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January 8, 2019

Mr. David Newell
Consultant Manager
New York State Department of Transportation
1220 Washington Avenue
Albany, NY 12232

Attention: Ms. Gretchen Fitzgerald

**Re: NYSDOT PIN 8806.51.101
Harrison Sub-Residency Landfill Site
5th Quarter Monitoring Report – October 2018
West Harrison, New York
TRC Project No. 280088**

Dear Ms. Fitzgerald:

TRC Engineers, Inc. (TRC) has prepared the following letter report to present the findings of the October 2018 5th quarter monitoring conducted at the Harrison Sub-Residency Landfill Site (hereafter referred to as the "Site"). The Harrison Sub-Residency is located at the intersection of New York Route 120 and King Street. The Site is a historic seasonal highway support and salt storage facility which is currently occupied by the Town of Harrison for leaf transfer operations. TRC performed the Site monitoring for the NYSDOT in accordance with TRC's August 2018 approved scope of service.

Sampling Activities

Between October 15 and 23, 2018, TRC sampled groundwater, surface water, sediment, and landfill gas at the Site to monitor the environmental conditions at the landfill. Figure 1 provides a Site Location Map and Figure 2 provides a Site Map of the landfill area.

Groundwater Sampling Activities

No signs of well damage or evidence of tampering were noted during a visual inspection conducted at the five (5) on-site and offsite monitoring wells prior to commencing sampling. Depth to groundwater and total depth measurements of the monitoring wells were measured with an oil/water interface sensing device relative to the top of the inner well casing (or PVC riser). No non-aqueous phase liquid was detected in any of the monitoring wells. An organic vapor headspace reading was measured at each monitoring well using a photoionization detector (PID). There were no headspace PID detections above background levels at any of the five (5) monitoring wells. Based on the historic knowledge and topography of the Site, monitoring well PC-3 is

located off-site and downgradient from the landfill while monitoring wells LMW-4, PC-1, and PC-2 are located on-site and downgradient from the landfill. Monitoring well LMW-2 is located on-site and upgradient of the landfill.

Groundwater in each well was purged and sampled utilizing a peristaltic pump equipped with new dedicated tubing. During purging, field readings for pH, conductivity, temperature, oxidation reduction potential, dissolved oxygen, and turbidity were monitored and documented using a flow-through cell and multi parameter meter. The groundwater sampling logs completed by TRC are provided in Appendix A.

Groundwater samples were collected following stabilization of water quality parameters. Groundwater samples, including one blind duplicate at PC-1, were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), and Target Analyte List (TAL) metals, cyanide and chloride. Groundwater samples for TAL metals were field-filtered with dedicated disposable 0.45 micron filters prior to preservation.

Decontamination and purge water was drummed and staged onsite, pending receipt of the groundwater sample test data and acceptance of the waste profile by the selected wastewater treatment facility, Veolia Environment Services (Schenectady, New York). The drummed water was transported off-Site by MC Environmental Services of Queensbury, New York on December 19, 2018. The waste transport and disposal documentation are provided in Appendix B.

Surface Water and Sediment Sampling Activities

Co-located surface water and sediment samples were collected at the four (4) locations depicted on Figure 2. Surface water samples were collected first at each location to minimize incorporation of solids within water samples. Additionally, the order of sampling proceeded from downstream (SW/SD-4) to upstream (SW/SD-1) to minimize sediment mobilization. Surface water samples were collected directly into laboratory supplied containers. Sediment samples were collected using new dedicated disposable plastic scoops. Surface water and sediment samples, including one blind duplicate at SW-3, were analyzed for TCL VOCs, TCL SVOCs, and TAL metals, cyanide and chloride. Surface water samples were also analyzed for hardness. Following the collection surface water and sediment samples, field surface water quality parameters including temperature, turbidity, conductivity, pH, and dissolved oxygen concentration were measured directly in the stream at each location, and the approximate stream channel width, depth, and flow rate were measured and recorded. Refer to Appendix C for surface water and sediment sampling field data.

Groundwater, surface water, and sediment samples were containerized in laboratory supplied containers, labeled, and placed in a chilled cooler for shipment to Hampton-Clarke/Veritech, Inc, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. One (1) trip blank sample provided by the laboratory accompanied each sample shipment to the laboratory and was analyzed for TCL VOCs.



Landfill Gas Monitoring Activities

Gas monitoring was conducted at the four (4) onsite landfill gas vents and along the perimeter of the landfill. A Landtec GEM5000 portable landfill gas meter was used to monitor for methane, carbon monoxide, carbon dioxide, oxygen, and hydrogen sulfide. A MiniRAE 3000 photo ionization detector was used to monitor for volatile organic vapors. Figure 2 depicts the locations of the landfill gas vents.

Monitoring Results

Groundwater Sample Results

Results of the groundwater sample analyses were compared to the NYSDEC Class GA Standards (NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, June 1998) and are summarized in Tables 1 through 3. A copy of the laboratory sample data report is included in Appendix D. Note that Appendix D also includes laboratory analytical data pertaining to the Harrison Sub-Residency Spill Site [Spill #94-07349] as both sites were sampled concurrently. A separate 5th quarter monitoring report was prepared for the spill site.

There were no VOCs or SVOCs detected above the respective laboratory reporting limits in the groundwater samples. Cyanide and chloride were likewise not detected above their respective standards in any of the groundwater samples. Concentrations of iron and manganese exceeded the Class GA groundwater standards at each of the monitoring wells except for LMW-2. Sodium concentrations exceeded the Class GA standard in each of the wells. A summary of the Class GA groundwater criteria exceedances are provided in the table below.

Metals Detected in Groundwater at Concentrations Greater than Class GA Standards

Analyte	NYSDEC Class GA Standards (µg/L)	Sample Identification Name					
		LMW-2- 102018 (µg/L)	LMW-4- 102018 (µg/L)	PC-1- 102018 (µg/L)	GW-DUP1- 102018 (µg/L)	PC-2- 102018 (µg/L)	PC-3- 102018 (µg/L)
Iron	300/500 ²	170	60,000	240	230	61,000	1,800
Manganese	300/500 ²	170	9,700	2,000	2,000	11,000	570
Sodium	20,000	25,000	29,000	100,000	100,000	39,000	120,000

Notes:

¹ – GW-DUP1-102018 is a blind duplicate of PC-1-102018

² – Standard of 500 µg/L applies to the sum of Iron and Manganese

Bolded Values Exceed the Class GA Standard

µg/L – micrograms per liter

Iron and manganese were detected below the Class GA standards in the upgradient background well LMW-2, whereas both analytes were detected at elevated levels exceeding the Class GA standards in the on-site and off-site downgradient wells. The iron and manganese groundwater



standards are both established for protection from aesthetic considerations. Sodium was detected in all five wells, including the upgradient well LMW-2 (with the lowest observed concentration of 25,000 µg/L), at levels exceeding the Class GA standard. The sodium groundwater standard is established for the protection of sources of drinking water; however, neither onsite groundwater nor near-site downgradient groundwater (in the vicinity of PC-3) is used as a source of drinking water.

Surface Water Results

Results of the surface water samples were compared to NYSDEC Class GA groundwater standards and NYSDEC Class A surface water standards and are summarized in Tables 4 through 6. A copy of the laboratory data report is included as Appendix D.

The surface water and sediment sampling stations are located within a tributary connecting to the Kensico Reservoir, which is a source of public drinking water. Class A standards are established for surface water drinking protection (Type H[WS]), human consumption of fish (Type H[FC]), fish propagation (Type A[C]), fish survival (Type A[A]), protection of wildlife (Type [W]), and aesthetics (Type [E]). Some Class A metals standards are dependent on a water sample's specific hardness concentration.

There were no VOCs or SVOCs detected above the laboratory reporting limits in surface water samples. Likewise, cyanide and chloride were not detected above their respective standards in any surface water samples. The concentrations of iron and manganese in all surface water samples exceeded the NYSDEC Class GA ground water standards and Class A surface water standards (except for manganese in SW-2) established for protection of aesthetic considerations as well as fish propagation (iron only). Aluminum was detected above the Class A surface water standard for fish propagation at the upstream (SW-1) and downstream (SW-4) sampling stations. Sodium was detected above the Class GA standard at the onsite and downstream sampling stations SW-3 and SW-4. A summary of the criteria exceedances is provided in the table below.

**Metals Detected in Surface Water at Concentrations Greater than
Class GA Groundwater Standards or Class A Surface Water Standards**

Analyte	NYSDEC Class GA Groundwater Standards (µg/L)	NYSDEC Class A Surface Water Standards (Standard Type) (µg/L)	Sample Identification Name				
			SW-1- 102018 (µg/L)	SW-2- 102018 (µg/L)	SW-3- 102018 (µg/L)	SW- DUP1- 102018 (µg/L)	SW-4- 102018 (µg/L)
Aluminum	-	100 (A(C))	390	ND	ND	ND	9,000
Iron	300/500 ²	300 (A(C)&E)	1,800	330	1,000	1,200	20,000
Manganese	300/500 ²	300 (A(C))	1,500	280	980	1,100	4,600
Sodium	20,000	-	9,300	14,000	99,000	120,000	31,000

Notes:

¹ – SW-DUP1-102018 is a blind duplicate of SW-3-102018

² – Groundwater standard of 500 µg/L applies to the sum of Iron and Manganese

A(C) - Fish Propagation Class A Standard

E – Aesthetic Class A Standard

µg/L – micrograms per liter

Bolded Values Exceed the Class GA and/or Class A Standard

ND – Not Detected

The highest aluminum, iron and manganese concentrations were detected at the downstream off-site sample location SW-4. In addition to the metals detected in surface water above established standards, calcium and magnesium were detected in the surface water samples at concentrations below established criteria. Sodium, which was detected in the groundwater at elevated levels in on-site and downgradient monitoring wells, was also detected at elevated concentrations at on-site and downstream surface water stations above the groundwater standard (there is no surface water criterion).

Sediment Sample Results

Results of the sediment sample analyses were compared to NYSDEC Screening and Assessment of Contaminated Sediment Guidance Values (SGVs) and are summarized in Tables 7 through 9. A copy of the laboratory data report is also included as Appendix C.

Based on the NYSDEC guidance, sediments are considered to present a low risk to aquatic life if their concentrations are less than the Class A SGVs. Sediments with concentrations greater than Class C SGVs are considered likely to pose a risk to aquatic life. For Class B sediments (i.e., sediments with concentrations equal to or greater than Class A SGVs but less than or equal to Class C SGVs) additional testing is required to evaluate the potential risks to aquatic life.

There were no VOCs detected in the sediment samples above the laboratory reporting limits. Trace amounts of the following PAHs were detected below SGVs within one or more sediment samples:



benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

Five (5) metals were detected at levels greater than Class A SGVs in one or more sediment samples. All of these detections above Class A SGVs (i.e., within Class B SGV range) were also below Class C SGVs except for the lead concentration detected in on-site sediment sample SD-3. The table below provides a summary of the sediment SGV exceedances.

Metals Detected in Sediment at Concentrations Greater than SGVs

Analyte	Class A SGV (mg/kg)	Class C SGV (mg/kg)	Sample Identification Name			
			SD-1- 102018 (mg/kg)	SD-2- 102018 (mg/kg)	SD-3- 102018 (mg/kg)	SD-4- 102018 (mg/kg)
Cadmium	1	5	ND	ND	1.2	1.9
Copper	32	150	15	45	45	45
Lead	36	130	21	51	<u>150</u>	73
Nickel	23	49	ND	ND	35	30
Zinc	120	460	69	260	200	260

Notes:

Bolded Values Exceed the Class A SGV

Bolded and Underlined Values Exceed the Class C SGV

mg/kg – milligrams per kilogram

ND – Not detected

Generally, the highest metals concentrations were detected at the on-site sediment sample location SD-3. Based on the Class A SGV exceedances for the above-listed five metals, which are all within the Class B range, there is a potential for adverse effects and according to NYSDEC sediment screening guidance, additional sediment metals testing and/or evaluation is required to evaluate the potential risks to aquatic life. According to NYSDEC guidance, the Class C SGV exceedance (lead at SD-3) indicates that the sediments at the location likely pose a risk to aquatic life. According to the guidance, in general, an exceedance of the freshwater Class C SGV established for a metal indicates a 75% likelihood that toxicity will be observed. However, the NYSDEC sediment screening guidance (page 16) also indicates “While Class A contaminant concentrations in sediment can be considered to be acceptable, a determination should not be made that contaminants in sediment are harmful *solely* on the basis of exceeding a Class B or Class C SGV.” Instead, given that four of the five above metals at SD-3 fall within Class B and the one other metal (lead) slightly exceeds the respective Class C SGV, overall the sediments at SD-3 could be classified as Class B with regards to potential risk to aquatic life.

Landfill Gas Monitoring Results

The table below provides the measured levels of percent oxygen, percent carbon dioxide, percent methane, the concentration of volatile organic compounds, the concentration of carbon monoxide, and the concentration of hydrogen sulfide that were observed within each landfill gas vent.

Landfill Gas Monitoring Results

Parameter	Gas Vent ID			
	GV-1	GV-2	GV-3	GV-4
Oxygen (%)	1.8	14.0	16.5	17.1
Carbon Dioxide (%)	11.4	6.4	3.0	2.8
Methane (%)	8.9	1.8	0.2	0.0
VOCs (ppm)	0.5	0.2	0.0	0.1
Carbon Monoxide (ppm)	0.0	0.0	0.0	0.0
Hydrogen Sulfide (ppm)	0.0	0.0	0.0	0.0

Notes:

ppm – parts per million

Methane has a LEL of 5%

The Lower Explosive Limit (LEL) is defined as the lowest concentration (by percentage) of a gas or vapor in air that is capable of igniting from a flash of fire (e.g., arc, flame, heat) at ambient atmospheric pressure and oxygen levels. The LEL for methane is 5%. The methane concentration within GV-1 exceeded the LEL; however, the concentration of oxygen within the vent was below the limiting oxygen concentration (12%), therefore, ignition at the vent could not occur.

Gas monitoring around the perimeter of the Site yielded typical ambient air background levels for oxygen (21.1 to 21.2%) and carbon dioxide (0.2 %). Methane, hydrogen sulfide, carbon monoxide, and VOCs were not detected at any monitored ambient air location around the perimeter of the Site.

Quality Assurance/Quality Control Sampling Results

Duplicate samples (i.e., GW-DUP1-102018) were collected from groundwater monitoring well PC-1 and at surface water sampling location SW-3 (i.e., SW-DUP1-102018) for quality assurance/quality control (QA/QC) purposes. One method of assessing data quality is by calculating and interpreting the relative percent difference (RPD) between duplicate samples. The RPD can be calculated using the formula below:

$$\% RPD = ABS\left(\frac{X_1 - X_2}{\frac{X_1 + X_2}{2}}\right) * 100\%$$

where, X₁ is the original value (PC-1 or SW-3), and
X₂ is the duplicate value (GW-DUP1-102018 or SW-DUP1-102018)



For groundwater samples, the greatest calculated RPD was 7.4% for barium. Additionally, aluminum was detected marginally above the reporting limit in the PC-1 sample and not detected in the corresponding field duplicate sample, resulting in an undefined RPD. For surface water samples, the greatest calculated RPD was 19.2% for sodium. Results for barium, iron, and potassium also had similar RPDs. Overall, the calculated RPDs are statistically insignificant and do not affect data usability.

Conclusions and Recommendations

TRC updated the database of historical groundwater, surface water and sediment sample data summary tables and concentration trend graphs previously prepared by HDR/EPM to assess historical data trends at the Site. The database and corresponding graphs are provided in Appendix E of this letter report. The following presents the conclusions of this round of monitoring, including a review of the documented data trends.

Groundwater

Generally, the contaminant data trends for most metals in groundwater remain mostly steady or on an overall downward trend. However, in recent years, the levels of iron and sodium are on an overall increasing trend at several wells. Iron and manganese were detected at elevated levels above Class GA standards in the on-site and off-site downgradient wells PC-1, PC-2, PC-3, and LMW-4. The iron and manganese groundwater standards are both established for protection from aesthetic considerations. Sodium was detected in all five wells, including the upgradient well LMW-2 at levels exceeding the Class GA standard. The highest sodium concentration was detected at the off-site downgradient well PC-3. The sodium groundwater standard is established for the protection of sources of drinking water; however, groundwater is not used for drinking water onsite or downgradient of the Site near PC-3.

No VOCs, SVOCs, nor cyanide were detected above the respective laboratory reporting limits in groundwater samples. These results are consistent with historical results. In August 2018, prior to completing this round of 5th quarter monitoring, the NYCDEC was petitioned to allow for the discontinuation of groundwater testing for VOCs, SVOCs, and cyanide, at the Site. Given the results of this round of monitoring, TRC recommends that another request be filed with NYSDEC to discontinue VOC, SVOC, and cyanide groundwater testing in future monitoring events.

Surface Water

The concentrations of iron and manganese in all the surface water samples exceeded the NYSDEC Class GA ground water standards and Class A surface water standards established for protection from aesthetic considerations (iron and manganese) and for protection of aquatic life from chronic effects (iron). Additionally, Aluminum was detected in the upstream and downstream samples (SW-1 and SW-4 respectively) at concentrations exceeding the Class A surface water standard for fish propagation. The highest iron, manganese, and aluminum surface water concentrations were detected at the downstream sample location SW-4.



Overall, the contaminant data trends for metals in surface water remain steady except for at SW-4 where a significant increase in the concentrations of aluminum, lead, iron, manganese and zinc was observed. This phenomenon may be due wholly or in part to the local weather patterns which preceded the October 2018 sampling event. During the 31 days prior to collection of surface water samples, approximately 9.35 inches of rainfall were recorded at the Westchester County Airport weather station. Typical 31-day rainfall totals in the area for the same timeframe range from 3.4 to 3.8 inches.

As was the case in the groundwater samples, no VOCs, SVOCs, nor cyanide were detected above the laboratory reporting limits in the surface water samples. These results are consistent with historical Site monitoring results. In August 2018, prior to completing this round of 5th quarter monitoring, the NYCDEC was petitioned to allow for the discontinuation of surface water testing for VOCs, SVOCs, and cyanide at the Site. Given the results of this round of monitoring, TRC recommends that another request be filed with NYSDEC to discontinue VOC, SVOC, and cyanide surface water testing in future monitoring events.

Sediment

Five (5) metals were detected at levels greater than the Class A SGVs in sediment samples collected at the onsite and downstream sampling locations. All of these detections above Class A SGVs (i.e., within Class B range) were below Class C SGVs except for the lead concentration detected in on-site sediment sample SD-3. Based on the Class A SGV exceedances for the above-listed five metals, there is a potential for adverse effects to aquatic life. According to NYSDEC guidance, the Class C SGV exceedance (lead at SD-3) indicates that the sediments at the location likely pose a risk to aquatic life. However, given that four of the five metals that exceed Class A SGVs at SD-3 fall within Class B and the one other metal (lead) slightly exceeds the respective Class C SGV, overall the sediments at SD-3 could be classified as Class B with regards to potential risk to aquatic life.

Overall, the contaminant data trends for metals in sediment remain steady except for at SD-4 where a significant increase in the concentrations of cadmium and lead were observed. Surface water samples at this location showed similarly higher than typical metals concentrations. As described in the section above, this phenomenon may be due wholly or in part to the local weather patterns which preceded the sampling event. During the 31 days prior to collection of surface water samples, approximately 9.35 inches of rainfall were recorded at the Westchester County Airport weather station. Typical 31-day rainfall totals in the area for the same timeframe range from 3.4 to 3.8 inches.

As was the case in both the groundwater and surface water samples, no VOCs or cyanide were detected above laboratory reporting limits in the sediment samples. A total of ten (10) PAHs were detected in sediment samples at very low concentrations below SGVs. These results are consistent with historical Site monitoring results. In August 2018, prior to completing this round of 5th quarter monitoring, the NYCDEC was petitioned to allow for the discontinuation of sediment



testing for VOCs and SVOCs at the Site. Given the results of this round of monitoring, TRC recommends that another request be filed with NYSDEC to discontinue VOC, SVOC, and cyanide sediment testing in future monitoring events.

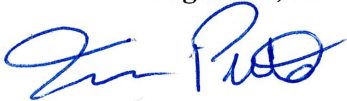
Landfill Gas

Methane was detected at the openings of gas vents GV-1 (8.9%), GV-2 (1.8%), and GV-3 (0.2%). The detected methane level at GV-1 exceeded the LEL for methane (5%). However, the detected methane gas did not pose a risk of ignition despite being above the LEL and below the upper explosive limit (UEL; 15%) due to the lack of oxygen that was simultaneously observed (1.8%). Methane, hydrogen sulfide, carbon monoxide, and VOCs were not detected at any location around the perimeter of the Site. Based on these monitoring results, the measured landfill gas did not present a hazard to human health or safety.

Please contact me at 860-298-6233 or jperonto@trcsolutions.com with any questions or comments on this report.

Sincerely,

TRC Engineers, Inc.



James Peronto, P.E.
Program Manager

cc: K. Myers, TRC



Attachments:

Figures

Figure 1 – Site Location Map

Figure 2 – Site Map and Sample/Monitoring Locations

Tables

Table 1 – Summary of Groundwater Sample Analytical Results for Volatile Organic Compounds

Table 2 – Summary of Groundwater Sample Analytical Results for Semivolatile Organic Compounds

Table 3 – Summary of Groundwater Sample Analytical Results for Metals

Table 4 – Summary of Surface Water Sample Analytical Results for Volatile Organic Compounds

Table 5 – Summary of Surface Water Sample Analytical Results for Semivolatile Organic Compounds

Table 6 – Summary of Surface Water Sample Analytical Results for Metals

Table 7 – Summary of Sediment Sample Analytical Results for Volatile Organic Compounds

Table 8 – Summary of Sediment Sample Analytical Results for Semivolatile Organic Compounds

Table 9 – Summary of Sediment Sample Analytical Results for Metals

Appendices

Appendix A – Groundwater Sampling Logs

Appendix B – Waste Disposal Documentation

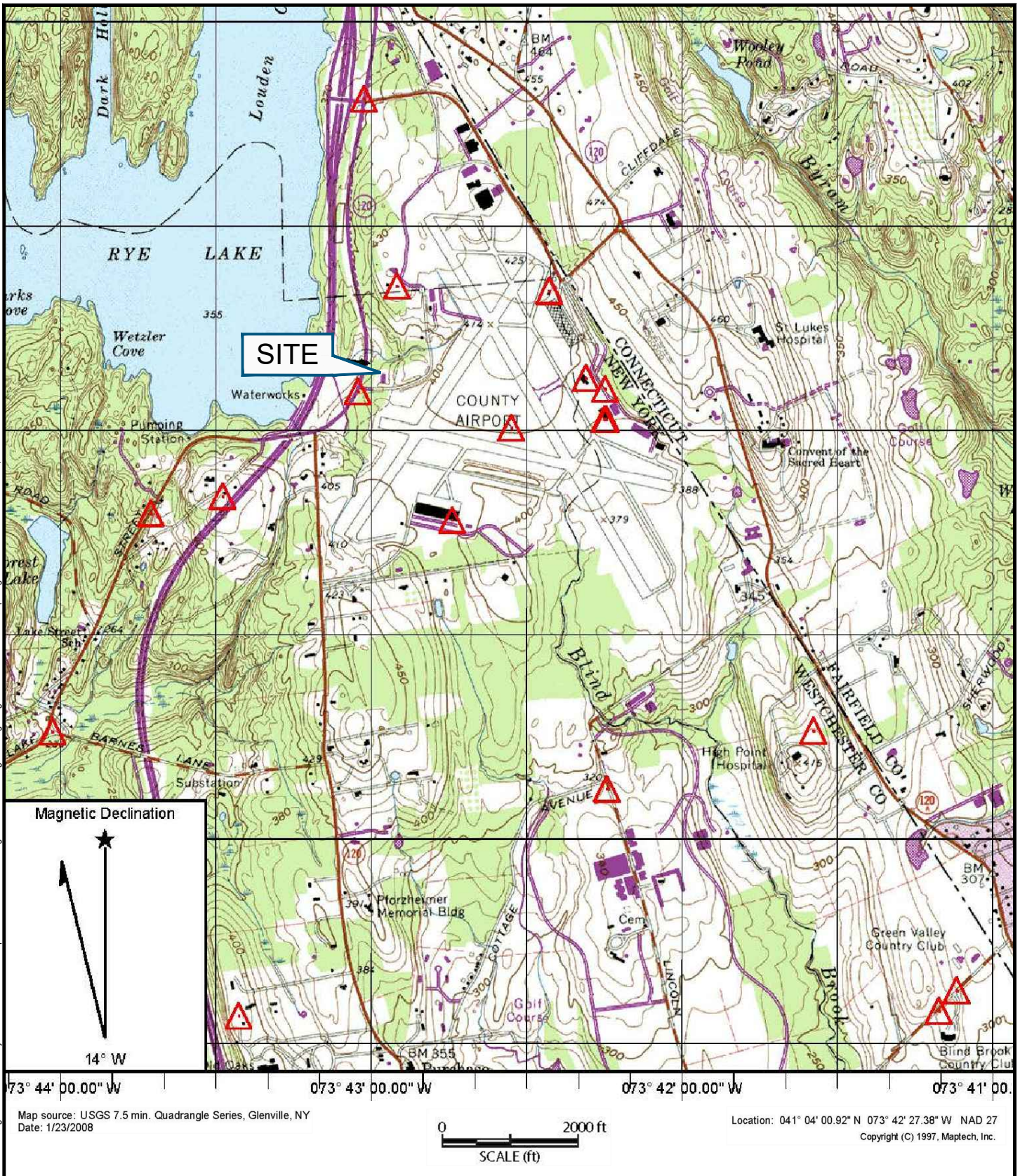
Appendix C – Surface Water and Sediment Sampling Log

Appendix D – Laboratory Data Report

Appendix E – Select Analyte Data Trends

FIGURES

8.5x11 - ATTACHED XREFS - ATTACHED IMAGES: Harrison Landfill Figures Page 1: DRAWING NAME: I:\Projects\NYSDOT - D03137\Assignments\2 - 3 - Bryant Pond + Harrison\Reports\Harrison Landfill\Figures\TRC Working Drawings\Figure 1 - Site Location Map.dwg - PLOT DATE: October 24, 2017 - 7:07PM - LAYOUT: 8.5x11



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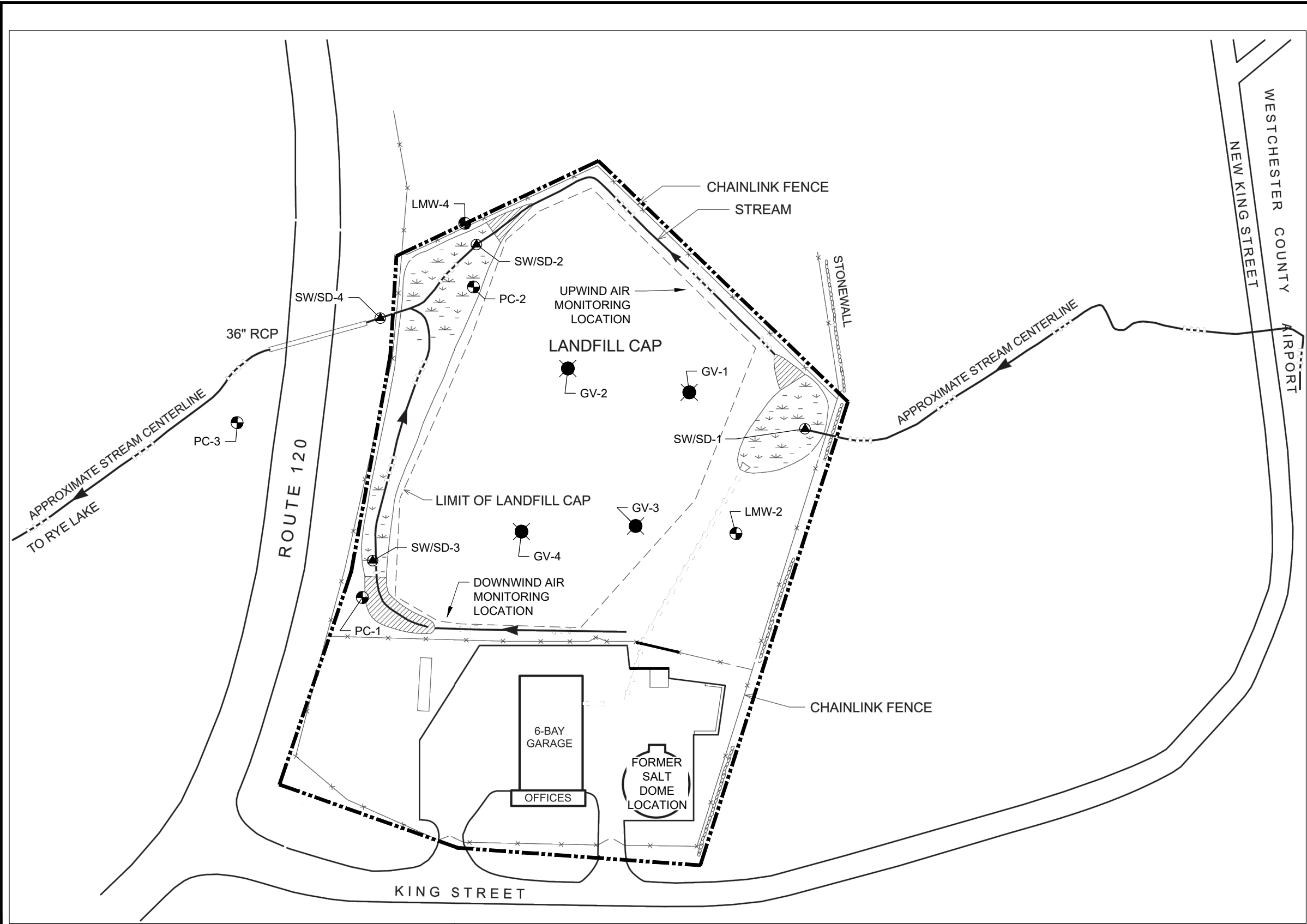
PROJECT: **NEW YORK STATE DEPARTMENT OF TRANSPORTATION
PIN 8806.51.101 - HARRISON LANDFILL AREA
HARRISON SUB-RESIDENCY
WEST HARRISON, NEW YORK**

TITLE: **SITE LOCATION MAP**

DRAWN BY:	H. DELGADO
CHECKED BY:	J. ROBINSON
APPROVED BY:	J. PERONTO
DATE:	OCTOBER 2017
PROJ. NO.:	280089.0001.0000
FILE:	Figure 1 - Site Location Map.dwg

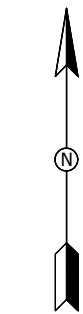
FIGURE 1

11x17 - ATTACHED XREFS: --- ATTACHED IMAGES: Harrison Sub-Residency - D03 37 1 Assignments #2 +3 - Bryant Pond + Harrison Reports Harrison Landfill Figures TRC Working Drawings Figure 2 - Site Map and Sampling-Monitoring Locations.dwg --- PLOT DATE: October 25, 2017 - 12:35 PM --- LAYOUT: 11x17L
DRAWING NAME: I:\Projects\NYSDOT - D03 37 1 Assignments #2 +3 - Bryant Pond + Harrison Reports Harrison Landfill Figures TRC Working Drawings Figure 2 - Site Map and Sampling-Monitoring Locations.dwg



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LMW-X OR PC-X MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- SW/SD-X SURFACE WATER AND SEDIMENT SAMPLING LOCATION AND IDENTIFICATION NUMBER
- GV-X LANDFILL GAS VENT LOCATION AND IDENTIFICATION NUMBER



NOTES:

- FIGURE SOURCE: HDR ENGINEERING, INC. 5TH QUARTER MONITORING REPORT DATED JUNE 1, 2016.



PROJECT: NEW YORK STATE DEPARTMENT OF TRANSPORTATION PIN 8806.51.101 - HARRISON LANDFILL AREA HARRISON SUB-RESIDENCY WEST HARRISON, NEW YORK			
TITLE: SITE MAP AND SAMPLING/MONITORING LOCATIONS			
DRAWN BY:	H. DELGADO	PROJ NO.:	280089.0000.0000
CHECKED BY:	J. ROBINSON	FIGURE 2	
APPROVED BY:	J. PERONTO		
DATE:	OCTOBER 2017		
1430 Broadway 10th Floor New York, NY 10018 Phone: 212.221.7822		FILE NO.: Figure 2 - Site Map and Sampling-Monitoring Locations.dwg	

TABLES

Table 1
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Groundwater Sample Analytical Results for Volatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	LMW-2-102018 AD07118-001 10/15/2018	LMW-4-102018 AD07137-001 10/16/2018	PC-1-102018 AD07118-003 10/15/2018	GW-DUP1-102018 ⁽⁴⁾ AD07118-005 10/15/2018				
	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Volatile Organic Compounds									
1,1,1-Trichloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloroethane	1	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromo-3-chloropropane	0.04	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromoethane	6.00E-04	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	0.6	ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,2-Dichloropropane	1	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,3-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0
1,4-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Butanone	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-pentanone	NS	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Acetone	50	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Benzene	1	ND	0.50	ND	0.50	ND	0.50	ND	0.50
Bromochloromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromodichloromethane	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromoform	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Bromomethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Carbon disulfide	60	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Carbon tetrachloride	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chloroethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chloroform	7	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Chloromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Cyclohexane	NS	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Dibromochloromethane	50	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Dichlorodifluoromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Isopropylbenzene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
m&p-Xylenes	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methyl Acetate	NS	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methylcyclohexane	NS	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methylene chloride	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methyl-t-butyl ether	10	ND	0.50	ND	0.50	ND	0.50	ND	0.50
o-Xylene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Styrene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Tetrachloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Toluene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
trans-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Trichloroethene	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Vinyl chloride	2	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Xylenes (Total)	5 ³	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Total VOCs	NS	ND	-	ND	-	ND	-	ND	-

Notes
⁽¹⁾ - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.
⁽²⁾ - 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene.
⁽³⁾ -There is no GA value for total xylenes. The standards for o-xylene, m-xylene, and p-xylene is 5 µg/L
⁽⁴⁾ - GW-DUP1-102018 is a blind duplicate of PC-1-102018

NS - No Standard
ND - Analyte not detected at the listed reporting limit
RL - Reporting Limit
µg/L - micrograms per liter

Shaded and bolded values exceed regulatory criteria

Table 1
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Groundwater Sample Analytical Results for Volatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	PC-2-102018 AD07137-003 10/16/2018		PC-3-102018 AD07137-005 10/16/2018		TRIP BLANKS VARIOUS 10/15/18 - 10/17/18	
	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Volatile Organic Compounds							
1,1,1-Trichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloroethane	1	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromo-3-chloropropane	0.04	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromoethane	6.00E-04	ND	1.0	ND	1.0	ND	1.0
1,2-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	0.6	ND	0.50	ND	0.50	ND	0.50
1,2-Dichloropropane	1	ND	1.0	ND	1.0	ND	1.0
1,3-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,4-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
2-Butanone	50	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	50	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-pentanone	NS	ND	1.0	ND	1.0	ND	1.0
Acetone	50	ND	5.0	ND	5.0	ND	5.0
Benzene	1	ND	0.50	ND	0.50	ND	0.50
Bromochloromethane	5	ND	1.0	ND	1.0	ND	1.0
Bromodichloromethane	50	ND	1.0	ND	1.0	ND	1.0
Bromoform	50	ND	1.0	ND	1.0	ND	1.0
Bromomethane	5	ND	1.0	ND	1.0	ND	1.0
Carbon disulfide	60	ND	1.0	ND	1.0	ND	1.0
Carbon tetrachloride	5	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
Chloroethane	5	ND	1.0	ND	1.0	ND	1.0
Chloroform	7	ND	1.0	ND	1.0	ND	1.0
Chloromethane	5	ND	1.0	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Cyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Dibromochloromethane	50	ND	1.0	ND	1.0	ND	1.0
Dichlorodifluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	5	ND	1.0	ND	1.0	ND	1.0
Isopropylbenzene	5	ND	1.0	ND	1.0	ND	1.0
m&p-Xylenes	5	ND	1.0	ND	1.0	ND	1.0
Methyl Acetate	NS	ND	1.0	ND	1.0	ND	1.0
Methylcyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Methylene chloride	5	ND	1.0	ND	1.0	ND	1.0
Methyl-t-butyl ether	10	ND	0.50	ND	0.50	ND	0.50
o-Xylene	5	ND	1.0	ND	1.0	ND	1.0
Styrene	5	ND	1.0	ND	1.0	ND	1.0
Tetrachloroethene	5	ND	1.0	ND	1.0	ND	1.0
Toluene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Trichloroethene	5	ND	1.0	ND	1.0	ND	1.0
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Vinyl chloride	2	ND	1.0	ND	1.0	ND	1.0
Xylenes (Total)	5 ³	ND	1.0	ND	1.0	ND	1.0
Total VOCs	NS	ND	-	ND	-	ND	-

Notes

- (1) - NYSDEC Class GA Standards are from Division of Water
(2) - 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropr
(3) -There is no GA value for total xylenes. The standards for o-
(4) - GW-DUP1-102018 is a blind duplicate of PC-1-102018

NS - No Standard

ND - Analyte not detected at the
listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed regulatory criteria

Table 2
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Groundwater Sample Analytical Results for Semivolatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	LMW-2-102018 AD07118-001 10/15/2018	LMW-4-102018 AD07137-001 10/16/2018	PC-1-102018 AD07118-003 10/15/2018			
	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Semivolatile Organic Compounds							
1,1'-Biphenyl	NS	ND	1.0	ND	1.0	ND	1.0
1,2,4,5-Tetrachlorobenzene	10	ND	1.0	ND	1.0	ND	1.0
1, 4-Dioxane	NS	ND	0.26	ND	0.25	ND	0.25
2,3,4,6-Tetrachlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4,5-Trichlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4,6-Trichlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4-Dichlorophenol	1	ND	0.26	ND	0.25	ND	0.25
2,4-Dimethylphenol	1	ND	0.26	ND	0.25	ND	0.25
2,4-Dinitrophenol	1	ND	5.2	ND	5.0	ND	5.0
2,4-Dinitrotoluene	5	ND	1.0	ND	1.0	ND	1.0
2,6-Dinitrotoluene	5	ND	1.0	ND	1.0	ND	1.0
2-Chloronaphthalene	NS	ND	1.0	ND	1.0	ND	1.0
2-Chlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2-Methylnaphthalene	NS	ND	1.0	ND	1.0	ND	1.0
2-Methylphenol	NS	ND	0.26	ND	0.25	ND	0.25
2-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
2-Nitrophenol	NS	ND	1.0	ND	1.0	ND	1.0
3&4-Methylphenol	NS	ND	0.26	ND	0.25	ND	0.25
3,3'-Dichlorobenzidine	5	ND	1.0	ND	1.0	ND	1.0
3-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
4,6-Dinitro-2-methylphenol	NS	ND	5.2	ND	5.0	ND	5.0
4-Bromophenyl-phenylether	NS	ND	1.0	ND	1.0	ND	1.0
4-Chloro-3-methylphenol	NS	ND	1.0	ND	1.0	ND	1.0
4-Chloroaniline	5	ND	0.26	ND	0.25	ND	0.25
4-Chlorophenyl-phenylether	NS	ND	1.0	ND	1.0	ND	1.0
4-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
4-Nitrophenol	NS	ND	1.0	ND	1.0	ND	1.0
Acenaphthene	20	ND	1.0	ND	1.0	ND	1.0
Acenaphthylene	NS	ND	1.0	ND	1.0	ND	1.0
Acetophenone	NS	ND	1.0	ND	1.0	ND	1.0
Anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Atrazine	7.5	ND	1.0	ND	1.0	ND	1.0
Benzaldehyde	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[a]anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[a]pyrene	ND	ND	1.0	ND	1.0	ND	1.0
Benzo[b]fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[g,h,i]perylene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[k]fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
bis(2-Chloroethoxy)methane	5	ND	1.0	ND	1.0	ND	1.0
bis(2-Chloroethyl)ether	1	ND	0.26	ND	0.25	ND	0.25
bis(2-Chloroisopropyl)ether	5	ND	1.0	ND	1.0	ND	1.0
bis(2-Ethylhexyl)phthalate	5	ND	1.0	ND	1.0	ND	1.0
Butylbenzylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Caprolactam	NS	ND	1.0	ND	1.0	ND	1.0
Carbazole	NS	ND	1.0	ND	1.0	ND	1.0
Chrysene	NS	ND	1.0	ND	1.0	ND	1.0
Dibenzo[a,h]anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Dibenzofuran	NS	ND	0.26	ND	0.25	ND	0.25
Diethylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Dimethylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Di-n-butylphthalate	50	ND	0.26	ND	0.25	ND	0.25
Di-n-octylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
Fluorene	NS	ND	1.0	ND	1.0	ND	1.0
Hexachlorobenzene	0.04	ND	1.0	ND	1.0	ND	1.0
Hexachlorobutadiene	0.5	ND	1.0	ND	1.0	ND	1.0
Hexachlorocyclopentadiene	5	ND	1.0	ND	1.0	ND	1.0
Hexachloroethane	5	ND	1.0	ND	1.0	ND	1.0
Indeno[1,2,3-cd]pyrene	NS	ND	1.0	ND	1.0	ND	1.0
Isophorone	NS	ND	1.0	ND	1.0	ND	1.0
Naphthalene	NS	ND	0.26	ND	0.25	ND	0.25
Nitrobenzene	0.4	ND	1.0	ND	1.0	ND	1.0
N-Nitroso-di-n-propylamine	NS	ND	0.26	ND	0.25	ND	0.25
N-Nitrosodiphenylamine	NS	ND	1.0	ND	1.0	ND	1.0
Pentachlorophenol	1	ND	5.2	ND	5.0	ND	5.0
Phenanthrene	NS	ND	1.0	ND	1.0	ND	1.0
Phenol	1	ND	1.0	ND	1.0	ND	1.0
Pyrene	NS	ND	1.0	ND	1.0	ND	1.0
Total SVOCs	NS	ND	-	ND	-	ND	-

Notes

(1) - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

(2) - GW-DUP1-102018 is a blind duplicate of PC-1-102018

NS - No Standard

ND - Analyte not detected at the listed reporting limit

Shaded and bolded values exceed regulatory criteria

Table 2
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Groundwater Sample Analytical Results for Semivolatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	GW-DUP1-102018 ⁽²⁾ AD07118-005 10/15/2018		PC-2-102018 AD07137-003 10/16/2018		PC-3-102018 AD07137-005 10/16/2018	
Semivolatile Organic Compounds	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
1,1'-Biphenyl	NS	ND	1.0	ND	1.0	ND	1.0
1,2,4,5-Tetrachlorobenzene	10	ND	1.0	ND	1.0	ND	1.0
1, 4-Dioxane	NS	ND	0.25	ND	0.25	ND	0.25
2,3,4,6-Tetrachlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4,5-Trichlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4,6-Trichlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2,4-Dichlorophenol	1	ND	0.25	ND	0.25	ND	0.25
2,4-Dimethylphenol	1	ND	0.25	ND	0.25	ND	0.25
2,4-Dinitrophenol	1	ND	5.0	ND	5.0	ND	5.0
2,4-Dinitrotoluene	5	ND	1.0	ND	1.0	ND	1.0
2,6-Dinitrotoluene	5	ND	1.0	ND	1.0	ND	1.0
2-Chloronaphthalene	NS	ND	1.0	ND	1.0	ND	1.0
2-Chlorophenol	NS	ND	1.0	ND	1.0	ND	1.0
2-Methylnaphthalene	NS	ND	1.0	ND	1.0	ND	1.0
2-Methylphenol	NS	ND	0.25	ND	0.25	ND	0.25
2-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
2-Nitrophenol	NS	ND	1.0	ND	1.0	ND	1.0
3&4-Methylphenol	NS	ND	0.25	ND	0.25	ND	0.25
3,3'-Dichlorobenzidine	5	ND	1.0	ND	1.0	ND	1.0
3-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
4,6-Dinitro-2-methylphenol	NS	ND	5.0	ND	5.0	ND	5.0
4-Bromophenyl-phenylether	NS	ND	1.0	ND	1.0	ND	1.0
4-Chloro-3-methylphenol	NS	ND	1.0	ND	1.0	ND	1.0
4-Chloroaniline	5	ND	0.25	ND	0.25	ND	0.25
4-Chlorophenyl-phenylether	NS	ND	1.0	ND	1.0	ND	1.0
4-Nitroaniline	5	ND	1.0	ND	1.0	ND	1.0
4-Nitrophenol	NS	ND	1.0	ND	1.0	ND	1.0
Acenaphthene	20	ND	1.0	ND	1.0	ND	1.0
Acenaphthylene	NS	ND	1.0	ND	1.0	ND	1.0
Acetophenone	NS	ND	1.0	ND	1.0	ND	1.0
Anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Atrazine	7.5	ND	1.0	ND	1.0	ND	1.0
Benzaldehyde	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[a]anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[a]pyrene	ND	ND	1.0	ND	1.0	ND	1.0
Benzo[b]fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[g,h,i]perylene	NS	ND	1.0	ND	1.0	ND	1.0
Benzo[k]fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
bis(2-Chloroethoxy)methane	5	ND	1.0	ND	1.0	ND	1.0
bis(2-Chloroethyl)ether	1	ND	0.25	ND	0.25	ND	0.25
bis(2-Chloroisopropyl)ether	5	ND	1.0	ND	1.0	ND	1.0
bis(2-Ethylhexyl)phthalate	5	ND	1.0	ND	1.0	ND	1.0
Butylbenzylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Caprolactam	NS	ND	1.0	ND	1.0	ND	1.0
Carbazole	NS	ND	1.0	ND	1.0	ND	1.0
Chrysene	NS	ND	1.0	ND	1.0	ND	1.0
Dibenzo[a,h]anthracene	NS	ND	1.0	ND	1.0	ND	1.0
Dibenzofuran	NS	ND	0.25	ND	0.25	ND	0.25
Diethylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Dimethylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Di-n-butylphthalate	50	ND	0.25	ND	0.25	ND	0.25
Di-n-octylphthalate	NS	ND	1.0	ND	1.0	ND	1.0
Fluoranthene	NS	ND	1.0	ND	1.0	ND	1.0
Fluorene	NS	ND	1.0	ND	1.0	ND	1.0
Hexachlorobenzene	0.04	ND	1.0	ND	1.0	ND	1.0
Hexachlorobutadiene	0.5	ND	1.0	ND	1.0	ND	1.0
Hexachlorocyclopentadiene	5	ND	1.0	ND	1.0	ND	1.0
Hexachloroethane	5	ND	1.0	ND	1.0	ND	1.0
Indeno[1,2,3-cd]pyrene	NS	ND	1.0	ND	1.0	ND	1.0
Isophorone	NS	ND	1.0	ND	1.0	ND	1.0
Naphthalene	NS	ND	0.25	ND	0.25	ND	0.25
Nitrobenzene	0.4	ND	1.0	ND	1.0	ND	1.0
N-Nitroso-di-n-propylamine	NS	ND	0.25	ND	0.25	ND	0.25
N-Nitrosodiphenylamine	NS	ND	1.0	ND	1.0	ND	1.0
Pentachlorophenol	1	ND	5.0	ND	5.0	ND	5.0
Phenanthrene	NS	ND	1.0	ND	1.0	ND	1.0
Phenol	1	ND	1.0	ND	1.0	ND	1.0
Pyrene	NS	ND	1.0	ND	1.0	ND	1.0
Total SVOCs	NS	ND	-	ND	-	ND	-

Notes

⁽¹⁾ - NYSDEC Class GA Standards are from Division of Water Technica revised April 2000.

⁽²⁾ - GW-DUP1-102018 is a blind duplicate of PC-1-102018

NS - No Standard

ND - Analyte not detected at the listed reporting limit

Shaded and bolded values exceed regulatory criteria

Table 3
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Groundwater Sample Analytical Results for Metals, Cyanide and Chloride

	CLIENT ID: LAB ID: COLLECTION DATE:	LMW-2-102018 AD07118-001 10/15/2018		LMW-4-102018 AD07137-001 10/16/2018		PC-1-102018 AD07118-003 10/15/2018		GW-DUP1-102018 ⁽³⁾ AD07118-005 10/15/2018		PC-2-102018 AD07137-003 10/16/2018		PC-3-102018 AD07137-005 10/16/2018	
Metals, Cyanide, and Chloride	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Aluminum	2,000	ND	100	ND	100	120	100	ND	100	ND	100	ND	100
Antimony	3	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5	ND	2.5
Arsenic	25	ND	1.0	2.0	1.0	ND	1.0	ND	1.0	1.8	1.0	ND	1.0
Barium	1,000	120	25	150	25	140	25	130	25	170	25	160	25
Beryllium	3	ND	0.75	ND	0.75	ND	0.75	ND	0.75	ND	0.75	ND	0.75
Cadmium	5	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Calcium	NS	78,000	1,000	40,000	1,000	170,000	1,000	170,000	1,000	81,000	1,000	74,000	1,000
Chromium	50	ND	25	ND	25	ND	25	ND	25	ND	25	ND	25
Cobalt	NS	ND	1	11	1	ND	1	ND	1	1.6	1	ND	1
Copper	200	ND	25	ND	25	ND	25	ND	25	ND	25	ND	25
Iron	300 / 500 ²	170	150	60,000	150	240	150	230	150	61,000	150	1,800	150
Lead	25	ND	0.75	ND	0.75	ND	0.75	ND	0.75	ND	0.75	ND	0.75
Magnesium	35,000	28,000	1,000	17,000	1,000	27,000	1,000	26,000	1,000	19,000	1,000	21,000	1,000
Manganese	300 / 500 ²	170	25	9,700	25	2,000	25	2,000	25	11,000	25	570	25
Mercury	0.7	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2
Nickel	100	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
Potassium	NS	3,900	2,500	3,500	2,500	4,900	2,500	5,000	2,500	3,700	2,500	7,300	2,500
Selenium	10	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
Silver	50	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
Sodium	20,000	25,000	2,500	29,000	2,500	100,000	2,500	100,000	2,500	39,000	2,500	120,000	2,500
Thallium	0.5	ND	1.5	ND	1.5	ND	1.5	ND	1.5	ND	1.5	ND	1.5
Vanadium	NS	ND	25	ND	25	ND	25	ND	25	ND	25	ND	25
Zinc	2,000	ND	25	ND	25	ND	25	ND	25	ND	25	ND	25
Cyanide	200	ND	20	ND	20	ND	20	ND	20	ND	20	ND	20
Chloride	NS	15,000	2,000	32,000	2,000	230,000	20,000	220,000	20,000	21,000	2,000	230,000	20,000

Notes

⁽¹⁾ - NYSDEC Class GA Standards and Guidance Values are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

⁽²⁾ - Standard of 500 µg/L applies to the sum of Iron and Manganese

⁽³⁾ - GW-DUP1-102018 is a blind duplicate of PC-1-102018

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed Class GA Standards

Table 4
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Volatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	SW-1-102018 AD07161-001 10/17/2018	SW-2-102018 AD07161-003 10/17/2018	SW-3-102018 AD07161-005 10/17/2018			
	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Volatile Organic Compounds							
1,1,1-Trichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloroethane	1	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromo-3-chloropropane	0.04	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromoethane	6.00E-04	ND	1.0	ND	1.0	ND	1.0
1,2-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	0.6	ND	0.50	ND	0.50	ND	0.50
1,2-Dichloropropane	1	ND	1.0	ND	1.0	ND	1.0
1,3-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,4-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,4-Dioxane	NS	ND	50	ND	50	ND	50
2-Butanone	50	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	50	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-pentanone	NS	ND	1.0	ND	1.0	ND	1.0
Acetone	50	ND	5.0	ND	5.0	ND	5.0
Benzene	1	ND	0.50	ND	0.50	ND	0.50
Bromochloromethane	5	ND	1.0	ND	1.0	ND	1.0
Bromodichloromethane	50	ND	1.0	ND	1.0	ND	1.0
Bromoform	50	ND	1.0	ND	1.0	ND	1.0
Bromomethane	5	ND	1.0	ND	1.0	ND	1.0
Carbon disulfide	60	ND	1.0	ND	1.0	ND	1.0
Carbon tetrachloride	5	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
Chloroethane	5	ND	1.0	ND	1.0	ND	1.0
Chloroform	7	ND	1.0	ND	1.0	ND	1.0
Chloromethane	5	ND	1.0	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Cyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Dibromochloromethane	50	ND	1.0	ND	1.0	ND	1.0
Dichlorodifluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	5	ND	1.0	ND	1.0	ND	1.0
Isopropylbenzene	5	ND	1.0	ND	1.0	ND	1.0
m&p-Xylenes	5 ³	ND	1.0	ND	1.0	ND	1.0
Methyl Acetate	NS	ND	1.0	ND	1.0	ND	1.0
Methylcyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Methylene chloride	5	ND	1.0	ND	1.0	ND	1.0
Methyl-t-butyl ether	10	ND	0.50	ND	0.50	ND	0.50
o-Xylene	5 ³	ND	1.0	ND	1.0	ND	1.0
Styrene	5	ND	1.0	ND	1.0	ND	1.0
Tetrachloroethene	5	ND	1.0	ND	1.0	ND	1.0
Toluene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Trichloroethene	5	ND	1.0	ND	1.0	ND	1.0
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Vinyl chloride	2	ND	1.0	ND	1.0	ND	1.0
Xylenes (Total)	5 ³	ND	1.0	ND	1.0	ND	1.0
Total VOCs	NS	ND	-	ND	-	ND	-

Notes

(1) - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

(2) - 0.4 µg/L applies to the sum of cis- and trans-1,3-dichloropropene.

(3) -There is no GA value for total xylenes. The standards for o-xylene, m-xylene, and p-xylene is 5 µg/L

(4) - SW-DUP1-102018 is a blind duplicate of SW-3-102018

NYSDEC Class A Standards are applicable but are not listed as no VOCs were detected in any surface water samples

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed regulatory criteria

Table 4
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Volatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	SW-DUP1-102018 ⁽⁴⁾ AD07161-007 10/17/2018		SW-4-102018 AD07161-008 10/17/2018		TB-3 AD07161-010 10/17/2018	
Volatile Organic Compounds	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
1,1,1-Trichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1,2-Trichloroethane	1	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethane	5	ND	1.0	ND	1.0	ND	1.0
1,1-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
1,2,3-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2,4-Trichlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromo-3-chloropropane	0.04	ND	1.0	ND	1.0	ND	1.0
1,2-Dibromoethane	6.00E-04	ND	1.0	ND	1.0	ND	1.0
1,2-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,2-Dichloroethane	0.6	ND	0.50	ND	0.50	ND	0.50
1,2-Dichloropropane	1	ND	1.0	ND	1.0	ND	1.0
1,3-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,4-Dichlorobenzene	3	ND	1.0	ND	1.0	ND	1.0
1,4-Dioxane	NS	ND	50	ND	50	ND	50
2-Butanone	50	ND	1.0	ND	1.0	ND	1.0
2-Hexanone	50	ND	1.0	ND	1.0	ND	1.0
4-Methyl-2-pentanone	NS	ND	1.0	ND	1.0	ND	1.0
Acetone	50	ND	5.0	ND	5.0	ND	5.0
Benzene	1	ND	0.50	ND	0.50	ND	0.50
Bromochloromethane	5	ND	1.0	ND	1.0	ND	1.0
Bromodichloromethane	50	ND	1.0	ND	1.0	ND	1.0
Bromoform	50	ND	1.0	ND	1.0	ND	1.0
Bromomethane	5	ND	1.0	ND	1.0	ND	1.0
Carbon disulfide	60	ND	1.0	ND	1.0	ND	1.0
Carbon tetrachloride	5	ND	1.0	ND	1.0	ND	1.0
Chlorobenzene	5	ND	1.0	ND	1.0	ND	1.0
Chloroethane	5	ND	1.0	ND	1.0	ND	1.0
Chloroform	7	ND	1.0	ND	1.0	ND	1.0
Chloromethane	5	ND	1.0	ND	1.0	ND	1.0
cis-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
cis-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Cyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Dibromochloromethane	50	ND	1.0	ND	1.0	ND	1.0
Dichlorodifluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Ethylbenzene	5	ND	1.0	ND	1.0	ND	1.0
Isopropylbenzene	5	ND	1.0	ND	1.0	ND	1.0
m&p-Xylenes	5 ³	ND	1.0	ND	1.0	ND	1.0
Methyl Acetate	NS	ND	1.0	ND	1.0	ND	1.0
Methylcyclohexane	NS	ND	1.0	ND	1.0	ND	1.0
Methylene chloride	5	ND	1.0	ND	1.0	ND	1.0
Methyl-t-butyl ether	10	ND	0.50	ND	0.50	ND	0.50
o-Xylene	5 ³	ND	1.0	ND	1.0	ND	1.0
Styrene	5	ND	1.0	ND	1.0	ND	1.0
Tetrachloroethene	5	ND	1.0	ND	1.0	ND	1.0
Toluene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,2-Dichloroethene	5	ND	1.0	ND	1.0	ND	1.0
trans-1,3-Dichloropropene	0.4 ²	ND	1.0	ND	1.0	ND	1.0
Trichloroethene	5	ND	1.0	ND	1.0	ND	1.0
Trichlorofluoromethane	5	ND	1.0	ND	1.0	ND	1.0
Vinyl chloride	2	ND	1.0	ND	1.0	ND	1.0
Xylenes (Total)	5 ³	ND	1.0	ND	1.0	ND	1.0
Total VOCs	NS	ND	-	ND	-	ND	-

Notes

- ⁽¹⁾ - NYSDEC Class GA Standards are from Division of Water June 1998, revised April 2000.
- ⁽²⁾ - 0.4 µg/L applies to the sum of cis- and trans-1,3-dichlorop
- ⁽³⁾ -There is no GA value for total xylenes. The standards for c
- ⁽⁴⁾ - SW-DUP1-102018 is a blind duplicate of SW-3-102018
- NYSDEC Class A Standards are applicable but are not listed
- NS - No Standard
- ND - Analyte not detected at the listed reporting limit
- RL - Reporting Limit
- µg/L - micrograms per liter
- Shaded and bolded values exceed regulatory criteria

Table 5
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Semivolatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:	SW-1-102018 AD07161-001 10/17/2018	SW-2-102018 AD07161-003 10/17/2018	SW-3-102018 AD07161-005 10/17/2018
Semivolatile Organic Compounds	NYSDEC Class GA Standards ¹ (µg/L)	Result (µg/L) RL (µg/L)	Result (µg/L) RL (µg/L)	Result (µg/L) RL (µg/L)
1,1'-Biphenyl	NS	ND 2.5	ND 0.58	ND 0.58
1,2,4,5-Tetrachlorobenzene	10	ND 2.5	ND 0.58	ND 0.58
1,4-Dioxane	NS	ND 0.62	ND 0.14	ND 0.14
2,3,4,6-Tetrachlorophenol	NS	ND 2.5	ND 0.58	ND 0.58
2,4,5-Trichlorophenol	NS	ND 2.5	ND 0.58	ND 0.58
2,4,6-Trichlorophenol	NS	ND 2.5	ND 0.58	ND 0.58
2,4-Dichlorophenol	1	ND 0.62	ND 0.14	ND 0.14
2,4-Dimethylphenol	1	ND 0.62	ND 0.14	ND 0.14
2,4-Dinitrophenol	1	ND 12	ND 2.9	ND 2.9
2,4-Dinitrotoluene	5	ND 2.5	ND 0.58	ND 0.58
2,6-Dinitrotoluene	5	ND 2.5	ND 0.58	ND 0.58
2-Chloronaphthalene	NS	ND 2.5	ND 0.58	ND 0.58
2-Chlorophenol	NS	ND 2.5	ND 0.58	ND 0.58
2-Methylnaphthalene	NS	ND 2.5	ND 0.58	ND 0.58
2-Methylphenol	NS	ND 0.62	ND 0.14	ND 0.14
2-Nitroaniline	5	ND 2.5	ND 0.58	ND 0.58
2-Nitrophenol	NS	ND 2.5	ND 0.58	ND 0.58
3&4-Methylphenol	NS	ND 0.62	ND 0.14	ND 0.14
3,3'-Dichlorobenzidine	5	ND 2.5	ND 0.58	ND 0.58
3-Nitroaniline	5	ND 2.5	ND 0.58	ND 0.58
4,6-Dinitro-2-methylphenol	NS	ND 12	ND 2.9	ND 2.9
4-Bromophenyl-phenylether	NS	ND 2.5	ND 0.58	ND 0.58
4-Chloro-3-methylphenol	NS	ND 2.5	ND 0.58	ND 0.58
4-Chloroaniline	5	ND 0.62	ND 0.14	ND 0.14
4-Chlorophenyl-phenylether	NS	ND 2.5	ND 0.58	ND 0.58
4-Nitroaniline	5	ND 2.5	ND 0.58	ND 0.58
4-Nitrophenol	NS	ND 2.5	ND 0.58	ND 0.58
Acenaphthene	20	ND 2.5	ND 0.58	ND 0.58
Acenaphthylene	NS	ND 2.5	ND 0.58	ND 0.58
Acetophenone	NS	ND 2.5	ND 0.58	ND 0.58
Anthracene	NS	ND 2.5	ND 0.58	ND 0.58
Atrazine	7.5	ND 2.5	ND 0.58	ND 0.58
Benzaldehyde	NS	ND 2.5	ND 0.58	ND 0.58
Benzo[a]anthracene	NS	ND 2.5	ND 0.58	ND 0.58
Benzo[a]pyrene	ND	ND 2.5	ND 0.58	ND 0.58
Benzo[b]fluoranthene	NS	ND 2.5	ND 0.58	ND 0.58
Benzo[g,h,i]perylene	NS	ND 2.5	ND 0.58	ND 0.58
Benzo[k]fluoranthene	NS	ND 2.5	ND 0.58	ND 0.58
bis(2-Chloroethoxy)methane	5	ND 2.5	ND 0.58	ND 0.58
bis(2-Chloroethyl)ether	1	ND 0.62	ND 0.14	ND 0.14
bis(2-Chloroisopropyl)ether	5	ND 2.5	ND 0.58	ND 0.58
bis(2-Ethylhexyl)phthalate	5	ND 2.5	ND 0.58	ND 0.58
Butylbenzylphthalate	NS	ND 2.5	ND 0.58	ND 0.58
Caprolactam	NS	ND 2.5	ND 0.58	ND 0.58
Carbazole	NS	ND 2.5	ND 0.58	ND 0.58
Chrysene	NS	ND 2.5	ND 0.58	ND 0.58
Dibenzo[a,h]anthracene	NS	ND 2.5	ND 0.58	ND 0.58
Dibenzofuran	NS	ND 0.62	ND 0.14	ND 0.14
Diethylphthalate	NS	ND 2.5	ND 0.58	ND 0.58
Dimethylphthalate	NS	ND 2.5	ND 0.58	ND 0.58
Di-n-butylphthalate	50	ND 0.62	ND 0.14	ND 0.14
Di-n-octylphthalate	NS	ND 2.5	ND 0.58	ND 0.58
Fluoranthene	NS	ND 2.5	ND 0.58	ND 0.58
Fluorene	NS	ND 2.5	ND 0.58	ND 0.58
Hexachlorobenzene	0.04	ND 2.5	ND 0.58	ND 0.58
Hexachlorobutadiene	0.5	ND 2.5	ND 0.58	ND 0.58
Hexachlorocyclopentadiene	5	ND 2.5	ND 0.58	ND 0.58
Hexachloroethane	5	ND 2.5	ND 0.58	ND 0.58
Indeno[1,2,3-cd]pyrene	NS	ND 2.5	ND 0.58	ND 0.58
Isophorone	NS	ND 2.5	ND 0.58	ND 0.58
Naphthalene	NS	ND 0.62	ND 0.14	ND 0.14
Nitrobenzene	0.4	ND 2.5	ND 0.58	ND 0.58
N-Nitroso-di-n-propylamine	NS	ND 0.62	ND 0.14	ND 0.14
N-Nitrosodiphenylamine	NS	ND 2.5	ND 0.58	ND 0.58
Pentachlorophenol	1	ND 12	ND 2.9	ND 2.9
Phenanthrene	NS	ND 2.5	ND 0.58	ND 0.58
Phenol	1	ND 2.5	ND 0.58	ND 0.58
Pyrene	NS	ND 2.5	ND 0.58	ND 0.58
Total SVOCs	NS	ND -	ND -	ND -

Notes

⁽¹⁾ - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

⁽²⁾ - SW-DUP1-102018 is a blind duplicate of SW-3-102018

NYSDEC Class A Standards are applicable but are not listed as no SVOCs were detected in any surface water samples

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed regulatory criteria

Table 5
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Semivolatile Organic Compounds

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Table 6
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Metals, Cyanide, and Chloride

	CLIENT ID: LAB ID: COLLECTION DATE:		SW-1-102018 AD07161-001 10/17/2018		SW-2-102018 AD07161-003 10/17/2018		SW-3-102018 AD07161-005 10/17/2018	
Metals and Cyanide and Chloride	NYSDEC Class GA Standards ¹ (µg/L)	NYSDEC A Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Aluminum	NS	100 (A(C))	390	200	ND	200	ND	200
Antimony	3	3 (H(WS))	ND	3.0	ND	3.0	ND	3.0
Arsenic	25	50 (H(WS)), 150 (A(C)), 340 (A(A))	ND	2.0	ND	2.0	ND	2.0
Barium	1,000	1,000 (H(WS))	ND	50	ND	50	92	50
Beryllium	3	3 (DW), 1,100 (A(C)) ²	ND	1.0	ND	1.0	ND	1.0
Cadmium	5	5 (H(WS)), 2.8 (A(C)) ² , 6 (A(A)) ²	ND	2.0	ND	2.0	ND	2.0
Calcium	NS	NS	43,000	5,000	44,000	5,000	170,000	5,000
Chromium	50	50 (H(WS)), 80 (A(C)) ²	ND	50	ND	50	ND	50
Cobalt	NS	5 (A(C))	ND	2	ND	2	ND	2
Copper	200	200 (H(WS)), 12.6 (A(C)) ² , 19.7 (A(A)) ²	ND	50	ND	50	ND	50
Cyanide	200	200 (H(WS)), 5.2 (A(C)), 22 (A(A)), 9,000 (H(FC))	ND	20	ND	20	ND	20
Iron	300 / 500 ³	300 (A(C) & E)	1,800	300	330	300	1,000	300
Lead	25	50 (H(WS))	ND	3	ND	3	ND	3
Magnesium	35,000	35,000 (H(WS))	12,000	5,000	12,000	5,000	24,000	5,000
Manganese	300 / 500 ³	300 (E)	1,500	40	280 ⁽³⁾	40	980	40
Mercury	0.7	0.7 (H(WS)), 0.77 (A(C)), 1.4 (A(A)), 7e-4 (H(FC)), 2.6e-3 (W)	ND	0.5	ND	0.5	ND	0.5
Nickel	100	100 (H(WS)), 73.3 (A(C)) ²	ND	50	ND	50	ND	50
Potassium	NS	NS	ND	5,000	ND	5,000	8100	5,000
Selenium	10	10 (H(WS)), 4.6 (A(C))	ND	10	ND	10	ND	10
Silver	50	50 (H(WS))	ND	20	ND	20	ND	20
Sodium	20,000	NS	9,300	5,000	14,000	5,000	99,000	5,000
Thallium	0.5	0.5 (H(WS)), 8 (A(C))	ND	2	ND	2	ND	2
Vanadium	NS	14 (FP)	ND	50	ND	50	ND	50
Zinc	2,000	2,000 (H(WS)), 126.8 (A(C)) ² , 165 (A(A)) ²	ND	50	ND	50	ND	50
Chloride	250,000	250,000 (H(WS))	23,000	2,000	7,800	2,000	170,000	10,000
Hardness (listed in milligrams of CaCO ₃ per liter)		NS	150	6.6	160	6.6	500	6.6

Notes

⁽¹⁾ - NYSDEC Class GA and Class A Standards & Guidance Values are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

⁽²⁾ - Class A Standard(s) are based on hardness concentrations

⁽³⁾ - Standard of 500 µg/L applies to the sum of Iron and Manganese

⁽⁴⁾ - SW-DUP1-102018 is a blind duplicate of SW-3-102018

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed Class GA or Class A Standards or Guidance Values

NYSDEC Class A Standard Types:

A(C) - Fish Propagation	A(C)
H(WS) - Drinking Water	H(WS)
A(A) - Fish Survival	A(A)
H(FC) - Human Consumption of Fish	H(FC)
E - Aesthetic	E
W - Wildlife Protection	W

Table 6
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water Sample Analytical Results for Metals, Cyanide, and Chloride

Metals and Cyanide and Chloride	CLIENT ID: SW-DUP1-102018⁽⁴⁾ LAB ID: AD07161-007 COLLECTION DATE: 10/17/2018 SW-4-102018 AD07161-008 10/17/2018					
	NYSDEC Class GA Standards ¹ (µg/L)	NYSDEC A Standards ¹ (µg/L)	Result (µg/L)	RL (µg/L)	Result (µg/L)	RL (µg/L)
Aluminum	NS	100 (A(C))	ND	200	9,000	200
Antimony	3	3 (H(WS))	ND	3.0	ND	3.0
Arsenic	25	50 (H(WS)), 150 (A(C)), 340 (A(A))	ND	2.0	2.6	2.0
Barium	1,000	1,000 (H(WS))	110	50	160	50
Beryllium	3	3 (DW), 1,100 (A(C)) ²	ND	1.0	ND	1.0
Cadmium	5	5 (H(WS)), 2.8 (A(C)) ² 6 (A(A)) ²	ND	2.0	ND	2.0
Calcium	NS	NS	190,000	5,000	76,000	5,000
Chromium	50	50 (H(WS)), 80 (A(C)) ²	ND	50	ND	50
Cobalt	NS	5 (A(C))	ND	2	5.8	2
Copper	200	200 (H(WS)), 12.6 (A(C)) ² , 19.7 (A(A)) ²	ND	50	ND	50
Cyanide	200	200 (H(WS)), 5.2 (A(C)), 22 (A(A)), 9,000 (H(FC))	ND	20	ND	20
Iron	300 / 500 ³	300 (A(C) & E)	1,200	300	20,000	300
Lead	25	50 (H(WS))	ND	3	24	3
Magnesium	35,000	35,000 (H(WS))	27,000	5,000	23,000	5,000
Manganese	300 / 500 ³	300 (E)	1,100	40	4,600	40
Mercury	0.7	0.7 (H(WS)), 0.77 (A(C)), 1.4 (A(A)), 7e-4 (H(FC)), 2.6e-3 (W)	ND	0.5	ND	0.5
Nickel	100	100 (H(WS)), 73.3 (A(C)) ²	ND	50	ND	50
Potassium	NS	NS	9,500	5,000	6,200	5,000
Selenium	10	10 (H(WS)), 4.6 (A(C))	ND	10	ND	10
Silver	50	50 (H(WS))	ND	20	ND	20
Sodium	20,000	NS	120,000	5,000	31,000	5,000
Thallium	0.5	0.5 (H(WS)), 8 (A(C))	ND	2	ND	2
Vanadium	NS	14 (FP)	ND	50	ND	50
Zinc	2,000	2,000 (H(WS)), 126.8 (A(C)) ² , 165 (A(A)) ²	ND	50	110	50
Chloride	250,000	250,000 (H(WS))	150,000	10,000	41,000	2,000
Hardness (listed in milligrams of CaCO ₃ per liter)		NS	500	6.6	310	6.6

Notes

⁽¹⁾ - NYSDEC Class GA and Class A Standards & Guidance Values are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.

⁽²⁾ - Class A Standard(s) are based on hardness concentrations

⁽³⁾ - Standard of 500 µg/L applies to the sum of Iron and Manganese

⁽⁴⁾ - SW-DUP1-102018 is a blind duplicate of SW-3-102018

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

µg/L - micrograms per liter

Shaded and bolded values exceed Class GA or Class A Standards or Gu

NYSDEC Class A Standard Types:

A(C) - Fish Propagation	A(C)
H(WS) - Drinking Water	H(WS)
A(A) - Fish Survival	A(A)
H(FC) - Human Consumption of Fish	H(FC)
E - Aesthetic	E
W - Wildlife Protection	W

Table 7
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Sediment Sample Analytical Results for Volatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:		SD-1-102018 AD07161-002 10/17/2018		SD-2-102018 AD07161-004 10/17/2018		SD-3-102018 AD07161-006 10/17/2018		SD-4-102018 AD07161-009 10/17/2018	
	NYSDEC Class A SGV ¹ (mg/kg)	NYSDEC Class C SGV ¹ (mg/kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)
Volatile Organic Compounds										
1,1,1-Trichloroethane	1.8	8.6	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
1,1,2,2-Tetrachloroethane	9	18	ND	0.0044	ND	0.0083	ND	0.0024	ND	0.0094
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
1,1,2-Trichloroethane	1.8	8.6	ND	0.0045	ND	0.0085	ND	0.0025	ND	0.0095
1,1-Dichloroethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
1,1-Dichloroethene	0.52	4.7	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
1,2,3-Trichlorobenzene	0.23	2.8	ND	0.0034	ND	0.0063	ND	0.0019	ND	0.0071
1,2,4-Trichlorobenzene	35	55	ND	0.0044	ND	0.0082	ND	0.0024	ND	0.0093
1,2-Dibromo-3-chloropropane	NS	NS	ND	0.0045	ND	0.0084	ND	0.0025	ND	0.0094
1,2-Dibromoethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
1,2-Dichlorobenzene	0.28	2.5	ND	0.0053	ND	0.0099	ND	0.0029	ND	0.011
1,2-Dichloroethane	NS	NS	ND	0.0042	ND	0.0079	ND	0.0023	ND	0.0089
1,2-Dichloropropane	NS	NS	ND	0.0036	ND	0.0068	ND	0.0020	ND	0.0076
1,3-Dichlorobenzene	1.8	7.1	ND	0.0041	ND	0.0077	ND	0.0023	ND	0.0087
1,4-Dichlorobenzene	0.72	3.3	ND	0.0030	ND	0.0057	ND	0.0017	ND	0.0064
1,4-Dioxane	NS	NS	ND	0.21	ND	0.39	ND	0.12	ND	0.44
2-Butanone	NS	NS	ND	0.0054	ND	0.010	ND	0.0030	ND	0.011
2-Hexanone	NS	NS	ND	0.0049	ND	0.0093	ND	0.0027	ND	0.010
4-Methyl-2-pentanone	NS	NS	ND	0.0054	ND	0.010	ND	0.0030	ND	0.011
Acetone	NS	NS	ND	0.027	ND	0.051	ND	0.015	ND	0.057
Benzene	0.53	1.9	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Bromochloromethane	NS	NS	ND	0.0047	ND	0.0087	ND	0.0026	ND	0.0098
Bromodichloromethane	NS	NS	ND	0.0033	ND	0.0061	ND	0.0018	ND	0.0069
Bromoform	NS	NS	ND	0.0048	ND	0.0090	ND	0.0026	ND	0.010
Bromomethane	NS	NS	ND	0.0035	ND	0.0066	ND	0.0020	ND	0.0075
Carbon disulfide	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Carbon tetrachloride	1.07	9.6	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Chlorobenzene	0.2	1.7	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Chloroethane	NS	NS	ND	0.0051	ND	0.0095	ND	0.0028	ND	0.011
Chloroform	NS	NS	ND	0.0044	ND	0.0083	ND	0.0024	ND	0.0094
Chloromethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
cis-1,2-Dichloroethene	NS	NS	ND	0.0029	ND	0.0055	ND	0.0016	ND	0.0062
cis-1,3-Dichloropropene	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Cyclohexane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Dibromochloromethane	NS	NS	ND	0.0033	ND	0.0061	ND	0.0018	ND	0.0069
Dichlorodifluoromethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Ethylbenzene	0.43	3.7	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Isopropylbenzene	0.21	1.8	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
m&p-Xylenes	0.82	7.2	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Methyl Acetate	NS	NS	ND	0.0046	ND	0.0087	ND	0.0026	ND	0.0098
Methylcyclohexane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Methylene chloride	NS	NS	ND	0.0049	ND	0.0092	ND	0.0027	ND	0.010
Methyl-t-butyl ether	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
o-Xylene	0.48	4.2	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Styrene	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Tetrachloroethene	16	57	ND	0.0030	ND	0.0056	ND	0.0016	ND	0.0063
Toluene	0.93	4.5	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
trans-1,2-Dichloroethene	1.2	11	ND	0.0028	ND	0.0052	ND	0.0015	ND	0.0058
trans-1,3-Dichloropropene	NS	NS	ND	0.0043	ND	0.0081	ND	0.0024	ND	0.0091
Trichloroethene	1.8	8.6	ND	0.0032	ND	0.0060	ND	0.0018	ND	0.0067
Trichlorofluoromethane	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Vinyl chloride	NS	NS	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Xylenes (Total)	0.59	5.2	ND	0.0027	ND	0.0051	ND	0.0015	ND	0.0057
Total VOCs	NS	NS	ND	-	ND	-	ND	-	ND	-

Notes
(¹) - NYSDEC Class A and Class C Sediment Guidance Values are from NYSDEC Bureau of Habitat Screeing and Assessment of Contaminated Sediment Guidance, dated June 24, 2014.
NS - No Standard
ND - Analyte not detected at the listed reporting limit
RL - Reporting Limit
mg/kg - milligrams per kilogram
Shaded and bolded values exceed regulatory criteria

Table 8
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Sediment Sample Analytical Results for Semivolatile Organic Compounds

	CLIENT ID: LAB ID: COLLECTION DATE:		SD-1-102018 AD07161-002 10/17/2018		SD-2-102018 AD07161-004 10/17/2018		SD-3-102018 AD07161-006 10/17/2018		SD-4-102018 AD07161-009 10/17/2018	
Semivolatile Organic Compounds	NYSDEC Class A SGV ¹ (mg/kg)	NYSDEC Class C SGV ¹ (mg/kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)	Result (mg/Kg)	RL (mg/Kg)
1,1'-Biphenyl	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
1,2,4,5-Tetrachlorobenzene	1	5.3	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2,3,4,6-Tetrachlorophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2,4,5-Trichlorophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2,4,6-Trichlorophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2,4-Dichlorophenol	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
2,4-Dimethylphenol	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
2,4-Dinitrophenol	NS	NS	ND	0.46	ND	1.0	ND	0.30	ND	0.56
2,4-Dinitrotoluene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2,6-Dinitrotoluene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2-Chloronaphthalene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2-Chlorophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2-Methylnaphthalene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2-Methylphenol	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
2-Nitroaniline	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
2-Nitrophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
3&4-Methylphenol	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
3,3'-Dichlorobenzidine	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
3-Nitroaniline	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
4,6-Dinitro-2-methylphenol	NS	NS	ND	0.46	ND	1.0	ND	0.30	ND	0.56
4-Bromophenyl-phenylether	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
4-Chloro-3-methylphenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
4-Chloroaniline	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
4-Chlorophenyl-phenylether	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
4-Nitroaniline	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
4-Nitrophenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Acenaphthene*	9.04		ND	0.093	ND	0.21	ND	0.061	ND	0.11
Acenaphthylene*	9.82		ND	0.093	ND	0.21	ND	0.061	ND	0.11
Acetophenone	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Anthracene*	11.88		ND	0.093	ND	0.21	ND	0.061	ND	0.11
Atrazine	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Benzaldehyde	NS	NS	ND	0.093	ND	0.21	ND	0.061	0.60	0.11
Benzo[a]anthracene*	16.82		0.16	0.093	0.29	0.21	0.075	0.061	0.14	0.11
Benzo[a]pyrene*	19.28		0.21	0.093	0.36	0.21	0.075	0.061	0.17	0.11
Benzo[b]fluoranthene*	19.58		0.31	0.093	0.58	0.21	0.11	0.061	0.26	0.11
Benzo[g,h,i]perylene*	21.90		0.14	0.093	0.3	0.21	ND	0.061	0.14	0.11
Benzo[k]fluoranthene*	19.60		0.1	0.093	ND	0.21	ND	0.061	ND	0.11
bis(2-Chloroethoxy)methane	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
bis(2-Chloroethyl)ether	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
bis(2-Chloroisopropyl)ether	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
bis(2-Ethylhexyl)phthalate	360	360	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Butylbenzylphthalate	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Caprolactam	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Carbazole	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Chrysene*	16.86		0.23	0.093	0.41	0.21	0.071	0.061	0.18	0.11
Dibenzo[a,h]anthracene*	22.44		ND	0.093	ND	0.21	ND	0.061	ND	0.11
Dibenzofuran	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
Diethylphthalate	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Dimethylphthalate	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Di-n-butylphthalate	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
Di-n-octylphthalate	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Fluoranthene*	14.16		0.35	0.093	0.5	0.21	0.13	0.061	0.27	0.11
Fluorene*	10.78		ND	0.093	ND	0.21	ND	0.061	ND	0.11
Hexachlorobenzene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Hexachlorobutadiene	1.2	12	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Hexachlorocyclopentadiene	0.81	8.1	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Hexachloroethane	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Indeno[1,2,3-cd]pyrene*	22.30		0.12	0.093	0.22	0.21	ND	0.061	ND	0.11
Isophorone	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Naphthalene*	7.70		ND	0.023	ND	0.052	ND	0.015	ND	0.028
Nitrobenzene	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
N-Nitroso-di-n-propylamine	NS	NS	ND	0.023	ND	0.052	ND	0.015	ND	0.028
N-Nitrosodiphenylamine	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Pentachlorophenol	14	19	ND	0.46	ND	1	ND	0.3	ND	0.56
Phenanthrene*	14.90		0.16	0.093	ND	0.21	ND	0.061	0.12	0.11
Phenol	NS	NS	ND	0.093	ND	0.21	ND	0.061	ND	0.11
Pyrene*	13.96		0.35	0.093	0.56	0.21	0.13	0.061	0.27	0.11
Total PAHs (16 Sampled) ²	4,000	35,000	2.1	-	3.2	-	0.6	-	1.6	-
Total SVOCs	NS	NS	2.1	-	3.2	-	0.6	-	1.6	-

Notes
(¹) - NYSDEC Class A and Class C Sediment Guidance Values are from NYSDEC Bureau of Habitat Screeing and Assessment of Contaminated Sediment Guidance, Table 5, dated June 24, 2014.
(²) - The correction Factor (or multiplier) for Total PAH comparison when 16 of 34 PAHs are sampled is 9.3 (see above guidance Section A, Page 27)
* - These compounds are PAHs; Sediment Guidance Values listed are from the above guidance, Table 7.
NS - No Standard
ND - Analyte not detected at the listed reporting limit
RL - Reporting Limit
mg/kg - milligrams per kilogram
Shaded and bolded values exceed regulatory criteria

Table 9
New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Sediment Sample Analytical Results for Metals and Cyanide

	CLIENT ID: LAB ID: COLLECTION DATE:		SD-1-102018 AD07161-002 10/17/2018		SD-2-102018 AD07161-004 10/17/2018		SD-3-102018 AD07161-006 10/17/2018		SD-4-102018 AD07161-009 10/17/2018	
	NYSDEC Class A SGV ¹ (mg/kg)	NYSDEC Class C SGV ¹ (mg/kg)	Result (mg/kg)	RL (mg/kg)	Result (mg/kg)	RL (mg/kg)	Result (mg/kg)	RL (mg/kg)	Result (mg/kg)	RL (mg/kg)
Metals and Cyanide										
Aluminum	NS	NS	6,500	560	8,900	1,200	27,000	360	16,000	670
Antimony	NS	NS	ND	2.2	ND	5.0	ND	1.5	ND	2.7
Arsenic	10	33	1.9	0.56	5.5	1.2	4.2	0.36	4.5	0.67
Barium	NS	NS	330	28	420	62	160	18	210	33
Beryllium	NS	NS	ND	0.56	ND	1.2	0.56	0.36	ND	0.67
Cadmium	1	5	ND	1.1	ND	2.5	1.2	0.73	1.9	1.3
Calcium	NS	NS	5,700	2,800	13,000	6,200	49,000	1,800	10,000	3,300
Chromium	43	110	19	14	ND	31	42	9.1	40	17
Cobalt	NS	NS	11	6.9	ND	16	15	4.5	13	8.3
Copper	32	150	15	14	45	31	45	9.1	45	17
Cyanide	NS	27	ND	0.67	1.9	1.5	1.3	0.44	ND	0.80
Iron	NS	NS	31,000	560	34,000	1,200	35,000	360	44,000	670
Lead	36	130	21	14	51	31	150	9.1	73	17
Magnesium	NS	NS	2,600	1,400	5,200	3,100	30,000	910	7,300	1,700
Manganese	NS	NS	17,000	280	18,000	250	430	18	1,300	33
Mercury	0.2	1	ND	0.23	ND	0.52	ND	0.15	ND	0.28
Nickel	23	49	ND	14	ND	31	35	9.1	30	17
Potassium	NS	NS	1,500	1,400	ND	3,100	2,800	910	3,400	1,700
Selenium	NS	NS	ND	5.6	ND	13	ND	3.6	ND	6.7
Silver	1	2.2	ND	0.56	ND	1.2	ND	0.36	ND	0.67
Sodium	NS	NS	ND	690	ND	1,600	650	450	ND	830
Thallium	NS	NS	ND	1.1	ND	2.5	ND	0.73	ND	1.3
Vanadium	NS	NS	ND	28	ND	62	68	18	52	33
Zinc	120	460	69	28	260	62	200	18	260	33
Chloride	NS	NS	ND	56	ND	120	200	36	100	67

Notes

⁽¹⁾ - NYSDEC Class A and Class C Sediment Guidance Values are from NYSDEC Bureau of Habitat Screening and Assessment of Contaminated Sediment Guidance, dated June 24, 2014.

NS - No Standard

ND - Analyte not detected at the listed reporting limit

RL - Reporting Limit

mg/kg - milligrams per kilogram

Shaded and bolded values exceed Class A SGV; underlined results exceed Class C SGV

APPENDIX A
GROUNDWATER SAMPLING LOGS

TRC Groundwater Sampling Data Record Form			Project: Harrison Landfill		Project No.: 280088		Date/Time: 10/15/2018		Sheet <u>1 of 1</u>																																													
			TRC Personnel: JZ-JR																																																			
Well Identification: LMW-2																																																						
WELL INTEGRITY <table><tr><td></td><td>YES</td><td>NO</td></tr><tr><td>Protect. Casing Secure</td><td>☒</td><td>☐</td></tr><tr><td>Concrete Collar Intact</td><td>☒</td><td>☐</td></tr><tr><td>PVC Stick-up Intact</td><td>☒</td><td>☐</td></tr><tr><td>Well Cap Present</td><td>☒</td><td>☐</td></tr><tr><td>Security Lock Present</td><td>☒</td><td>☐</td></tr></table>				YES	NO	Protect. Casing Secure	☒	☐	Concrete Collar Intact	☒	☐	PVC Stick-up Intact	☒	☐	Well Cap Present	☒	☐	Security Lock Present	☒	☐	Protective Casing Stick-up _____ ft. (from Ground) WELL DIAMETER<table><tr><td>☒</td><td>2 inch</td></tr><tr><td>☐</td><td>4 inch</td></tr><tr><td>☐</td><td>6 inch</td></tr></table>			☒	2 inch	☐	4 inch	☐	6 inch	Reference Point: <table><tr><td>Well Depth (ft.):</td><td>21.21</td><td>☒ top of riser</td><td>☐ historical</td></tr><tr><td>Depth to Water (ft.):</td><td>9.97</td><td>☐ top of casing</td><td>☒ measured: notch</td></tr><tr><td colspan="2">Depth of pump intake (ft.): 18</td><td></td><td>☒ north side</td></tr><tr><td colspan="2"></td><td></td><td>☐ high pt</td></tr><tr><td colspan="2"></td><td></td><td>☐ pen mark</td></tr></table> ☒ .16 gal/ft (2 in.) ☐ .65 gal/ft (4 in.) ☐ 1.5 gal/ft (6 in.) ☐ gal/ft (___ in.)					Well Depth (ft.):	21.21	☒ top of riser	☐ historical	Depth to Water (ft.):	9.97	☐ top of casing	☒ measured: notch	Depth of pump intake (ft.): 18			☒ north side				☐ high pt				☐ pen mark
	YES	NO																																																				
Protect. Casing Secure	☒	☐																																																				
Concrete Collar Intact	☒	☐																																																				
PVC Stick-up Intact	☒	☐																																																				
Well Cap Present	☒	☐																																																				
Security Lock Present	☒	☐																																																				
☒	2 inch																																																					
☐	4 inch																																																					
☐	6 inch																																																					
Well Depth (ft.):	21.21	☒ top of riser	☐ historical																																																			
Depth to Water (ft.):	9.97	☐ top of casing	☒ measured: notch																																																			
Depth of pump intake (ft.): 18			☒ north side																																																			
			☐ high pt																																																			
			☐ pen mark																																																			
PID SCREENING (ppmV) <table><tr><td>Background</td><td>0</td></tr><tr><td>Well Mouth</td><td>0</td></tr></table> (if required)			Background	0	Well Mouth	0	WELL MATERIAL <table><tr><td>☒</td><td>☐</td><td>☐</td></tr><tr><td>PVC</td><td>SS</td><td></td></tr></table>			☒	☐	☐	PVC	SS		Height of water column (ft.): 11.24 Volume of Water in Well (gal): 1.68 Total Gallons Purged: 2.25 [Vol. = r²h(0.163)]																																						
Background	0																																																					
Well Mouth	0																																																					
☒	☐	☐																																																				
PVC	SS																																																					
FIELD WATER QUALITY MEASUREMENTS																																																						
Time	10:40	10:45	10:50	10:55	11:00	11:05	11:10	11:15	11:20																																													
Temp. (C.) - (±10%)	12.57	12.77	13.18	13.18	13.14	13.02	13.02	12.97	12.95																																													
pH (Std.Units) - (± 0.1)	6.02	6.05	6.23	6.46	6.53	6.59	6.6	6.68	6.73																																													
ORP (millivolts) - (± 10)	262	268	191	164	156	156	155	148	149																																													
Conduct.(mS/cm) - (±3%)	0.354	0.349	0.346	0.346	0.350	0.354	0.352	0.352	0.350																																													
Turb. (NTU) - (± 10%)	42.4	54.9	66.6	42.8	34.9	32.6	31.8	13.2	9.4																																													
DO (mg/L) - (± 10%)	2.87	6.32	8.87	9.96	10.11	10.11	10.1	10.24	9.35																																													
Depth to water (ft)	15.58	18.49	18.54	18.55	18.55	NM	NM	NM	18.1																																													
Flow (ml/min)	200	200	200	200	200	200	200	200	200																																													
Salinity (ppt)																																																						
Comments																																																						
Time	11:25	11:55	12:00																																																			
Temp. (C.) - (±10%)	12.60	11.93	12.08																																																			
pH (Std.Units) - (± 0.1)	6.5	6.43	6.4																																																			
ORP (millivolts) - (± 10)	157	157	154																																																			
Conduct.(mS/cm) - (±3%)	0.370	0.370	0.370																																																			
Turb. (NTU) - (± 10%)	33.7	37.8	25																																																			
DO (mg/L) - (± 10%)	1.75	1.34	1.34																																																			
Depth to water (ft)	NM	16.91	17.85																																																			
Flow (ml/min)	200	200	200																																																			
Salinity																																																						
Comments	Well runs dry																																																					
Pump Type Peristaltic Pump Submersible Pump Bladder Pump Bailer: Purge Sample Description of Sampling Equipment HDPE Tubing + Geopump																																																						
Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID																																																	
VOCs	N	HCl	40ml x 3	12:30	LMW-2-102018																																																	
SVOCs	N	None	1L x 2	12:30	LMW-2-102018																																																	
PFCs/Chloride	N	None	250 ml x 3	12:30	LMW-2-102018																																																	
Metals	Y	HNO3	1L Poly	12:30	LMW-2-102018																																																	
Cyanide	Y	NaOH	200 ml	12:30	LMW-2-102018																																																	
Remarks:	Sample: Clear Color, No Odor																																																					
	Samples were collected without stabilization of turbidity and depth to water due to slow recharge rate																																																					



Project:
Harrison Landfill

Project No.:
280088

Date/Time:
10/16/2018

Sheet 1 of 1

TRC Personnel: JZ JR

Well Identification: LMW-4

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	x	
Concrete Collar Intact	x	
PVC Stick-up Intact	x	
Well Cap Present	x	
Security Lock Present		x

PID SCREENING (ppmV)

Background	0	(if required)
Well Mouth	0	

Protective
Casing Stick-up 2.25 ft
(from Ground)

WELL DIAMETER	x	
		2 inch
		4 inch
		6 inch

WELL MATERIAL

x		
PVC	SS	

Well	15
Depth (ft.):	

Depth to Water (ft):	2.94

Depth of pump intake (ft.): 13

Height of water column (ft.):	12.06

Volume of Water in Well (gal):	1.87

Total Gallons Purged:	1.59

$$[\text{Vol.} = r^2 h (0.163)]$$

Reference Point:

x top of riser

top of casing

	top of cash

13

x .16 gal/ft (2 in.)

	.65 gal/ft (4 in.)

	1.5 gal/ft (6 in.)

gal/ft (in.)

Depth to NAPL (ft.):

Thickness of NAPL (ft.):

FIELD WATER QUALITY MEASUREMENTS

[illegible]

Time	10:30	10:35							
Temp. (C.) - (±10%)	12.95	12.16							
pH (Std.Units) - (± 0.1)	6.38	6.39							
ORP (millivolts) - (± 10)	6	6							
Conduct. (mS/cm) - (±3%)	0.412	0.410							
Turb. (NTU) - (± 10%)	2.9	3.1							
DO (mg/L) - (± 10%)	8.14	8.09							
Depth to water (ft)	12.95	12.92							
Flow (ml/min)	250	250							
Salinity									
Comments									

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	x	x	HDPE Tubing + Geopump
Submersible Pump			
Bladder Pump			
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs	N	HCl	40ml x 3	10:35	LMW-4-102018
SVOCs	N	None	1L x 2	10:35	LMW-4-102018
PFCs/Chloride	N	None	250 ml x 3	10:35	LMW-4-102018
Metals	Y	HNO3	1L Poly	10:35	LMW-4-102018
Cyanide	Y	NaOH	200 ml	10:35	LMW-4-102018

[illegible]

		Project: Harrison Landfill		Project No.: 280088		Date/Time: 10/15/2018		Sheet <u>1 of 1</u>	
Groundwater Sampling Data Record Form		TRC Personnel: JZ, JR							
Well Identification: PC-1-102018									
WELL INTEGRITY			Protective Casing Stick-up <u>2.5</u> ft. (from Ground)		Well Depth (ft.): 16.77		Reference Point: ☒ top of riser		historical measured: ☐
YES NO			WELL DIAMETER ☒ 2 inch		Depth to Water (ft.): 3.64		☐ top of casing		☒ north side
Protect. Casing Secure ☒			☐ 4 inch						☐ high pt
Concrete Collar Intact ☒			☐ 6 inch						☐ pen mark
PVC Stick-up Intact ☒									
Well Cap Present ☒									
Security Lock Present ☐									
Well behind locked gate ☐									
PID SCREENING (ppmV)			WELL MATERIAL		Height of water column (ft.): 13.13		☒ .16 gal/ft (2 in.)		
Background 0			☒ PVC ☐ SS ☐		Volume of Water in Well (gal): 1.85		☐ .65 gal/ft (4 in.)		Depth to NAPL (ft.):
Well Mouth 0 (if required)					Total Gallons Purged: 1		☐ 1.5 gal/ft (6 in.)		Thickness of NAPL (ft.):
					[Vol. = r ² h(0.163)]		☐ gal/ft (in.)		
FIELD WATER QUALITY MEASUREMENTS									
Time	13:10	13:15	13:20	13:25	13:30	13:35	13:40	13:45	
Temp. (C.) - (±10%)	15.04	14.98	15.00	15.00	15.02	15.05	15.06	13.09	
pH (Std.Units) - (± 0.1)	7.03	7.03	7.04	7.04	7.04	7.04	7.04	7.05	
ORP (millivolts) - (± 10)	-64	-12	-71	-74	-76	-76	-76	-77	
Conduct.(mS/cm) - (±3%)	1.340	1.340	1.360	1.360	1.360	1.360	1.360	1.360	
Turb. (NTU) - (± 10%)	0.2	0.3	0.4	0.9	1	1.2	1.2	1.1	
DO (mg/L) - (± 10%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Depth to water (ft)	3.71	3.72	NM	3.72	3.73	3.73	3.75	3.75	
Flow (ml/min)	250	250	300	300	300	300	300	300	
Salinity (ppt)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity									
Comments									
Pump Type	Purge	Sample	Description of Sampling Equipment						
Peristaltic Pump	☒	☒	HDPE Tubing + Geopump						
Submersible Pump	☐	☐							
Bladder Pump	☐	☐							
Bailer:	☐	☐							
Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers		Time Collected			Sample ID	
VOCs	N	HCl	40ml x 3		13:50			PC-1-102018	
SVOCs	N	None	1L x 2		13:50			PC-1-102018	
PFCs/Chloride	N	None	250 ml x 3		13:50			PC-1-102018	
Metals	Y	HNO3	1L Poly		13:50			PC-1-102018	
Cyanide	Y	NaOH	200 ml		13:50			PC-1-102018	
Alkalinity	N	None	60 ml VOA		13:50			PC-1-102018	
Remarks:	Sample: Clear color, No odor								
	Collected field duplicate GW-DUP-1-102018 @ this location								

		Project: Harrison Landfill		Project No.: 280088		Date/Time: 10/23/2018		Sheet <u>1 of 1</u>	
Groundwater Sampling Data Record Form		TRC Personnel: JZ, JR							
Well Identification: PC-1-102018									
WELL INTEGRITY			Protective Casing Stick-up <u>2.5</u> ft. (from Ground)		Well Depth (ft.): 16.77		Reference Point: ☒ top of riser		historical measured: ☐
Protect. Casing Secure ☒ YES ☐ NO			WELL DIAMETER ☒ 2 inch		Depth to Water (ft.): 3.64		☐ top of casing		☒ north side
Concrete Collar Intact ☒			☐ 4 inch						☐ high pt
PVC Stick-up Intact ☒			☐ 6 inch						☐ pen mark
Well Cap Present ☒									
Security Lock Present ☐									
Well behind locked gate ☐									
PID SCREENING (ppmV)			WELL MATERIAL		Height of water column (ft.): 13.13		☒ .16 gal/ft (2 in.)		
Background 0			☒ PVC ☐ SS ☐		Volume of Water in Well (gal): 1.85		☐ .65 gal/ft (4 in.)		Depth to NAPL (ft.):
Well Mouth 0 (if required)					Total Gallons Purged: 1		☐ 1.5 gal/ft (6 in.)		Thickness of NAPL (ft.):
					[Vol. = r ² h(0.163)]		☐ gal/ft (in.)		
FIELD WATER QUALITY MEASUREMENTS									
Time	13:25	13:30	13:35	13:40	13:45	13:50	13:55	14:00	14:05
Temp. (C.) - (±10%)	12.15	11.83	11.86	11.87	11.85	11.83	11.84	11.85	11.90
pH (Std.Units) - (± 0.1)	7.12	7.2	7.23	7.23	7.22	7.22	7.22	7.21	7.21
ORP (millivolts) - (± 10)	148	119	65	43	32	16	9	5	0
Conduct.(mS/cm) - (±3%)	1.460	1.440	1.430	1.430	1.430	1.420	1.410	1.410	1.400
Turb. (NTU) - (± 10%)	0	0	0	0	0	0	0	0	0
DO (mg/L) - (± 10%)	1.16	0.42	0.11	0.7	0.00	0	0	0	0
Depth to water (ft)	5.05	5.39	5.45	5.47	5.48	5.48	5.59	5.59	5.48
Flow (ml/min)	300	300	300	300	300	300	300	300	300
Salinity (ppt)	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Comments	No color, No Odor, No Turbidity, Disposal Method: Drum								
Time	14:10	14:15							
Temp. (C.) - (±10%)	11.88	11.87							
pH (Std.Units) - (± 0.1)	7.21	7.22							
ORP (millivolts) - (± 10)	-3	-7							
Conduct.(mS/cm) - (±3%)	1.500	1.400							
Turb. (NTU) - (± 10%)	0	0							
DO (mg/L) - (± 10%)	0.00	0							
Depth to water (ft)	5.5	5.5							
Flow (ml/min)	300	300.00							
Salinity (ppt)	0.7	0.7							
Comments									
Pump Type Peristaltic Pump ☒ Purge ☒ Sample ☒ Submersible Pump ☐ Bladder Pump ☐ Bailer: ☐									
Description of Sampling Equipment HDPE Tubing + Geopump									
Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers		Time Collected		Sample ID		
Sulfide	N	Zn Acetate	500 mL Poly		13:50		PC-1-102018		
Remarks: Sample: Clear color, No odor									
Only Sulfide Sampled as it was missed in original 10/15/2018 sample.									

TRC

Groundwater Sampling

Data Record Form

Project:

Harrison Landfill

Project No.:

280088

Date/Time:

10/16/2018

Sheet

1 of 1

1 OF 1

TRC Personnel:

JR, JZ

Well Identification: PC-2-102018

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	☒	☐
Concrete Collar Intact	☒	☐
PVC Stick-up Intact	☒	☐
Well Cap Present	☒	☐
Security Lock Present	☐	☒

Protective Casing Stick-up _____ ft.
(from Ground)

WELL DIAMETER

☒ 2 inch
☐ 4 inch
☐ 6 inch

WELL MATERIAL

☒ PVC
☐ SS
☐

Reference Point:

Well Depth (ft.):

4.96

Depth to Water (ft):

2.6

Depth of pump intake (ft.):

4

Height of water column (ft.):

2

2.36

Volume of Water in Well (gal):

0.38

Total Gallons Purged:

2.18

[Vol. = r²h(0.163)]

☒ top of riser
☐ top of casing

historical measured:
notch
north side
high pt
pen mark

☒ .16 gal/ft (2 in.)
☐ .65 gal/ft (4 in.)
☐ 1.5 gal/ft (6 in.)
☐ gal/ft (in.)

Depth to NAPL (ft.):

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0
Well Mouth	0

(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	9:50	9:55	10:00	10:05	10:10	10:15	10:20	10:25	10:30
Temp. (C.) - (±10%)	14.91	14.77	14.62	14.60	14.65	14.67	14.64	14.65	16.60
pH (Std.Units) - (± 0.1)	6.55	6.53	6.53	6.55	6.56	6.56	6.57	6.56	6.56
ORP (millivolts) - (± 10)	-124	-126	-126	-125	-123	-123	-121	-121	-120
Conduct.(mS/cm) - (±3%)	0.765	0.734	0.713	0.707	0.703	0.700	0.696	0.695	0.693
Turb. (NTU) - (± 10%)	260	265	57.1	18.9	7.2	10	4.2	2.9	3.3
DO (mg/L) - (± 10%)	0.53	0	0	0	0.00	0	0	0	0
Depth to water (ft)	2.9	4.41	4.20	4.14	4.12	4.13	4.12	4.12	4.12
Flow (ml/min)	200	200	250	250	250	250	250	250	250
Salinity (ppt)	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity (ppt)									
Comments									

Pump Type

Peristaltic Pump

Submersible Pump

Bladder Pump

Bailer:

Purge

☒

☐

☐

☐

Sample

☒

☐

☐

☐

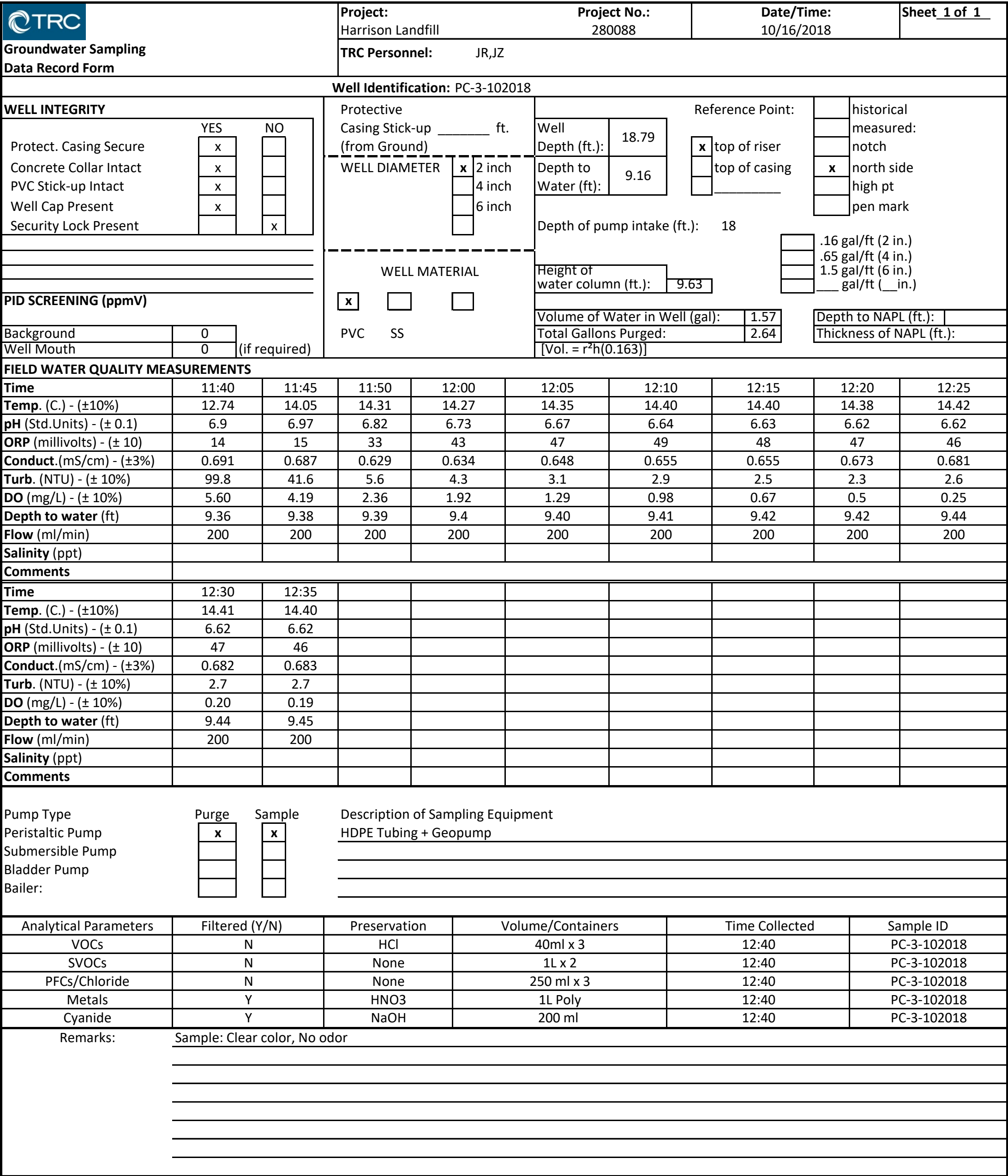
Description of Sampling Equipment

HDPE Tubing + Geopump

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
VOCs	N	HCl	40ml x 3	10:35	PC-2-102018
SVOCs	N	None	1L x 2	10:35	PC-2-102018
PFCs/Chloride	N	None	250 ml x 3	10:35	PC-2-102018
Metals	Y	HNO3	1L Poly	10:35	PC-2-102018
Cyanide	Y	NaOH	200 ml	10:35	PC-2-102018

Remarks:

Sample: Clear color, No odor



APPENDIX B
WASTE DISPOSAL DOCUMENTATION

GENERATOR	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number <i>N/A</i>	2. Page 1 of <i>1</i>	3. Emergency Response Phone <i>800-451-8984</i>	4. Waste Tracking Number <i>121118 - D1</i>		
	5. Generator's Name and Mailing Address NYS DOT Region 8 Attn: Gretchen Fitzgerald 4 Burnett Blvd. Poughkeepsie, NY 12603 Generator's Site Address (if different than mailing address) NY 120 & New King Street West Harrison, NY 10604						
	Generator's Phone: <i>845-431-5826</i>						
	6. Transporter 1 Company Name <i>MC Environmental Services, Inc.</i>			U.S. EPA ID Number <i>NYR000021071</i>			
	7. Transporter 2 Company Name			U.S. EPA ID Number			
TRANSPORTER	8. Designated Facility Name and Site Address Veolia ES Technical Solutions, LLC 4301 Infirmary Road West Carrollton, OH 45449 USA U.S. EPA ID Number <i>OH0093945293</i>		Facility's Phone: <i>937-859-2207-169</i>				
	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
			No.	Type			
	1. <i>Non RCRA, Non DOT-Regulated</i> <i>None None</i>		<i>1</i>	<i>DN</i>	<i>55</i>	<i>G</i>	
	2.						
3.							
4.							
DESIGNATED FACILITY	13. Special Handling Instructions and Additional Information Petroleum-impacted water WIP #: 153050 Approval #: SRRLFLUID-NH Emergency Contact: M. Craft - 800-451-8984						
	14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
	Generator's/Offoror's Printed/Typed Name <i>Gretchen Fitzgerald</i>		Signature <i>[Signature]</i>		Month <i>12</i>	Day <i>17</i>	Year <i>18</i>
	15. International Shipments ☐ Import to U.S. ☐ Export from U.S.		Port of entry/exit:		Date leaving U.S.:		
	Transporter Signature (for exports only):						
DESIGNATED FACILITY	16. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name <i>Bliga Flanagan</i>		Signature <i>[Signature]</i>		Month <i>12</i>	Day <i>19</i>	Year <i>18</i>
	Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy							
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection							
Manifest Reference Number:							
17b. Alternate Facility (or Generator)					U.S. EPA ID Number		
Facility's Phone:							
17c. Signature of Alternate Facility (or Generator)					Month	Day	Year
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a							
Printed/Typed Name			Signature		Month	Day	Year

APPENDIX C
SURFACE WATER AND SEDIMENT SAMPLING LOG

**New York State Department of Transportation
Harrison Sub-Residency Landfill Site
Summary of Surface Water and Sediment Field Data**

Samplers: JMR and JZ

Surface Water

Station	Sample Date	Sample Time	Stream Depth (in) ¹	Stream Width (ft) ¹	Temp (C°) ²	pH ²	Conductivity (mS/cm) ²	Dis. O ₂ (mg/L) ²	Turbidity (NTU) ²	Flow Rate (ft/s) ³
SW-1	10/17/2018	11:00	6	3	11.78	7.41	0.269	5.91	9.3	0.14
SW-2	10/17/2018	10:35	6	3.5	10.66	7.76	0.267	7.17	8.8	0.31
SW-3	10/17/2018	10:10	20	14	9.84	7.37	1.09	0	19.3	0
SW-4	10/17/2018	9:25	3	5	10.41	7.64	0.299	5.98	29.2	0.09

Sediment

Station	Sample Date	Sample Time	Sample Interval	Collection Method	Sediment Description
SD-1	10/17/2018	11:00	0-2"	New Disposable Plastic Scoop	Dark brown and black silt and organics
SD-2	10/17/2018	10:35	0-2"	New Disposable Plastic Scoop	Dark brown silt with some organics
SW-3	10/17/2018	10:10	0-2'	New Disposable Plastic Scoop	Dark brown sandy organic silt
SD-4	10/17/2018	9:25	0-2"	New Disposable Plastic Scoop	Brown silt and fine sand

Notes

¹ Stream width and depth measured using measuring tape. Stream depths were measured at center of stream/water body.

² Water quality parameters measured using Horiba U-52

³ Flow rates were measured using Hach FH950 velocity meter

in - inches

ft - feet

mS/cm - millisiemens per centimeter

mg/L - milligrams per liter

NTU - nephelometric turbidity units

ft/s - feet per second



APPENDIX D
ANALYTICAL LAB REPORT

Project: Harrison Sub Residency

Client PO: 128525

Report To: TRC Engineering
1430 Broadway
10th Floor
New York, NY 10018

Attn: James Robinson

Received Date: 10/17/2018

Report Date: 11/26/2018

Deliverables: NYDOH-CatA ^B 12/19/2018

Lab ID: AD07118 AD07137 AD07161 AD07325

Lab Project No: 8101509

REVISED
12/19/2018

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAP Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.


Robin Cousineau - Quality Assurance Director

OR

Jean Revolus - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)





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SDG Narrative

HC Case Narrative

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project: 8101509

Hampton-Clarke (HC) received the following samples on 10/15/18, 10/16/18, 10/17/18, 10/18/18 & 10/23/18:

<u>Client ID</u>	<u>HC Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
LMW-2-102018 U	AD07118-001	Aqueous	BNA Semi-volatile Compounds (625.1)
LMW-2-102018 F	AD07118-002	Aqueous	Refer to Cat A deliverables for Analysis
PC-1-10 2018 U	AD07118-003	Aqueous	BNA Semi-volatile Compounds (625.1)
PC-1-10 2018 F	AD07118-004	Aqueous	Refer to Cat A deliverables for Analysis
GW-DUP1-102018 U	AD07118-005	Aqueous	BNA Semi-volatile Compounds (625.1)
GW-DUP1-102018 F	AD07118-006	Aqueous	Refer to Cat A deliverables for Analysis
MW-11-102018 U	AD07118-007	Aqueous	BNA Semi-volatile Compounds (625.1)
MW-11-102018 F	AD07118-008	Aqueous	Refer to Cat A deliverables for Analysis
TB-1	AD07118-009	Aqueous	Refer to Cat A deliverables for Analysis
LMW-4-102018 U	AD07137-001	Aqueous	BNA Semi-volatile Compounds (625.1)
LMW-4-102018 F	AD07137-002	Aqueous	Refer to Cat A deliverables for Analysis
PC-2-102018 U	AD07137-003	Aqueous	BNA Semi-volatile Compounds (625.1)
PC-2-102018 F	AD07137-004	Aqueous	Refer to Cat A deliverables for Analysis
PC-3-102018 U	AD07137-005	Aqueous	BNA Semi-volatile Compounds (625.1)
PC-3-102018 F	AD07137-006	Aqueous	Refer to Cat A deliverables for Analysis
TB-2	AD07137-007	Aqueous	Refer to Cat A deliverables for Analysis
SW-1-102018	AD07161-001	Aqueous	BNA Semi-volatile Compounds (625.1)
SD-1-102018	AD07161-002	Sediment/Encore	BNA Semi-volatile Compounds (8270D)
SW-2-102018	AD07161-003	Aqueous	BNA Semi-volatile Compounds (625.1)
SD-2-102018	AD07161-004	Sediment/Encore	BNA Semi-volatile Compounds (8270D)
SW-3-102018	AD07161-005	Aqueous	BNA Semi-volatile Compounds (625.1)
SD-3-102018	AD07161-006	Sediment/Encore	BNA Semi-volatile Compounds (8270D)
SW-DUP1-102018	AD07161-007	Aqueous	BNA Semi-volatile Compounds (625.1)
SW-4-102018	AD07161-008	Aqueous	BNA Semi-volatile Compounds (625.1)
SD-4-102018	AD07161-009	Sediment/Encore	BNA Semi-volatile Compounds (8270D)
TB-3	AD07161-010	Aqueous	Refer to Cat A deliverables for Analysis
PC-1-102018	AD07325-001	Aqueous	Refer to Cat A deliverables for Analysis
MW-11-102018	AD07325-002	Aqueous	Refer to Cat A deliverables for Analysis
GW-DUP1-102018	AD07325-003	Aqueous	Refer to Cat A deliverables for Analysis

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Full Data deliverables were required for the BNA Semi-volatile parameters, the rest of the parameters are packaged under the Cat A deliverables, which are amended to the end of this report

Base Neutral/Acid Extractable Analysis:

Samples AD07161-003, 005, 007 and 008 were extracted one day past hold. The samples were originally extracted within hold, but required re-extraction due to surrogates recovering outside QC limits.

The Method Blank Spike for batch 71480 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 71471, 71479, 71480, 71497 have recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Samples AD07161-003 and 008 have one or more surrogates outside QC limits. The sample was re-extracted and re-analyzed confirming recoveries outside QC limits due to matrix interference. The re-analysis is reported. Please refer to the applicable Form 2 for the recoveries.

Samples AD07118-003 and AD07137-001 have one or more surrogates outside QC limits. The sample was re-extracted and re-analyzed confirming recoveries outside QC limits due to matrix interference. The original analysis is reported. Please refer to the applicable Form 2 for the recoveries.

QC samples WMB71496MS and AD07093-001MS has one or more surrogates outside QC limits. Please refer to the applicable Form 2 for the recoveries.

Samples AD07161-005, AD07118-005 and 007, AD07137-005 and QC samples WMB71471, WMB71497, WMB71479MS, WMB71497MS and AD07161-001MSD has a surrogate recovery outside QC limits, but the recovery is greater than 10%, therefore, no corrective action was necessary. Please refer to the applicable Form 2 for the recoveries.

Wet Chemistry Analysis- (% Moisture only):

Data conforms to method requirements.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

11/21/2018
Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: TRC Engineering

HC Project #: 8101509

Project: Harrison Sub Residency

Sample ID: LMW-2-102018 U

Collection Date: 10/15/2018

Lab#: AD07118-001

Receipt Date: 10/15/2018

Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	15

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.26	ND

Sample ID: LMW-2-102018 U

Lab#: AD07118-001

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND

Sample ID: LMW-2-102018 U

Lab#: AD07118-001

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-2-102018 F
 Lab#: AD07118-002
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	120
Calcium	1	ug/l	1000	78000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	170
Magnesium	1	ug/l	1000	28000
Manganese	1	ug/l	25	170
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3900
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	25000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-1-10 2018 U
 Lab#: AD07118-003
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Alkalinity-Bicarbonate (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	450

Alkalinity-Total (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	450
pH Endpoint	1	ph		4.5

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	230

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Nitrite-N (Aqueous) 300.0

Analyte	DF	Units	RL	Result
Nitrite	1	mg/l	1.0	ND

p-Alkalinity

Analyte	DF	Units	RL	Result
p-Alkalinity	1	mg caco3/l	10	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 U

Lab#: AD07118-003

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	1	mg/l	2.0	8.1

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 U

Lab#: AD07118-003

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 F
 Lab#: AD07118-004
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	120
Barium	1	ug/l	25	140
Calcium	1	ug/l	1000	170000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	240
Magnesium	1	ug/l	1000	27000
Manganese	1	ug/l	25	2000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	4900
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	100000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	220

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 F
 Lab#: AD07118-006
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	130
Calcium	1	ug/l	1000	170000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	230
Magnesium	1	ug/l	1000	26000
Manganese	1	ug/l	25	2000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	5000
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	100000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: MW-11-102018 U

Lab#: AD07118-007

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Alkalinity-Bicarbonate (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	270

Alkalinity-Total (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	270
pH Endpoint	1	ph		4.5

BTEX (624.1)

Analyte	DF	Units	RL	Result
Benzene	1	ug/l	0.50	ND
Ethylbenzene	1	ug/l	1.0	17
m&p-Xylenes	1	ug/l	1.0	2.0
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	2.0

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Nitrite-N (Aqueous) 300.0

Analyte	DF	Units	RL	Result
Nitrite	1	mg/l	1.0	ND

p-Alkalinity

Analyte	DF	Units	RL	Result
p-Alkalinity	1	mg caco3/l	10	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND

Sample ID: MW-11-102018 U

Lab#: AD07118-007

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	0.56
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	1	mg/l	2.0	7.5

Sample ID: MW-11-102018 F

Lab#: AD07118-008

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Metals Pair 200.7

Analyte	DF	Units	RL	Result
Iron	1	ug/l	150	1600
Manganese	1	ug/l	25	1600

Sample ID: TB-1
 Lab#: AD07118-009
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Lab#: AD07137-001

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	32

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Lab#: AD07137-001

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Lab#: AD07137-001

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 F
 Lab#: AD07137-002
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	150
Calcium	1	ug/l	1000	40000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	60000
Magnesium	1	ug/l	1000	17000
Manganese	1	ug/l	25	9700
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3500
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	29000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	2.0
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	11
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-2-102018 U

Lab#: AD07137-003

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	21

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: PC-2-102018 U

Lab#: AD07137-003

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: PC-2-102018 U

Lab#: AD07137-003

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-2-102018 F
 Lab#: AD07137-004
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	170
Calcium	1	ug/l	1000	81000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	61000
Magnesium	1	ug/l	1000	19000
Manganese	1	ug/l	25	11000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3700
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	39000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	1.8
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	1.6
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-3-102018 U

Lab#: AD07137-005

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	230

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: PC-3-102018 U

Lab#: AD07137-005

Matrix: Aqueous

Collection Date: 10/16/2018

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Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: PC-3-102018 U

Lab#: AD07137-005

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-3-102018 F
 Lab#: AD07137-006
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	160
Calcium	1	ug/l	1000	74000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	1800
Magnesium	1	ug/l	1000	21000
Manganese	1	ug/l	25	570
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	7300
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	120000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: TB-2
 Lab#: AD07137-007
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/16/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SW-1-102018
 Lab#: AD07161-001
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	5.5

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg caco3/l	6.6	150

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.5	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.5	ND
1,4-Dioxane	1	ug/l	0.62	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.5	ND
2,4,5-Trichlorophenol	1	ug/l	2.5	ND
2,4,6-Trichlorophenol	1	ug/l	2.5	ND
2,4-Dichlorophenol	1	ug/l	0.62	ND
2,4-Dimethylphenol	1	ug/l	0.62	ND
2,4-Dinitrophenol	1	ug/l	12	ND
2,4-Dinitrotoluene	1	ug/l	2.5	ND
2,6-Dinitrotoluene	1	ug/l	2.5	ND
2-Chloronaphthalene	1	ug/l	2.5	ND
2-Chlorophenol	1	ug/l	2.5	ND
2-Methylnaphthalene	1	ug/l	2.5	ND
2-Methylphenol	1	ug/l	0.62	ND
2-Nitroaniline	1	ug/l	2.5	ND
2-Nitrophenol	1	ug/l	2.5	ND
3&4-Methylphenol	1	ug/l	0.62	ND
3,3'-Dichlorobenzidine	1	ug/l	2.5	ND
3-Nitroaniline	1	ug/l	2.5	ND
4,6-Dinitro-2-methylphenol	1	ug/l	12	ND
4-Bromophenyl-phenylether	1	ug/l	2.5	ND
4-Chloro-3-methylphenol	1	ug/l	2.5	ND
4-Chloroaniline	1	ug/l	0.62	ND
4-Chlorophenyl-phenylether	1	ug/l	2.5	ND
4-Nitroaniline	1	ug/l	2.5	ND
4-Nitrophenol	1	ug/l	2.5	ND
Acenaphthene	1	ug/l	2.5	ND
Acenaphthylene	1	ug/l	2.5	ND
Acetophenone	1	ug/l	2.5	ND
Anthracene	1	ug/l	2.5	ND
Atrazine	1	ug/l	2.5	ND
Benzaldehyde	1	ug/l	2.5	ND
Benzo[a]anthracene	1	ug/l	2.5	ND
Benzo[a]pyrene	1	ug/l	2.5	ND
Benzo[b]fluoranthene	1	ug/l	2.5	ND
Benzo[g,h,i]perylene	1	ug/l	2.5	ND
Benzo[k]fluoranthene	1	ug/l	2.5	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.5	ND

Sample ID: SW-1-102018

Lab#: AD07161-001

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.62	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.5	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.5	ND
Butylbenzylphthalate	1	ug/l	2.5	ND
Caprolactam	1	ug/l	2.5	ND
Carbazole	1	ug/l	2.5	ND
Chrysene	1	ug/l	2.5	ND
Dibenzo[a,h]anthracene	1	ug/l	2.5	ND
Dibenzofuran	1	ug/l	0.62	ND
Diethylphthalate	1	ug/l	2.5	ND
Dimethylphthalate	1	ug/l	2.5	ND
Di-n-butylphthalate	1	ug/l	0.62	ND
Di-n-octylphthalate	1	ug/l	2.5	ND
Fluoranthene	1	ug/l	2.5	ND
Fluorene	1	ug/l	2.5	ND
Hexachlorobenzene	1	ug/l	2.5	ND
Hexachlorobutadiene	1	ug/l	2.5	ND
Hexachlorocyclopentadiene	1	ug/l	2.5	ND
Hexachloroethane	1	ug/l	2.5	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.5	ND
Isophorone	1	ug/l	2.5	ND
Naphthalene	1	ug/l	0.62	ND
Nitrobenzene	1	ug/l	2.5	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.62	ND
N-Nitrosodiphenylamine	1	ug/l	2.5	ND
Pentachlorophenol	1	ug/l	12	ND
Phenanthrene	1	ug/l	2.5	ND
Phenol	1	ug/l	2.5	ND
Pyrene	1	ug/l	2.5	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	390
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	43000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1800
Magnesium	1	ug/l	5000	12000
Manganese	1	ug/l	40	1500
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	9300
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-1-102018

Lab#: AD07161-001

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-1-102018
 Lab#: AD07161-002
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		36

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	56	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.67	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.23	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.093	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.093	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.093	ND
2,4,5-Trichlorophenol	1	mg/kg	0.093	ND
2,4,6-Trichlorophenol	1	mg/kg	0.093	ND
2,4-Dichlorophenol	1	mg/kg	0.023	ND
2,4-Dimethylphenol	1	mg/kg	0.023	ND
2,4-Dinitrophenol	1	mg/kg	0.46	ND
2,4-Dinitrotoluene	1	mg/kg	0.093	ND
2,6-Dinitrotoluene	1	mg/kg	0.093	ND
2-Chloronaphthalene	1	mg/kg	0.093	ND
2-Chlorophenol	1	mg/kg	0.093	ND
2-Methylnaphthalene	1	mg/kg	0.093	ND
2-Methylphenol	1	mg/kg	0.023	ND
2-Nitroaniline	1	mg/kg	0.093	ND
2-Nitrophenol	1	mg/kg	0.093	ND
3&4-Methylphenol	1	mg/kg	0.023	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.093	ND
3-Nitroaniline	1	mg/kg	0.093	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.46	ND
4-Bromophenyl-phenylether	1	mg/kg	0.093	ND
4-Chloro-3-methylphenol	1	mg/kg	0.093	ND
4-Chloroaniline	1	mg/kg	0.023	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.093	ND
4-Nitroaniline	1	mg/kg	0.093	ND
4-Nitrophenol	1	mg/kg	0.093	ND
Acenaphthene	1	mg/kg	0.093	ND
Acenaphthylene	1	mg/kg	0.093	ND
Acetophenone	1	mg/kg	0.093	ND
Anthracene	1	mg/kg	0.093	ND
Atrazine	1	mg/kg	0.093	ND
Benzaldehyde	1	mg/kg	0.093	ND
Benzo[a]anthracene	1	mg/kg	0.093	0.16
Benzo[a]pyrene	1	mg/kg	0.093	0.21
Benzo[b]fluoranthene	1	mg/kg	0.093	0.31
Benzo[g,h,i]perylene	1	mg/kg	0.093	0.14
Benzo[k]fluoranthene	1	mg/kg	0.093	0.10
bis(2-Chloroethoxy)methane	1	mg/kg	0.093	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.023	ND

Sample ID: SD-1-102018

Lab#: AD07161-002

Matrix: Sediment/Encore

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.093	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.093	ND
Butylbenzylphthalate	1	mg/kg	0.093	ND
Caprolactam	1	mg/kg	0.093	ND
Carbazole	1	mg/kg	0.093	ND
Chrysene	1	mg/kg	0.093	0.23
Dibenzo[a,h]anthracene	1	mg/kg	0.093	ND
Dibenzofuran	1	mg/kg	0.023	ND
Diethylphthalate	1	mg/kg	0.093	ND
Dimethylphthalate	1	mg/kg	0.093	ND
Di-n-butylphthalate	1	mg/kg	0.023	ND
Di-n-octylphthalate	1	mg/kg	0.093	ND
Fluoranthene	1	mg/kg	0.093	0.35
Fluorene	1	mg/kg	0.093	ND
Hexachlorobenzene	1	mg/kg	0.093	ND
Hexachlorobutadiene	1	mg/kg	0.093	ND
Hexachlorocyclopentadiene	1	mg/kg	0.093	ND
Hexachloroethane	1	mg/kg	0.093	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.093	0.12
Isophorone	1	mg/kg	0.093	ND
Naphthalene	1	mg/kg	0.023	ND
Nitrobenzene	1	mg/kg	0.093	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.023	ND
N-Nitrosodiphenylamine	1	mg/kg	0.093	ND
Pentachlorophenol	1	mg/kg	0.46	ND
Phenanthrene	1	mg/kg	0.093	0.16
Phenol	1	mg/kg	0.093	ND
Pyrene	1	mg/kg	0.093	0.35

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	560	6500
Barium	1	mg/kg	28	330
Calcium	1	mg/kg	2800	5700
Chromium	1	mg/kg	14	19
Cobalt	1	mg/kg	6.9	11
Copper	1	mg/kg	14	15
Iron	1	mg/kg	560	31000
Lead	1	mg/kg	14	21
Magnesium	1	mg/kg	1400	2600
Manganese	10	mg/kg	280	17000
Nickel	1	mg/kg	14	ND
Potassium	1	mg/kg	1400	1500
Sodium	1	mg/kg	690	ND
Vanadium	1	mg/kg	28	ND
Zinc	1	mg/kg	28	69

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	0.56	1.9
Beryllium	1	mg/kg	0.56	ND
Cadmium	1	mg/kg	1.1	ND
Selenium	1	mg/kg	5.6	ND
Silver	1	mg/kg	0.56	ND
Thallium	1	mg/kg	1.1	ND

Sample ID: SD-1-102018
 Lab#: AD07161-002
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.982	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	0.982	mg/kg	0.0044	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.982	mg/kg	0.0027	ND
1,1,2-Trichloroethane	0.982	mg/kg	0.0045	ND
1,1-Dichloroethane	0.982	mg/kg	0.0027	ND
1,1-Dichloroethene	0.982	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	0.982	mg/kg	0.0034	ND
1,2,4-Trichlorobenzene	0.982	mg/kg	0.0044	ND
1,2-Dibromo-3-chloropropane	0.982	mg/kg	0.0045	ND
1,2-Dibromoethane	0.982	mg/kg	0.0027	ND
1,2-Dichlorobenzene	0.982	mg/kg	0.0053	ND
1,2-Dichloroethane	0.982	mg/kg	0.0042	ND
1,2-Dichloropropane	0.982	mg/kg	0.0036	ND
1,3-Dichlorobenzene	0.982	mg/kg	0.0041	ND
1,4-Dichlorobenzene	0.982	mg/kg	0.0030	ND
1,4-Dioxane	0.982	mg/kg	0.21	ND
2-Butanone	0.982	mg/kg	0.0054	ND
2-Hexanone	0.982	mg/kg	0.0049	ND
4-Methyl-2-pentanone	0.982	mg/kg	0.0054	ND
Acetone	0.982	mg/kg	0.027	ND
Benzene	0.982	mg/kg	0.0027	ND
Bromochloromethane	0.982	mg/kg	0.0047	ND
Bromodichloromethane	0.982	mg/kg	0.0033	ND
Bromoform	0.982	mg/kg	0.0048	ND
Bromomethane	0.982	mg/kg	0.0035	ND
Carbon disulfide	0.982	mg/kg	0.0027	ND
Carbon tetrachloride	0.982	mg/kg	0.0027	ND
Chlorobenzene	0.982	mg/kg	0.0027	ND
Chloroethane	0.982	mg/kg	0.0051	ND
Chloroform	0.982	mg/kg	0.0044	ND
Chloromethane	0.982	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	0.982	mg/kg	0.0029	ND
cis-1,3-Dichloropropene	0.982	mg/kg	0.0027	ND
Cyclohexane	0.982	mg/kg	0.0027	ND
Dibromochloromethane	0.982	mg/kg	0.0033	ND
Dichlorodifluoromethane	0.982	mg/kg	0.0027	ND
Ethylbenzene	0.982	mg/kg	0.0027	ND
Isopropylbenzene	0.982	mg/kg	0.0027	ND
m&p-Xylenes	0.982	mg/kg	0.0027	ND
Methyl Acetate	0.982	mg/kg	0.0046	ND
Methylcyclohexane	0.982	mg/kg	0.0027	ND
Methylene chloride	0.982	mg/kg	0.0049	ND
Methyl-t-butyl ether	0.982	mg/kg	0.0027	ND
o-Xylene	0.982	mg/kg	0.0027	ND
Styrene	0.982	mg/kg	0.0027	ND
Tetrachloroethene	0.982	mg/kg	0.0030	ND
Toluene	0.982	mg/kg	0.0027	ND
trans-1,2-Dichloroethene	0.982	mg/kg	0.0028	ND
trans-1,3-Dichloropropene	0.982	mg/kg	0.0043	ND
Trichloroethene	0.982	mg/kg	0.0032	ND
Trichlorofluoromethane	0.982	mg/kg	0.0027	ND
Vinyl chloride	0.982	mg/kg	0.0027	ND
Xylenes (Total)	0.982	mg/kg	0.0027	ND

Sample ID: SW-2-102018

Lab#: AD07161-003

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	7.8

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cac03/l	6.6	160

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	0.58	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	0.58	ND
1,4-Dioxane	1	ug/l	0.14	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	0.58	ND
2,4,5-Trichlorophenol	1	ug/l	0.58	ND
2,4,6-Trichlorophenol	1	ug/l	0.58	ND
2,4-Dichlorophenol	1	ug/l	0.14	ND
2,4-Dimethylphenol	1	ug/l	0.14	ND
2,4-Dinitrophenol	1	ug/l	2.9	ND
2,4-Dinitrotoluene	1	ug/l	0.58	ND
2,6-Dinitrotoluene	1	ug/l	0.58	ND
2-Chloronaphthalene	1	ug/l	0.58	ND
2-Chlorophenol	1	ug/l	0.58	ND
2-Methylnaphthalene	1	ug/l	0.58	ND
2-Methylphenol	1	ug/l	0.14	ND
2-Nitroaniline	1	ug/l	0.58	ND
2-Nitrophenol	1	ug/l	0.58	ND
3&4-Methylphenol	1	ug/l	0.14	ND
3,3'-Dichlorobenzidine	1	ug/l	0.58	ND
3-Nitroaniline	1	ug/l	0.58	ND
4,6-Dinitro-2-methylphenol	1	ug/l	2.9	ND
4-Bromophenyl-phenylether	1	ug/l	0.58	ND
4-Chloro-3-methylphenol	1	ug/l	0.58	ND
4-Chloroaniline	1	ug/l	0.14	ND
4-Chlorophenyl-phenylether	1	ug/l	0.58	ND
4-Nitroaniline	1	ug/l	0.58	ND
4-Nitrophenol	1	ug/l	0.58	ND
Acenaphthene	1	ug/l	0.58	ND
Acenaphthylene	1	ug/l	0.58	ND
Acetophenone	1	ug/l	0.58	ND
Anthracene	1	ug/l	0.58	ND
Atrazine	1	ug/l	0.58	ND
Benzaldehyde	1	ug/l	0.58	ND
Benzo[a]anthracene	1	ug/l	0.58	ND
Benzo[a]pyrene	1	ug/l	0.58	ND
Benzo[b]fluoranthene	1	ug/l	0.58	ND
Benzo[g,h,i]perylene	1	ug/l	0.58	ND
Benzo[k]fluoranthene	1	ug/l	0.58	ND
bis(2-Chloroethoxy)methane	1	ug/l	0.58	ND

Sample ID: SW-2-102018

Collection Date: 10/17/2018

Lab#: AD07161-003

Receipt Date: 10/17/2018

Matrix: Aqueous

bis(2-Chloroethyl)ether	1	ug/l	0.14	ND
bis(2-Chloroisopropyl)ether	1	ug/l	0.58	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	0.58	ND
Butylbenzylphthalate	1	ug/l	0.58	ND
Caprolactam	1	ug/l	0.58	ND
Carbazole	1	ug/l	0.58	ND
Chrysene	1	ug/l	0.58	ND
Dibenzo[a,h]anthracene	1	ug/l	0.58	ND
Dibenzofuran	1	ug/l	0.14	ND
Diethylphthalate	1	ug/l	0.58	ND
Dimethylphthalate	1	ug/l	0.58	ND
Di-n-butylphthalate	1	ug/l	0.14	ND
Di-n-octylphthalate	1	ug/l	0.58	ND
Fluoranthene	1	ug/l	0.58	ND
Fluorene	1	ug/l	0.58	ND
Hexachlorobenzene	1	ug/l	0.58	ND
Hexachlorobutadiene	1	ug/l	0.58	ND
Hexachlorocyclopentadiene	1	ug/l	0.58	ND
Hexachloroethane	1	ug/l	0.58	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	0.58	ND
Isophorone	1	ug/l	0.58	ND
Naphthalene	1	ug/l	0.14	ND
Nitrobenzene	1	ug/l	0.58	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.14	ND
N-Nitrosodiphenylamine	1	ug/l	0.58	ND
Pentachlorophenol	1	ug/l	2.9	ND
Phenanthrene	1	ug/l	0.58	ND
Phenol	1	ug/l	0.58	ND
Pyrene	1	ug/l	0.58	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	44000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	330
Magnesium	1	ug/l	5000	12000
Manganese	1	ug/l	40	280
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	14000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-2-102018

Lab#: AD07161-003

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-2-102018
 Lab#: AD07161-004
 Matrix: Sediment/Encore

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		16

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	120	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	1.5	1.9

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.52	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.21	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.21	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.21	ND
2,4,5-Trichlorophenol	1	mg/kg	0.21	ND
2,4,6-Trichlorophenol	1	mg/kg	0.21	ND
2,4-Dichlorophenol	1	mg/kg	0.052	ND
2,4-Dimethylphenol	1	mg/kg	0.052	ND
2,4-Dinitrophenol	1	mg/kg	1.0	ND
2,4-Dinitrotoluene	1	mg/kg	0.21	ND
2,6-Dinitrotoluene	1	mg/kg	0.21	ND
2-Chloronaphthalene	1	mg/kg	0.21	ND
2-Chlorophenol	1	mg/kg	0.21	ND
2-Methylnaphthalene	1	mg/kg	0.21	ND
2-Methylphenol	1	mg/kg	0.052	ND
2-Nitroaniline	1	mg/kg	0.21	ND
2-Nitrophenol	1	mg/kg	0.21	ND
3&4-Methylphenol	1	mg/kg	0.052	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.21	ND
3-Nitroaniline	1	mg/kg	0.21	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	1.0	ND
4-Bromophenyl-phenylether	1	mg/kg	0.21	ND
4-Chloro-3-methylphenol	1	mg/kg	0.21	ND
4-Chloroaniline	1	mg/kg	0.052	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.21	ND
4-Nitroaniline	1	mg/kg	0.21	ND
4-Nitrophenol	1	mg/kg	0.21	ND
Acenaphthene	1	mg/kg	0.21	ND
Acenaphthylene	1	mg/kg	0.21	ND
Acetophenone	1	mg/kg	0.21	ND
Anthracene	1	mg/kg	0.21	ND
Atrazine	1	mg/kg	0.21	ND
Benzaldehyde	1	mg/kg	0.21	ND
Benzo[a]anthracene	1	mg/kg	0.21	0.29
Benzo[a]pyrene	1	mg/kg	0.21	0.36
Benzo[b]fluoranthene	1	mg/kg	0.21	0.58
Benzo[g,h,i]perylene	1	mg/kg	0.21	0.30
Benzo[k]fluoranthene	1	mg/kg	0.21	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.21	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.052	ND

Sample ID: SD-2-102018

Lab#: AD07161-004

Matrix: Sediment/Encore

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.21	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.21	ND
Butylbenzylphthalate	1	mg/kg	0.21	ND
Caprolactam	1	mg/kg	0.21	ND
Carbazole	1	mg/kg	0.21	ND
Chrysene	1	mg/kg	0.21	0.41
Dibenzo[a,h]anthracene	1	mg/kg	0.21	ND
Dibenzofuran	1	mg/kg	0.052	ND
Diethylphthalate	1	mg/kg	0.21	ND
Dimethylphthalate	1	mg/kg	0.21	ND
Di-n-butylphthalate	1	mg/kg	0.052	ND
Di-n-octylphthalate	1	mg/kg	0.21	ND
Fluoranthene	1	mg/kg	0.21	0.50
Fluorene	1	mg/kg	0.21	ND
Hexachlorobenzene	1	mg/kg	0.21	ND
Hexachlorobutadiene	1	mg/kg	0.21	ND
Hexachlorocyclopentadiene	1	mg/kg	0.21	ND
Hexachloroethane	1	mg/kg	0.21	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.21	0.22
Isophorone	1	mg/kg	0.21	ND
Naphthalene	1	mg/kg	0.052	ND
Nitrobenzene	1	mg/kg	0.21	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.052	ND
N-Nitrosodiphenylamine	1	mg/kg	0.21	ND
Pentachlorophenol	1	mg/kg	1.0	ND
Phenanthrene	1	mg/kg	0.21	ND
Phenol	1	mg/kg	0.21	ND
Pyrene	1	mg/kg	0.21	0.56

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	1200	8900
Barium	1	mg/kg	62	420
Calcium	1	mg/kg	6200	13000
Chromium	1	mg/kg	31	ND
Cobalt	1	mg/kg	16	ND
Copper	1	mg/kg	31	45
Iron	1	mg/kg	1200	34000
Lead	1	mg/kg	31	51
Magnesium	1	mg/kg	3100	5200
Manganese	4	mg/kg	250	18000
Nickel	1	mg/kg	31	ND
Potassium	1	mg/kg	3100	ND
Sodium	1	mg/kg	1600	ND
Vanadium	1	mg/kg	62	ND
Zinc	1	mg/kg	62	260

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	5.0	ND
Arsenic	1	mg/kg	1.2	5.5
Beryllium	1	mg/kg	1.2	ND
Cadmium	1	mg/kg	2.5	ND
Selenium	1	mg/kg	13	ND
Silver	1	mg/kg	1.2	ND
Thallium	1	mg/kg	2.5	ND

Sample ID: SD-2-102018
 Lab#: AD07161-004
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.818	mg/kg	0.0051	ND
1,1,2,2-Tetrachloroethane	0.818	mg/kg	0.0083	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.818	mg/kg	0.0051	ND
1,1,2-Trichloroethane	0.818	mg/kg	0.0085	ND
1,1-Dichloroethane	0.818	mg/kg	0.0051	ND
1,1-Dichloroethene	0.818	mg/kg	0.0051	ND
1,2,3-Trichlorobenzene	0.818	mg/kg	0.0063	ND
1,2,4-Trichlorobenzene	0.818	mg/kg	0.0082	ND
1,2-Dibromo-3-chloropropane	0.818	mg/kg	0.0084	ND
1,2-Dibromoethane	0.818	mg/kg	0.0051	ND
1,2-Dichlorobenzene	0.818	mg/kg	0.0099	ND
1,2-Dichloroethane	0.818	mg/kg	0.0079	ND
1,2-Dichloropropane	0.818	mg/kg	0.0068	ND
1,3-Dichlorobenzene	0.818	mg/kg	0.0077	ND
1,4-Dichlorobenzene	0.818	mg/kg	0.0057	ND
1,4-Dioxane	0.818	mg/kg	0.39	ND
2-Butanone	0.818	mg/kg	0.010	ND
2-Hexanone	0.818	mg/kg	0.0093	ND
4-Methyl-2-pentanone	0.818	mg/kg	0.010	ND
Acetone	0.818	mg/kg	0.051	ND
Benzene	0.818	mg/kg	0.0051	ND
Bromochloromethane	0.818	mg/kg	0.0087	ND
Bromodichloromethane	0.818	mg/kg	0.0061	ND
Bromoform	0.818	mg/kg	0.0090	ND
Bromomethane	0.818	mg/kg	0.0066	ND
Carbon disulfide	0.818	mg/kg	0.0051	ND
Carbon tetrachloride	0.818	mg/kg	0.0051	ND
Chlorobenzene	0.818	mg/kg	0.0051	ND
Chloroethane	0.818	mg/kg	0.0095	ND
Chloroform	0.818	mg/kg	0.0083	ND
Chloromethane	0.818	mg/kg	0.0051	ND
cis-1,2-Dichloroethene	0.818	mg/kg	0.0055	ND
cis-1,3-Dichloropropene	0.818	mg/kg	0.0051	ND
Cyclohexane	0.818	mg/kg	0.0051	ND
Dibromochloromethane	0.818	mg/kg	0.0061	ND
Dichlorodifluoromethane	0.818	mg/kg	0.0051	ND
Ethylbenzene	0.818	mg/kg	0.0051	ND
Isopropylbenzene	0.818	mg/kg	0.0051	ND
m&p-Xylenes	0.818	mg/kg	0.0051	ND
Methyl Acetate	0.818	mg/kg	0.0087	ND
Methylcyclohexane	0.818	mg/kg	0.0051	ND
Methylene chloride	0.818	mg/kg	0.0092	ND
Methyl-t-butyl ether	0.818	mg/kg	0.0051	ND
o-Xylene	0.818	mg/kg	0.0051	ND
Styrene	0.818	mg/kg	0.0051	ND
Tetrachloroethene	0.818	mg/kg	0.0056	ND
Toluene	0.818	mg/kg	0.0051	ND
trans-1,2-Dichloroethene	0.818	mg/kg	0.0052	ND
trans-1,3-Dichloropropene	0.818	mg/kg	0.0081	ND
Trichloroethene	0.818	mg/kg	0.0060	ND
Trichlorofluoromethane	0.818	mg/kg	0.0051	ND
Vinyl chloride	0.818	mg/kg	0.0051	ND
Xylenes (Total)	0.818	mg/kg	0.0051	ND

Sample ID: SW-3-102018

Lab#: AD07161-005

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	5	mg/l	10	170

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cac03/l	6.6	500

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	0.58	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	0.58	ND
1,4-Dioxane	1	ug/l	0.14	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	0.58	ND
2,4,5-Trichlorophenol	1	ug/l	0.58	ND
2,4,6-Trichlorophenol	1	ug/l	0.58	ND
2,4-Dichlorophenol	1	ug/l	0.14	ND
2,4-Dimethylphenol	1	ug/l	0.14	ND
2,4-Dinitrophenol	1	ug/l	2.9	ND
2,4-Dinitrotoluene	1	ug/l	0.58	ND
2,6-Dinitrotoluene	1	ug/l	0.58	ND
2-Chloronaphthalene	1	ug/l	0.58	ND
2-Chlorophenol	1	ug/l	0.58	ND
2-Methylnaphthalene	1	ug/l	0.58	ND
2-Methylphenol	1	ug/l	0.14	ND
2-Nitroaniline	1	ug/l	0.58	ND
2-Nitrophenol	1	ug/l	0.58	ND
3&4-Methylphenol	1	ug/l	0.14	ND
3,3'-Dichlorobenzidine	1	ug/l	0.58	ND
3-Nitroaniline	1	ug/l	0.58	ND
4,6-Dinitro-2-methylphenol	1	ug/l	2.9	ND
4-Bromophenyl-phenylether	1	ug/l	0.58	ND
4-Chloro-3-methylphenol	1	ug/l	0.58	ND
4-Chloroaniline	1	ug/l	0.14	ND
4-Chlorophenyl-phenylether	1	ug/l	0.58	ND
4-Nitroaniline	1	ug/l	0.58	ND
4-Nitrophenol	1	ug/l	0.58	ND
Acenaphthene	1	ug/l	0.58	ND
Acenaphthylene	1	ug/l	0.58	ND
Acetophenone	1	ug/l	0.58	ND
Anthracene	1	ug/l	0.58	ND
Atrazine	1	ug/l	0.58	ND
Benzaldehyde	1	ug/l	0.58	ND
Benzo[a]anthracene	1	ug/l	0.58	ND
Benzo[a]pyrene	1	ug/l	0.58	ND
Benzo[b]fluoranthene	1	ug/l	0.58	ND
Benzo[g,h,i]perylene	1	ug/l	0.58	ND
Benzo[k]fluoranthene	1	ug/l	0.58	ND
bis(2-Chloroethoxy)methane	1	ug/l	0.58	ND

Sample ID: SW-3-102018

Lab#: AD07161-005

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.14	ND
bis(2-Chloroisopropyl)ether	1	ug/l	0.58	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	0.58	ND
Butylbenzylphthalate	1	ug/l	0.58	ND
Caprolactam	1	ug/l	0.58	ND
Carbazole	1	ug/l	0.58	ND
Chrysene	1	ug/l	0.58	ND
Dibenzo[a,h]anthracene	1	ug/l	0.58	ND
Dibenzofuran	1	ug/l	0.14	ND
Diethylphthalate	1	ug/l	0.58	ND
Dimethylphthalate	1	ug/l	0.58	ND
Di-n-butylphthalate	1	ug/l	0.14	ND
Di-n-octylphthalate	1	ug/l	0.58	ND
Fluoranthene	1	ug/l	0.58	ND
Fluorene	1	ug/l	0.58	ND
Hexachlorobenzene	1	ug/l	0.58	ND
Hexachlorobutadiene	1	ug/l	0.58	ND
Hexachlorocyclopentadiene	1	ug/l	0.58	ND
Hexachloroethane	1	ug/l	0.58	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	0.58	ND
Isophorone	1	ug/l	0.58	ND
Naphthalene	1	ug/l	0.14	ND
Nitrobenzene	1	ug/l	0.58	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.14	ND
N-Nitrosodiphenylamine	1	ug/l	0.58	ND
Pentachlorophenol	1	ug/l	2.9	ND
Phenanthrene	1	ug/l	0.58	ND
Phenol	1	ug/l	0.58	ND
Pyrene	1	ug/l	0.58	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	92
Calcium	1	ug/l	5000	170000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1000
Magnesium	1	ug/l	5000	24000
Manganese	1	ug/l	40	980
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	8100
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	99000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-3-102018

Lab#: AD07161-005

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		55

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	36	200

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.44	1.3

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.15	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.061	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.061	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.061	ND
2,4,5-Trichlorophenol	1	mg/kg	0.061	ND
2,4,6-Trichlorophenol	1	mg/kg	0.061	ND
2,4-Dichlorophenol	1	mg/kg	0.015	ND
2,4-Dimethylphenol	1	mg/kg	0.015	ND
2,4-Dinitrophenol	1	mg/kg	0.30	ND
2,4-Dinitrotoluene	1	mg/kg	0.061	ND
2,6-Dinitrotoluene	1	mg/kg	0.061	ND
2-Chloronaphthalene	1	mg/kg	0.061	ND
2-Chlorophenol	1	mg/kg	0.061	ND
2-Methylnaphthalene	1	mg/kg	0.061	ND
2-Methylphenol	1	mg/kg	0.015	ND
2-Nitroaniline	1	mg/kg	0.061	ND
2-Nitrophenol	1	mg/kg	0.061	ND
3&4-Methylphenol	1	mg/kg	0.015	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.061	ND
3-Nitroaniline	1	mg/kg	0.061	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.30	ND
4-Bromophenyl-phenylether	1	mg/kg	0.061	ND
4-Chloro-3-methylphenol	1	mg/kg	0.061	ND
4-Chloroaniline	1	mg/kg	0.015	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.061	ND
4-Nitroaniline	1	mg/kg	0.061	ND
4-Nitrophenol	1	mg/kg	0.061	ND
Acenaphthene	1	mg/kg	0.061	ND
Acenaphthylene	1	mg/kg	0.061	ND
Acetophenone	1	mg/kg	0.061	ND
Anthracene	1	mg/kg	0.061	ND
Atrazine	1	mg/kg	0.061	ND
Benzaldehyde	1	mg/kg	0.061	ND
Benzo[a]anthracene	1	mg/kg	0.061	0.075
Benzo[a]pyrene	1	mg/kg	0.061	0.075
Benzo[b]fluoranthene	1	mg/kg	0.061	0.11
Benzo[g,h,i]perylene	1	mg/kg	0.061	ND
Benzo[k]fluoranthene	1	mg/kg	0.061	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.061	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.015	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.061	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.061	ND
Butylbenzylphthalate	1	mg/kg	0.061	ND
Caprolactam	1	mg/kg	0.061	ND
Carbazole	1	mg/kg	0.061	ND
Chrysene	1	mg/kg	0.061	0.071
Dibenzo[a,h]anthracene	1	mg/kg	0.061	ND
Dibenzofuran	1	mg/kg	0.015	ND
Diethylphthalate	1	mg/kg	0.061	ND
Dimethylphthalate	1	mg/kg	0.061	ND
Di-n-butylphthalate	1	mg/kg	0.015	ND
Di-n-octylphthalate	1	mg/kg	0.061	ND
Fluoranthene	1	mg/kg	0.061	0.13
Fluorene	1	mg/kg	0.061	ND
Hexachlorobenzene	1	mg/kg	0.061	ND
Hexachlorobutadiene	1	mg/kg	0.061	ND
Hexachlorocyclopentadiene	1	mg/kg	0.061	ND
Hexachloroethane	1	mg/kg	0.061	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.061	ND
Isophorone	1	mg/kg	0.061	ND
Naphthalene	1	mg/kg	0.015	ND
Nitrobenzene	1	mg/kg	0.061	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	ND
N-Nitrosodiphenylamine	1	mg/kg	0.061	ND
Pentachlorophenol	1	mg/kg	0.30	ND
Phenanthrene	1	mg/kg	0.061	ND
Phenol	1	mg/kg	0.061	ND
Pyrene	1	mg/kg	0.061	0.13

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	360	27000
Barium	1	mg/kg	18	160
Calcium	1	mg/kg	1800	49000
Chromium	1	mg/kg	9.1	42
Cobalt	1	mg/kg	4.5	15
Copper	1	mg/kg	9.1	45
Iron	1	mg/kg	360	35000
Lead	1	mg/kg	9.1	150
Magnesium	1	mg/kg	910	30000
Manganese	1	mg/kg	18	430
Nickel	1	mg/kg	9.1	35
Potassium	1	mg/kg	910	2800
Sodium	1	mg/kg	450	650
Vanadium	1	mg/kg	18	68
Zinc	1	mg/kg	18	200

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.5	ND
Arsenic	1	mg/kg	0.36	4.2
Beryllium	1	mg/kg	0.36	0.56
Cadmium	1	mg/kg	0.73	1.2
Selenium	1	mg/kg	3.6	ND
Silver	1	mg/kg	0.36	ND
Thallium	1	mg/kg	0.73	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.826	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.826	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.826	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.826	mg/kg	0.0025	ND
1,1-Dichloroethane	0.826	mg/kg	0.0015	ND
1,1-Dichloroethene	0.826	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.826	mg/kg	0.0019	ND
1,2,4-Trichlorobenzene	0.826	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.826	mg/kg	0.0025	ND
1,2-Dibromoethane	0.826	mg/kg	0.0015	ND
1,2-Dichlorobenzene	0.826	mg/kg	0.0029	ND
1,2-Dichloroethane	0.826	mg/kg	0.0023	ND
1,2-Dichloropropane	0.826	mg/kg	0.0020	ND
1,3-Dichlorobenzene	0.826	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.826	mg/kg	0.0017	ND
1,4-Dioxane	0.826	mg/kg	0.12	ND
2-Butanone	0.826	mg/kg	0.0030	ND
2-Hexanone	0.826	mg/kg	0.0027	ND
4-Methyl-2-pentanone	0.826	mg/kg	0.0030	ND
Acetone	0.826	mg/kg	0.015	ND
Benzene	0.826	mg/kg	0.0015	ND
Bromochloromethane	0.826	mg/kg	0.0026	ND
Bromodichloromethane	0.826	mg/kg	0.0018	ND
Bromoform	0.826	mg/kg	0.0026	ND
Bromomethane	0.826	mg/kg	0.0020	ND
Carbon disulfide	0.826	mg/kg	0.0015	ND
Carbon tetrachloride	0.826	mg/kg	0.0015	ND
Chlorobenzene	0.826	mg/kg	0.0015	ND
Chloroethane	0.826	mg/kg	0.0028	ND
Chloroform	0.826	mg/kg	0.0024	ND
Chloromethane	0.826	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.826	mg/kg	0.0016	ND
cis-1,3-Dichloropropene	0.826	mg/kg	0.0015	ND
Cyclohexane	0.826	mg/kg	0.0015	ND
Dibromochloromethane	0.826	mg/kg	0.0018	ND
Dichlorodifluoromethane	0.826	mg/kg	0.0015	ND
Ethylbenzene	0.826	mg/kg	0.0015	ND
Isopropylbenzene	0.826	mg/kg	0.0015	ND
m&p-Xylenes	0.826	mg/kg	0.0015	ND
Methyl Acetate	0.826	mg/kg	0.0026	ND
Methylcyclohexane	0.826	mg/kg	0.0015	ND
Methylene chloride	0.826	mg/kg	0.0027	ND
Methyl-t-butyl ether	0.826	mg/kg	0.0015	ND
o-Xylene	0.826	mg/kg	0.0015	ND
Styrene	0.826	mg/kg	0.0015	ND
Tetrachloroethene	0.826	mg/kg	0.0016	ND
Toluene	0.826	mg/kg	0.0015	ND
trans-1,2-Dichloroethene	0.826	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.826	mg/kg	0.0024	ND
Trichloroethene	0.826	mg/kg	0.0018	ND
Trichlorofluoromethane	0.826	mg/kg	0.0015	ND
Vinyl chloride	0.826	mg/kg	0.0015	ND
Xylenes (Total)	0.826	mg/kg	0.0015	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	5	mg/l	10	150

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg caco3/l	6.6	500

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.26	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	110
Calcium	1	ug/l	5000	190000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1200
Magnesium	1	ug/l	5000	27000
Manganese	1	ug/l	40	1100
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	9500
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	120000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	41

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg caco3/l	6.6	310

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.26	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	9000
Barium	1	ug/l	50	160
Calcium	1	ug/l	5000	76000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	20000
Magnesium	1	ug/l	5000	23000
Manganese	1	ug/l	40	4600
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	6200
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	31000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	110

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	2.6
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	5.8
Lead	1	ug/l	3.0	24
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-4-102018
 Lab#: AD07161-009
 Matrix: Sediment/Encore

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		30

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	67	100

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.80	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.28	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.11	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.11	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.11	ND
2,4,5-Trichlorophenol	1	mg/kg	0.11	ND
2,4,6-Trichlorophenol	1	mg/kg	0.11	ND
2,4-Dichlorophenol	1	mg/kg	0.028	ND
2,4-Dimethylphenol	1	mg/kg	0.028	ND
2,4-Dinitrophenol	1	mg/kg	0.56	ND
2,4-Dinitrotoluene	1	mg/kg	0.11	ND
2,6-Dinitrotoluene	1	mg/kg	0.11	ND
2-Chloronaphthalene	1	mg/kg	0.11	ND
2-Chlorophenol	1	mg/kg	0.11	ND
2-Methylnaphthalene	1	mg/kg	0.11	ND
2-Methylphenol	1	mg/kg	0.028	ND
2-Nitroaniline	1	mg/kg	0.11	ND
2-Nitrophenol	1	mg/kg	0.11	ND
3&4-Methylphenol	1	mg/kg	0.028	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.11	ND
3-Nitroaniline	1	mg/kg	0.11	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.56	ND
4-Bromophenyl-phenylether	1	mg/kg	0.11	ND
4-Chloro-3-methylphenol	1	mg/kg	0.11	ND
4-Chloroaniline	1	mg/kg	0.028	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.11	ND
4-Nitroaniline	1	mg/kg	0.11	ND
4-Nitrophenol	1	mg/kg	0.11	ND
Acenaphthene	1	mg/kg	0.11	ND
Acenaphthylene	1	mg/kg	0.11	ND
Acetophenone	1	mg/kg	0.11	ND
Anthracene	1	mg/kg	0.11	ND
Alrazine	1	mg/kg	0.11	ND
Benzaldehyde	1	mg/kg	0.11	0.60
Benzo[a]anthracene	1	mg/kg	0.11	0.14
Benzo[a]pyrene	1	mg/kg	0.11	0.17
Benzo[b]fluoranthene	1	mg/kg	0.11	0.26
Benzo[g,h,i]perylene	1	mg/kg	0.11	0.14
Benzo[k]fluoranthene	1	mg/kg	0.11	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.11	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.028	ND

Sample ID: SD-4-102018

Lab#: AD07161-009

Matrix: Sediment/Encore

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.11	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.11	ND
Butylbenzylphthalate	1	mg/kg	0.11	ND
Caprolactam	1	mg/kg	0.11	ND
Carbazole	1	mg/kg	0.11	ND
Chrysene	1	mg/kg	0.11	0.18
Dibenzo[a,h]anthracene	1	mg/kg	0.11	ND
Dibenzofuran	1	mg/kg	0.028	ND
Diethylphthalate	1	mg/kg	0.11	ND
Dimethylphthalate	1	mg/kg	0.11	ND
Di-n-butylphthalate	1	mg/kg	0.028	ND
Di-n-octylphthalate	1	mg/kg	0.11	ND
Fluoranthene	1	mg/kg	0.11	0.27
Fluorene	1	mg/kg	0.11	ND
Hexachlorobenzene	1	mg/kg	0.11	ND
Hexachlorobutadiene	1	mg/kg	0.11	ND
Hexachlorocyclopentadiene	1	mg/kg	0.11	ND
Hexachloroethane	1	mg/kg	0.11	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.11	ND
Isophorone	1	mg/kg	0.11	ND
Naphthalene	1	mg/kg	0.028	ND
Nitrobenzene	1	mg/kg	0.11	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.028	ND
N-Nitrosodiphenylamine	1	mg/kg	0.11	ND
Pentachlorophenol	1	mg/kg	0.56	ND
Phenanthrene	1	mg/kg	0.11	0.12
Phenol	1	mg/kg	0.11	ND
Pyrene	1	mg/kg	0.11	0.27

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	670	16000
Barium	1	mg/kg	33	210
Calcium	1	mg/kg	3300	10000
Chromium	1	mg/kg	17	40
Cobalt	1	mg/kg	8.3	13
Copper	1	mg/kg	17	45
Iron	1	mg/kg	670	44000
Lead	1	mg/kg	17	73
Magnesium	1	mg/kg	1700	7300
Manganese	1	mg/kg	33	1300
Nickel	1	mg/kg	17	30
Potassium	1	mg/kg	1700	3400
Sodium	1	mg/kg	830	ND
Vanadium	1	mg/kg	33	52
Zinc	1	mg/kg	33	260

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	2.7	ND
Arsenic	1	mg/kg	0.67	4.5
Beryllium	1	mg/kg	0.67	ND
Cadmium	1	mg/kg	1.3	1.9
Selenium	1	mg/kg	6.7	ND
Silver	1	mg/kg	0.67	ND
Thallium	1	mg/kg	1.3	ND

Sample ID: SD-4-102018
 Lab#: AD07161-009
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.72	mg/kg	0.0057	ND
1,1,2,2-Tetrachloroethane	1.72	mg/kg	0.0094	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.72	mg/kg	0.0057	ND
1,1,2-Trichloroethane	1.72	mg/kg	0.0095	ND
1,1-Dichloroethane	1.72	mg/kg	0.0057	ND
1,1-Dichloroethene	1.72	mg/kg	0.0057	ND
1,2,3-Trichlorobenzene	1.72	mg/kg	0.0071	ND
1,2,4-Trichlorobenzene	1.72	mg/kg	0.0093	ND
1,2-Dibromo-3-chloropropane	1.72	mg/kg	0.0094	ND
1,2-Dibromoethane	1.72	mg/kg	0.0057	ND
1,2-Dichlorobenzene	1.72	mg/kg	0.011	ND
1,2-Dichloroethane	1.72	mg/kg	0.0089	ND
1,2-Dichloropropane	1.72	mg/kg	0.0076	ND
1,3-Dichlorobenzene	1.72	mg/kg	0.0087	ND
1,4-Dichlorobenzene	1.72	mg/kg	0.0064	ND
1,4-Dioxane	1.72	mg/kg	0.44	ND
2-Butanone	1.72	mg/kg	0.011	ND
2-Hexanone	1.72	mg/kg	0.010	ND
4-Methyl-2-pentanone	1.72	mg/kg	0.011	ND
Acetone	1.72	mg/kg	0.057	ND
Benzene	1.72	mg/kg	0.0057	ND
Bromochloromethane	1.72	mg/kg	0.0098	ND
Bromodichloromethane	1.72	mg/kg	0.0069	ND
Bromoform	1.72	mg/kg	0.010	ND
Bromomethane	1.72	mg/kg	0.0075	ND
Carbon disulfide	1.72	mg/kg	0.0057	ND
Carbon tetrachloride	1.72	mg/kg	0.0057	ND
Chlorobenzene	1.72	mg/kg	0.0057	ND
Chloroethane	1.72	mg/kg	0.011	ND
Chloroform	1.72	mg/kg	0.0094	ND
Chloromethane	1.72	mg/kg	0.0057	ND
cis-1,2-Dichloroethene	1.72	mg/kg	0.0062	ND
cis-1,3-Dichloropropene	1.72	mg/kg	0.0057	ND
Cyclohexane	1.72	mg/kg	0.0057	ND
Dibromochloromethane	1.72	mg/kg	0.0069	ND
Dichlorodifluoromethane	1.72	mg/kg	0.0057	ND
Ethylbenzene	1.72	mg/kg	0.0057	ND
Isopropylbenzene	1.72	mg/kg	0.0057	ND
m&p-Xylenes	1.72	mg/kg	0.0057	ND
Methyl Acetate	1.72	mg/kg	0.0098	ND
Methylcyclohexane	1.72	mg/kg	0.0057	ND
Methylene chloride	1.72	mg/kg	0.010	ND
Methyl-t-butyl ether	1.72	mg/kg	0.0057	ND
o-Xylene	1.72	mg/kg	0.0057	ND
Styrene	1.72	mg/kg	0.0057	ND
Tetrachloroethene	1.72	mg/kg	0.0063	ND
Toluene	1.72	mg/kg	0.0057	ND
trans-1,2-Dichloroethene	1.72	mg/kg	0.0058	ND
trans-1,3-Dichloropropene	1.72	mg/kg	0.0091	ND
Trichloroethene	1.72	mg/kg	0.0067	ND
Trichlorofluoromethane	1.72	mg/kg	0.0057	ND
Vinyl chloride	1.72	mg/kg	0.0057	ND
Xylenes (Total)	1.72	mg/kg	0.0057	ND

Sample ID: TB-3
 Lab#: AD07161-010
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-1-102018
Lab#: AD07325-001
Matrix: Aqueous

Collection Date: 10/23/2018
Receipt Date: 10/24/2018

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Sample ID: MW-11-102018

Lab#: AD07325-002

Matrix: Aqueous

Collection Date: 10/23/2018

Receipt Date: 10/24/2018

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Sample ID: GW-DUP1-102018**Lab#: AD07325-003****Matrix: Aqueous****Collection Date: 10/23/2018****Receipt Date: 10/24/2018****Sulfide-Total (SM4500-S2F-11)**

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-001

Client Id: LMW-2-102018 U

Data File: 5M105877.D

Analysis Date: 10/19/18 12:44

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 970ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3&4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-003

Client Id: PC-1-10 2018 U

Data File: 5M105878.D

Analysis Date: 10/19/18 13:08

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-005

Client Id: GW-DUP1-102018 U

Data File: 5M105879.D

Analysis Date: 10/19/18 13:31

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-007

Client Id: MW-11-102018 U

Data File: 5M105880.D

Analysis Date: 10/19/18 13:55

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	0.56
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0.56

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α-Chlordane and γ-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-001

Client Id: LMW-4-102018 U

Data File: 5M105905.D

Analysis Date: 10/22/18 11:41

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-003

Client Id: PC-2-102018 U

Data File: 5M105906.D

Analysis Date: 10/22/18 12:04

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-005

Client Id: PC-3-102018 U

Data File: 5M105907.D

Analysis Date: 10/22/18 12:28

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-001(R)

Client Id: SW-1-102018

Data File: 5M105976.D

Analysis Date: 10/25/18 13:19

Date Rec/Extracted: 10/17/18-10/24/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 400ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	2.5	U	50-32-8	Benzo[a]pyrene	2.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	2.5	U	205-99-2	Benzo[b]fluoranthene	2.5	U
123-91-1	1,4-Dioxane	0.62	U	191-24-2	Benzo[g,h,i]perylene	2.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	2.5	U	207-08-9	Benzo[k]fluoranthene	2.5	U
95-95-4	2,4,5-Trichlorophenol	2.5	U	111-91-1	bis(2-Chloroethoxy)methane	2.5	U
88-06-2	2,4,6-Trichlorophenol	2.5	U	111-44-4	bis(2-Chloroethyl)ether	0.62	U
120-83-2	2,4-Dichlorophenol	0.62	U	108-60-1	bis(2-chloroisopropyl)ether	2.5	U
105-67-9	2,4-Dimethylphenol	0.62	U	117-81-7	bis(2-Ethylhexyl)phthalate	2.5	U
51-28-5	2,4-Dinitrophenol	12	U	85-68-7	Butylbenzylphthalate	2.5	U
121-14-2	2,4-Dinitrotoluene	2.5	U	105-60-2	Caprolactam	2.5	U
606-20-2	2,6-Dinitrotoluene	2.5	U	86-74-8	Carbazole	2.5	U
91-58-7	2-Chloronaphthalene	2.5	U	218-01-9	Chrysene	2.5	U
95-57-8	2-Chlorophenol	2.5	U	53-70-3	Dibenzo[a,h]anthracene	2.5	U
91-57-6	2-Methylnaphthalene	2.5	U	132-64-9	Dibenzofuran	0.62	U
95-48-7	2-Methylphenol	0.62	U	84-66-2	Diethylphthalate	2.5	U
88-74-4	2-Nitroaniline	2.5	U	131-11-3	Dimethylphthalate	2.5	U
88-75-5	2-Nitrophenol	2.5	U	84-74-2	Di-n-butylphthalate	0.62	U
106-44-5	3&4-Methylphenol	0.62	U	117-84-0	Di-n-octylphthalate	2.5	U
91-94-1	3,3'-Dichlorobenzidine	2.5	U	206-44-0	Fluoranthene	2.5	U
99-09-2	3-Nitroaniline	2.5	U	86-73-7	Fluorene	2.5	U
534-52-1	4,6-Dinitro-2-methylphenol	12	U	118-74-1	Hexachlorobenzene	2.5	U
101-55-3	4-Bromophenyl-phenylether	2.5	U	87-68-3	Hexachlorobutadiene	2.5	U
59-50-7	4-Chloro-3-methylphenol	2.5	U	77-47-4	Hexachlorocyclopentadiene	2.5	U
106-47-8	4-Chloroaniline	0.62	U	67-72-1	Hexachloroethane	2.5	U
7005-72-3	4-Chlorophenyl-phenylether	2.5	U	193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U
100-01-6	4-Nitroaniline	2.5	U	78-59-1	Isophorone	2.5	U
100-02-7	4-Nitrophenol	2.5	U	91-20-3	Naphthalene	0.62	U
83-32-9	Acenaphthene	2.5	U	98-95-3	Nitrobenzene	2.5	U
208-96-8	Acenaphthylene	2.5	U	621-64-7	N-Nitroso-di-n-propylamine	0.62	U
98-86-2	Acetophenone	2.5	U	86-30-6	n-Nitrosodiphenylamine	2.5	U
120-12-7	Anthracene	2.5	U	87-86-5	Pentachlorophenol	12	U
1912-24-9	Atrazine	2.5	U	85-01-8	Phenanthrene	2.5	U
100-52-7	Benzaldehyde	2.5	U	108-95-2	Phenol	2.5	U
56-55-3	Benzo[a]anthracene	2.5	U	129-00-0	Pyrene	2.5	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

R - Retention Time Out

B - Indicates the analyte was found in the blank as well as in the sample.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-002

Client Id: SD-1-102018

Data File: 9M88680.D

Analysis Date: 10/20/18 00:07

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 36

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.093	U	50-32-8	Benzo[a]pyrene	0.093	0.21
95-94-3	1,2,4,5-Tetrachlorobenzene	0.093	U	205-99-2	Benzo[b]fluoranthene	0.093	0.31
191-24-2	Benzo[g,h,i]perylene	0.093	0.14	58-90-2	2,3,4,6-Tetrachlorophenol	0.093	U
207-08-9	Benzo[k]fluoranthene	0.093	0.10	95-95-4	2,4,5-Trichlorophenol	0.093	U
111-91-1	bis(2-Chloroethoxy)methan	0.093	U	88-06-2	2,4,6-Trichlorophenol	0.093	U
111-44-4	bis(2-Chloroethyl)ether	0.023	U	120-83-2	2,4-Dichlorophenol	0.023	U
108-60-1	bis(2-chloroisopropyl)ether	0.093	U	105-67-9	2,4-Dimethylphenol	0.023	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.093	U	51-28-5	2,4-Dinitrophenol	0.46	U
85-68-7	Butylbenzylphthalate	0.093	U	121-14-2	2,4-Dinitrotoluene	0.093	U
105-60-2	Caprolactam	0.093	U	606-20-2	2,6-Dinitrotoluene	0.093	U
86-74-8	Carbazole	0.093	U	91-58-7	2-Chloronaphthalene	0.093	U
218-01-9	Chrysene	0.093	0.23	95-57-8	2-Chlorophenol	0.093	U
53-70-3	Dibenzo[a,h]anthracene	0.093	U	91-57-6	2-Methylnaphthalene	0.093	U
132-64-9	Dibenzofuran	0.023	U	95-48-7	2-Methylphenol	0.023	U
84-66-2	Diethylphthalate	0.093	U	88-74-4	2-Nitroaniline	0.093	U
131-11-3	Dimethylphthalate	0.093	U	88-75-5	2-Nitrophenol	0.093	U
84-74-2	Di-n-butylphthalate	0.023	U	106-44-5	3&4-Methylphenol	0.023	U
117-84-0	Di-n-octylphthalate	0.093	U	91-94-1	3,3'-Dichlorobenzidine	0.093	U
206-44-0	Fluoranthene	0.093	0.35	99-09-2	3-Nitroaniline	0.093	U
86-73-7	Fluorene	0.093	U	534-52-1	4,6-Dinitro-2-methylphenol	0.46	U
118-74-1	Hexachlorobenzene	0.093	U	101-55-3	4-Bromophenyl-phenylether	0.093	U
87-68-3	Hexachlorobutadiene	0.093	U	59-50-7	4-Chloro-3-methylphenol	0.093	U
77-47-4	Hexachlorocyclopentadiene	0.093	U	106-47-8	4-Chloroaniline	0.023	U
67-72-1	Hexachloroethane	0.093	U	7005-72-3	4-Chlorophenyl-phenylether	0.093	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.093	0.12	100-01-6	4-Nitroaniline	0.093	U
78-59-1	Isophorone	0.093	U	100-02-7	4-Nitrophenol	0.093	U
91-20-3	Naphthalene	0.023	U	83-32-9	Acenaphthene	0.093	U
98-95-3	Nitrobenzene	0.093	U	208-96-8	Acenaphthylene	0.093	U
621-64-7	N-Nitroso-di-n-propylamine	0.023	U	98-86-2	Acetophenone	0.093	U
86-30-6	n-Nitrosodiphenylamine	0.093	U	120-12-7	Anthracene	0.093	U
87-86-5	Pentachlorophenol	0.46	U	1912-24-9	Atrazine	0.093	U
85-01-8	Phenanthrene	0.093	0.16	100-52-7	Benzaldehyde	0.093	U
108-95-2	Phenol	0.093	U	56-55-3	Benzo[a]anthracene	0.093	0.16
129-00-0	Pyrene	0.093	0.35				

Worksheet #: 489030

Total Target Concentration 2.1

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-003(R)

Client Id: SW-2-102018

Data File: 7M95353.D

Analysis Date: 10/26/18 13:16

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 865ml

Final Vol: 0.25ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.58	U	50-32-8	Benzo[a]pyrene	0.58	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.58	U	205-99-2	Benzo[b]fluoranthene	0.58	U
123-91-1	1,4-Dioxane	0.14	U	191-24-2	Benzo[g,h,i]perylene	0.58	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.58	U	207-08-9	Benzo[k]fluoranthene	0.58	U
95-95-4	2,4,5-Trichlorophenol	0.58	U	111-91-1	bis(2-Chloroethoxy)methane	0.58	U
88-06-2	2,4,6-Trichlorophenol	0.58	U	111-44-4	bis(2-Chloroethyl)ether	0.14	U
120-83-2	2,4-Dichlorophenol	0.14	U	108-60-1	bis(2-chloroisopropyl)ether	0.58	U
105-67-9	2,4-Dimethylphenol	0.14	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.58	U
51-28-5	2,4-Dinitrophenol	2.9	U	85-68-7	Butylbenzylphthalate	0.58	U
121-14-2	2,4-Dinitrotoluene	0.58	U	105-60-2	Caprolactam	0.58	U
606-20-2	2,6-Dinitrotoluene	0.58	U	86-74-8	Carbazole	0.58	U
91-58-7	2-Chloronaphthalene	0.58	U	218-01-9	Chrysene	0.58	U
95-57-8	2-Chlorophenol	0.58	U	53-70-3	Dibenzo[a,h]anthracene	0.58	U
91-57-6	2-Methylnaphthalene	0.58	U	132-64-9	Dibenzofuran	0.14	U
95-48-7	2-Methylphenol	0.14	U	84-66-2	Diethylphthalate	0.58	U
88-74-4	2-Nitroaniline	0.58	U	131-11-3	Dimethylphthalate	0.58	U
88-75-5	2-Nitrophenol	0.58	U	84-74-2	Di-n-butylphthalate	0.14	U
106-44-5	3&4-Methylphenol	0.14	U	117-84-0	Di-n-octylphthalate	0.58	U
91-94-1	3,3'-Dichlorobenzidine	0.58	U	206-44-0	Fluoranthene	0.58	U
99-09-2	3-Nitroaniline	0.58	U	86-73-7	Fluorene	0.58	U
534-52-1	4,6-Dinitro-2-methylphenol	2.9	U	118-74-1	Hexachlorobenzene	0.58	U
101-55-3	4-Bromophenyl-phenylether	0.58	U	87-68-3	Hexachlorobutadiene	0.58	U
59-50-7	4-Chloro-3-methylphenol	0.58	U	77-47-4	Hexachlorocyclopentadiene	0.58	U
106-47-8	4-Chloroaniline	0.14	U	67-72-1	Hexachloroethane	0.58	U
7005-72-3	4-Chlorophenyl-phenylether	0.58	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.58	U
100-01-6	4-Nitroaniline	0.58	U	78-59-1	Isophorone	0.58	U
100-02-7	4-Nitrophenol	0.58	U	91-20-3	Naphthalene	0.14	U
83-32-9	Acenaphthene	0.58	U	98-95-3	Nitrobenzene	0.58	U
208-96-8	Acenaphthylene	0.58	U	621-64-7	N-Nitroso-di-n-propylamine	0.14	U
98-86-2	Acetophenone	0.58	U	86-30-6	n-Nitrosodiphenylamine	0.58	U
120-12-7	Anthracene	0.58	U	87-86-5	Pentachlorophenol	2.9	U
1912-24-9	Atrazine	0.58	U	85-01-8	Phenanthrene	0.58	U
100-52-7	Benzaldehyde	0.58	U	108-95-2	Phenol	0.58	U
56-55-3	Benzo[a]anthracene	0.58	U	129-00-0	Pyrene	0.58	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-004

Client Id: SD-2-102018

Data File: 9M88681.D

Analysis Date: 10/20/18 00:31

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 16

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.21	U	50-32-8	Benzo[a]pyrene	0.21	0.36
95-94-3	1,2,4,5-Tetrachlorobenzene	0.21	U	205-99-2	Benzo[b]fluoranthene	0.21	0.58
191-24-2	Benzo[g,h,i]perylene	0.21	0.30	58-90-2	2,3,4,6-Tetrachlorophenol	0.21	U
207-08-9	Benzo[k]fluoranthene	0.21	U	95-95-4	2,4,5-Trichlorophenol	0.21	U
111-91-1	bis(2-Chloroethoxy)methan	0.21	U	88-06-2	2,4,6-Trichlorophenol	0.21	U
111-44-4	bis(2-Chloroethyl)ether	0.052	U	120-83-2	2,4-Dichlorophenol	0.052	U
108-60-1	bis(2-chloroisopropyl)ether	0.21	U	105-67-9	2,4-Dimethylphenol	0.052	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.21	U	51-28-5	2,4-Dinitrophenol	1.0	U
85-68-7	Butylbenzylphthalate	0.21	U	121-14-2	2,4-Dinitrotoluene	0.21	U
105-60-2	Caprolactam	0.21	U	606-20-2	2,6-Dinitrotoluene	0.21	U
86-74-8	Carbazole	0.21	U	91-58-7	2-Chloronaphthalene	0.21	U
218-01-9	Chrysene	0.21	0.41	95-57-8	2-Chlorophenol	0.21	U
53-70-3	Dibenzo[a,h]anthracene	0.21	U	91-57-6	2-Methylnaphthalene	0.21	U
132-64-9	Dibenzofuran	0.052	U	95-48-7	2-Methylphenol	0.052	U
84-66-2	Diethylphthalate	0.21	U	88-74-4	2-Nitroaniline	0.21	U
131-11-3	Dimethylphthalate	0.21	U	88-75-5	2-Nitrophenol	0.21	U
84-74-2	Di-n-butylphthalate	0.052	U	106-44-5	3&4-Methylphenol	0.052	U
117-84-0	Di-n-octylphthalate	0.21	U	91-94-1	3,3'-Dichlorobenzidine	0.21	U
206-44-0	Fluoranthene	0.21	0.50	99-09-2	3-Nitroaniline	0.21	U
86-73-7	Fluorene	0.21	U	534-52-1	4,6-Dinitro-2-methylphenol	1.0	U
118-74-1	Hexachlorobenzene	0.21	U	101-55-3	4-Bromophenyl-phenylether	0.21	U
87-68-3	Hexachlorobutadiene	0.21	U	59-50-7	4-Chloro-3-methylphenol	0.21	U
77-47-4	Hexachlorocyclopentadiene	0.21	U	106-47-8	4-Chloroaniline	0.052	U
67-72-1	Hexachloroethane	0.21	U	7005-72-3	4-Chlorophenyl-phenylether	0.21	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.21	0.22	100-01-6	4-Nitroaniline	0.21	U
78-59-1	Isophorone	0.21	U	100-02-7	4-Nitrophenol	0.21	U
91-20-3	Naphthalene	0.052	U	83-32-9	Acenaphthene	0.21	U
98-95-3	Nitrobenzene	0.21	U	208-96-8	Acenaphthylene	0.21	U
621-64-7	N-Nitroso-di-n-propylamine	0.052	U	98-86-2	Acetophenone	0.21	U
86-30-6	n-Nitrosodiphenylamine	0.21	U	120-12-7	Anthracene	0.21	U
87-86-5	Pentachlorophenol	1.0	U	1912-24-9	Atrazine	0.21	U
85-01-8	Phenanthrene	0.21	U	100-52-7	Benzaldehyde	0.21	U
108-95-2	Phenol	0.21	U	56-55-3	Benzo[a]anthracene	0.21	0.29
129-00-0	Pyrene	0.21	0.56				

Worksheet #: 489030

Total Target Concentration 3.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-005(R)

Client Id: SW-3-102018

Data File: 7M95354.D

Analysis Date: 10/26/18 13:38

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 865ml

Final Vol: 0.25ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.58	U	50-32-8	Benzo[a]pyrene	0.58	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.58	U	205-99-2	Benzo[b]fluoranthene	0.58	U
123-91-1	1,4-Dioxane	0.14	U	191-24-2	Benzo[g,h,i]perylene	0.58	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.58	U	207-08-9	Benzo[k]fluoranthene	0.58	U
95-95-4	2,4,5-Trichlorophenol	0.58	U	111-91-1	bis(2-Chloroethoxy)methane	0.58	U
88-06-2	2,4,6-Trichlorophenol	0.58	U	111-44-4	bis(2-Chloroethyl)ether	0.14	U
120-83-2	2,4-Dichlorophenol	0.14	U	108-60-1	bis(2-chloroisopropyl)ether	0.58	U
105-67-9	2,4-Dimethylphenol	0.14	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.58	U
51-28-5	2,4-Dinitrophenol	2.9	U	85-68-7	Butylbenzylphthalate	0.58	U
121-14-2	2,4-Dinitrotoluene	0.58	U	105-60-2	Caprolactam	0.58	U
606-20-2	2,6-Dinitrotoluene	0.58	U	86-74-8	Carbazole	0.58	U
91-58-7	2-Chloronaphthalene	0.58	U	218-01-9	Chrysene	0.58	U
95-57-8	2-Chlorophenol	0.58	U	53-70-3	Dibenzo[a,h]anthracene	0.58	U
91-57-6	2-Methylnaphthalene	0.58	U	132-64-9	Dibenzofuran	0.14	U
95-48-7	2-Methylphenol	0.14	U	84-66-2	Diethylphthalate	0.58	U
88-74-4	2-Nitroaniline	0.58	U	131-11-3	Dimethylphthalate	0.58	U
88-75-5	2-Nitrophenol	0.58	U	84-74-2	Di-n-butylphthalate	0.14	U
106-44-5	3&4-Methylphenol	0.14	U	117-84-0	Di-n-octylphthalate	0.58	U
91-94-1	3,3'-Dichlorobenzidine	0.58	U	206-44-0	Fluoranthene	0.58	U
99-09-2	3-Nitroaniline	0.58	U	86-73-7	Fluorene	0.58	U
534-52-1	4,6-Dinitro-2-methylphenol	2.9	U	118-74-1	Hexachlorobenzene	0.58	U
101-55-3	4-Bromophenyl-phenylether	0.58	U	87-68-3	Hexachlorobutadiene	0.58	U
59-50-7	4-Chloro-3-methylphenol	0.58	U	77-47-4	Hexachlorocyclopentadiene	0.58	U
106-47-8	4-Chloroaniline	0.14	U	67-72-1	Hexachloroethane	0.58	U
7005-72-3	4-Chlorophenyl-phenylether	0.58	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.58	U
100-01-6	4-Nitroaniline	0.58	U	78-59-1	Isophorone	0.58	U
100-02-7	4-Nitrophenol	0.58	U	91-20-3	Naphthalene	0.14	U
83-32-9	Acenaphthene	0.58	U	98-95-3	Nitrobenzene	0.58	U
208-96-8	Acenaphthylene	0.58	U	621-64-7	N-Nitroso-di-n-propylamine	0.14	U
98-86-2	Acetophenone	0.58	U	86-30-6	n-Nitrosodiphenylamine	0.58	U
120-12-7	Anthracene	0.58	U	87-86-5	Pentachlorophenol	2.9	U
1912-24-9	Atrazine	0.58	U	85-01-8	Phenanthrene	0.58	U
100-52-7	Benzaldehyde	0.58	U	108-95-2	Phenol	0.58	U
56-55-3	Benzo[a]anthracene	0.58	U	129-00-0	Pyrene	0.58	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-006

Client Id: SD-3-102018

Data File: 9M88682.D

Analysis Date: 10/20/18 00:54

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 55

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.061	U	50-32-8	Benzo[a]pyrene	0.061	0.075
95-94-3	1,2,4,5-Tetrachlorobenzene	0.061	U	205-99-2	Benzo[b]fluoranthene	0.061	0.11
191-24-2	Benzo[g,h,i]perylene	0.061	U	58-90-2	2,3,4,6-Tetrachlorophenol	0.061	U
207-08-9	Benzo[k]fluoranthene	0.061	U	95-95-4	2,4,5-Trichlorophenol	0.061	U
111-91-1	bis(2-Chloroethoxy)methan	0.061	U	88-06-2	2,4,6-Trichlorophenol	0.061	U
111-44-4	bis(2-Chloroethyl)ether	0.015	U	120-83-2	2,4-Dichlorophenol	0.015	U
108-60-1	bis(2-chloroisopropyl)ether	0.061	U	105-67-9	2,4-Dimethylphenol	0.015	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.061	U	51-28-5	2,4-Dinitrophenol	0.30	U
85-68-7	Butylbenzylphthalate	0.061	U	121-14-2	2,4-Dinitrotoluene	0.061	U
105-60-2	Caprolactam	0.061	U	606-20-2	2,6-Dinitrotoluene	0.061	U
86-74-8	Carbazole	0.061	U	91-58-7	2-Chloronaphthalene	0.061	U
218-01-9	Chrysene	0.061	0.071	95-57-8	2-Chlorophenol	0.061	U
53-70-3	Dibenzo[a,h]anthracene	0.061	U	91-57-6	2-Methylnaphthalene	0.061	U
132-64-9	Dibenzofuran	0.015	U	95-48-7	2-Methylphenol	0.015	U
84-66-2	Diethylphthalate	0.061	U	88-74-4	2-Nitroaniline	0.061	U
131-11-3	Dimethylphthalate	0.061	U	88-75-5	2-Nitrophenol	0.061	U
84-74-2	Di-n-butylphthalate	0.015	U	106-44-5	3&4-Methylphenol	0.015	U
117-84-0	Di-n-octylphthalate	0.061	U	91-94-1	3,3'-Dichlorobenzidine	0.061	U
206-44-0	Fluoranthene	0.061	0.13	99-09-2	3-Nitroaniline	0.061	U
86-73-7	Fluorene	0.061	U	534-52-1	4,6-Dinitro-2-methylphenol	0.30	U
118-74-1	Hexachlorobenzene	0.061	U	101-55-3	4-Bromophenyl-phenylether	0.061	U
87-68-3	Hexachlorobutadiene	0.061	U	59-50-7	4-Chloro-3-methylphenol	0.061	U
77-47-4	Hexachlorocyclopentadiene	0.061	U	106-47-8	4-Chloroaniline	0.015	U
67-72-1	Hexachloroethane	0.061	U	7005-72-3	4-Chlorophenyl-phenylether	0.061	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.061	U	100-01-6	4-Nitroaniline	0.061	U
78-59-1	Isophorone	0.061	U	100-02-7	4-Nitrophenol	0.061	U
91-20-3	Naphthalene	0.015	U	83-32-9	Acenaphthene	0.061	U
98-95-3	Nitrobenzene	0.061	U	208-96-8	Acenaphthylene	0.061	U
621-64-7	N-Nitroso-di-n-propylamine	0.015	U	98-86-2	Acetophenone	0.061	U
86-30-6	n-Nitrosodiphenylamine	0.061	U	120-12-7	Anthracene	0.061	U
87-86-5	Pentachlorophenol	0.30	U	1912-24-9	Atrazine	0.061	U
85-01-8	Phenanthrene	0.061	U	100-52-7	Benzaldehyde	0.061	U
108-95-2	Phenol	0.061	U	56-55-3	Benzo[a]anthracene	0.061	0.075
129-00-0	Pyrene	0.061	0.13				

Worksheet #: 489030

Total Target Concentration 0.59

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-007(R)

Client Id: SW-DUP1-102018

Data File: 7M95355.D

Analysis Date: 10/26/18 14:01

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 970ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3,4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-008(R)

Client Id: SW-4-102018

Data File: 7M95356.D

Analysis Date: 10/26/18 14:25

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 960ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3&4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-009

Client Id: SD-4-102018

Data File: 9M88683.D

Analysis Date: 10/20/18 01:17

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 30

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.11	U	50-32-8	Benzo[a]pyrene	0.11	0.17
95-94-3	1,2,4,5-Tetrachlorobenzene	0.11	U	205-99-2	Benzo[b]fluoranthene	0.11	0.26
191-24-2	Benzo[g,h,i]perylene	0.11	0.14	58-90-2	2,3,4,6-Tetrachlorophenol	0.11	U
207-08-9	Benzo[k]fluoranthene	0.11	U	95-95-4	2,4,5-Trichlorophenol	0.11	U
111-91-1	bis(2-Chloroethoxy)methan	0.11	U	88-06-2	2,4,6-Trichlorophenol	0.11	U
111-44-4	bis(2-Chloroethyl)ether	0.028	U	120-83-2	2,4-Dichlorophenol	0.028	U
108-60-1	bis(2-chloroisopropyl)ether	0.11	U	105-67-9	2,4-Dimethylphenol	0.028	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.11	U	51-28-5	2,4-Dinitrophenol	0.56	U
85-68-7	Butylbenzylphthalate	0.11	U	121-14-2	2,4-Dinitrotoluene	0.11	U
105-60-2	Caprolactam	0.11	U	606-20-2	2,6-Dinitrotoluene	0.11	U
86-74-8	Carbazole	0.11	U	91-58-7	2-Chloronaphthalene	0.11	U
218-01-9	Chrysene	0.11	0.18	95-57-8	2-Chlorophenol	0.11	U
53-70-3	Dibenzo[a,h]anthracene	0.11	U	91-57-6	2-Methylnaphthalene	0.11	U
132-64-9	Dibenzofuran	0.028	U	95-48-7	2-Methylphenol	0.028	U
84-66-2	Diethylphthalate	0.11	U	88-74-4	2-Nitroaniline	0.11	U
131-11-3	Dimethylphthalate	0.11	U	88-75-5	2-Nitrophenol	0.11	U
84-74-2	Di-n-butylphthalate	0.028	U	106-44-5	3&4-Methylphenol	0.028	U
117-84-0	Di-n-octylphthalate	0.11	U	91-94-1	3,3'-Dichlorobenzidine	0.11	U
206-44-0	Fluoranthene	0.11	0.27	99-09-2	3-Nitroaniline	0.11	U
86-73-7	Fluorene	0.11	U	534-52-1	4,6-Dinitro-2-methylphenol	0.56	U
118-74-1	Hexachlorobenzene	0.11	U	101-55-3	4-Bromophenyl-phenylether	0.11	U
87-68-3	Hexachlorobutadiene	0.11	U	59-50-7	4-Chloro-3-methylphenol	0.11	U
77-47-4	Hexachlorocyclopentadiene	0.11	U	106-47-8	4-Chloroaniline	0.028	U
67-72-1	Hexachloroethane	0.11	U	7005-72-3	4-Chlorophenyl-phenylether	0.11	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.11	U	100-01-6	4-Nitroaniline	0.11	U
78-59-1	Isophorone	0.11	U	100-02-7	4-Nitrophenol	0.11	U
91-20-3	Naphthalene	0.028	U	83-32-9	Acenaphthene	0.11	U
98-95-3	Nitrobenzene	0.11	U	208-96-8	Acenaphthylene	0.11	U
621-64-7	N-Nitroso-di-n-propylamine	0.028	U	98-86-2	Acetophenone	0.11	U
86-30-6	n-Nitrosodiphenylamine	0.11	U	120-12-7	Anthracene	0.11	U
87-86-5	Pentachlorophenol	0.56	U	1912-24-9	Atrazine	0.11	U
85-01-8	Phenanthrene	0.11	0.12	100-52-7	Benzaldehyde	0.11	0.60
108-95-2	Phenol	0.11	U	56-55-3	Benzo[a]anthracene	0.11	0.14
129-00-0	Pyrene	0.11	0.27				

Worksheet #: 489030

Total Target Concentration 2.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

VERITECH Wet Chem Form1 Analysis Summary
% Solids**TestGroupName: % Solids SM2540G****Project #: 8101509****TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD07161-002	SD-1-102018	Sediment/Encore	1	36	Percent			10/18/18	10/17/18	10/17/18
AD07161-004	SD-2-102018	Sediment/Encore	1	16	Percent			10/18/18	10/17/18	10/17/18
AD07161-006	SD-3-102018	Sediment/Encore	1	55	Percent			10/18/18	10/17/18	10/17/18
AD07161-009	SD-4-102018	Sediment/Encore	1	30	Percent			10/18/18	10/17/18	10/17/18

Chain of Custody Forms

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9892 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gallier Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY RECORD

Project # (Lab Use Only)

Page of

3) Reporting Requirements (Please Circle)

Customer Information 11a) Customer: <u>RE Engineers</u> Address: <u>1430 Broadway 10th Fl</u> <u>New York, NY 10018</u> 11b) Email/Cell/Fax/Pr: <u>jonathan@reengineers.com</u> 11c) Send Invoice to: <u>jonathan@reengineers.com</u> 11d) Send Report to: <u>jonathan@reengineers.com</u>		Project Information 2a) Project: <u>Harrison Sub-Residency</u> 2b) Project Mgr: <u>James Harrison</u> 2c) Project Location (City/State): <u>Harrison, NY</u> 2d) Quote/PO # (If Applicable): <u>128525</u>		Turnaround When Available: 1 Business Day (100%)* 2 Business Days (75%)* 3 Business Days (50%)* 4 Business Days (35%)* 5 Business Days (25%)* 6 Business Days (Standard) Other: _____		Report Type Summary Results + QC (Waste) Reduced: X NJ [] NY [] PA [] Other _____ NJ Full (NY ASP Calc) NY ASP Calc Other: _____		Electronic Data Deliv. NJ Hazle Excel Reg. NJ / NY / PA EnviroData EQUIS: [] 4File [] EZ X NYDEC [] Region 2 or 5 Other: _____	

FOR LAB USE ONLY		Matrix Codes		Sample Type		7) Analysis (specify methods & parameter lists)		8) # of Bottles		9) Comments					
Batch #	Lab Sample #	Customer Sample ID	Matrix	Date	Time	Composite (C)	Grab (G)	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:

AD07118	4) Customer Sample ID	6w	10/15/18												
	5) Matrix	6) Sample Date	Time												
001/002	LMW-2-102018	6w	10/15/18												
005/004	PC-1-102018														
005/006	GW-D001-102018														
007/008	MW-11-102018														
	Adhate White														

10) Relinquished by: _____ Accepted by: _____ Date: _____ Time: _____		Comments, Notes, Special Requirements, HAZARDS Indicate if low-level methods required to meet current groundwater standards (SPLP for soil): BN or BNA (8270D SIM) VOC (8260C SIM or 8011) SPLP (BN, BNA, Metals) 1,4 Dioxane Check if applicable: Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project (also check boxes above/right) Please note NUMBERED items. If not completed your analytical work may be delayed. A fee of \$5/sample will be charged for storage should sample not be activated for any analysis.	
11) Sampler (print name): _____ Date: _____		Cooler Temperature _____	

Turnaround

When Available:	Summary

1 Business Day (100%)*	Result

2 Business Days (75%)*	Reduced
3 Business Days (50%)*	☒ No

4 Business Days (35%)*	NI
5 Business Days (25%)	NI

8 Business Days (Stand.)

Office: _____

* Expedited TAT Not Always

* Expedited TAT Not Always Available. Please Check with Lab

9) Comments

Inds which stand

Cooler Temperature

30

may be delayed.

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only) 8101509 Page 1 of 1
3) Reporting Requirements (Please Circle)

Customer Information
1a) Customer: TRE Engineers
Address: 1430 Broadway 10th Fl
New York, NY 10018
1b) Email/Cell/Fax/Ph: James.Benson@tre-engineers.com
1c) Send Invoice to: HP Invoice #11001 @ the solution doc
1d) Send Report to: "

Project Information
2a) Project: Harrison Sus - Rosbury
2b) Project Mgr: James Benson
2c) Project Location (City/State): Harrison, NY
2d) Quote/PO # (If Applicable): 128525

Turnaround
When Available:
1 Business Day (100%)*
2 Business Days (75%)*
3 Business Days (50%)*
4 Business Days (35%)*
5 Business Days (25%)*
8 Business Days (Standard)
Other: _____
Report Type: Summary
Results + QC (Waste)
Reduced:
[] NJ [] NY
[] PA [] Other _____
NJ Full (NY ASP CatB)
NY ASP CatA
Other: _____
Electronic Data Deliv.
NJ Hazsite
Excel Reg. NJ (NTPA)
EnviroData
EQUS:
[] 4-File [] EZ
[] NYDEC
[] Region 2 or 5
Other: _____

FOR LAB USE ONLY	Matrix Codes DW - Drinking Water GW - Ground Water WW - Waste Water OT - Other (please specify under item 9, Comments)	Check if Contingent		Sample Type	7) Analysis (specify methods & parameter lists)				Check if Contingent					9) Comments
		4) Customer Sample ID	5) Matrix	6) Sample Date/Time										
Batch #														
Lab Sample #														
001	SW-1-102018	SW		10/17/18 1100	X	SWAS w/low RL	X	Chloride	X	TAL Metals	X	Cyanide	X	Hardness
002	SD-1-102018	SD		1100	X		X		X		X		X	
003	SW-2-102018	SW		1035	X		X		X		X		X	
004	SD-2-102018	SD		1035	X		X		X		X		X	
005	SW-3-102018	SW		1010	X		X		X		X		X	
006	SD-3-102018	SD		1010	X		X		X		X		X	
007	SW-4-102018	SW		0825	X		X		X		X		X	
008	SD-4-102018	SD		0925	X		X		X		X		X	

10) Relinquished by: [Signature] Accepted by: [Signature] Date: 10/17/18 Time: 130
10/17/18 1615
11) Sampler (print name): James Benson Date: 10/17/18

Additional Notes Please batch all Harrison samples received from 10/15/18 thru 10/18/18 on same lab report. Use for today's
Internal use: samplino plan (check box) HC [] or client [] FSP# _____
Cooler Temperature 3.4/2.6

3) Reporting Requirements (Please Circle)

Turnaround Report Type Electronic Data Deliv.

When Available: Summary Results + QC (Waste) NJ Hazsite

1 Business Day (100%)* Reduced: [] NJ [] NY [] PA [] Other: [] 4-File [] EZ

2 Business Days (75%)* [] NJ [] NY [] PA [] Other: [] NYDEC [] Region 2 or 5

3 Business Days (50%)* [] PA [] Other: [] NY ASP CatA [] NY ASP CatB

4 Business Days (35%)* [] PA [] Other: [] NY ASP CatA [] NY ASP CatB

5 Business Days (25%)* [] PA [] Other: [] NY ASP CatA [] NY ASP CatB

8 Business Days (Stand)* [] PA [] Other: [] NY ASP CatA [] NY ASP CatB

* Expedited TAT Not Always Available. Please Check with Lab.

CHAIN OF CUSTODY RECORD



A Women-Owned Disadvantaged Small Business Enterprise

NE/AC/NJ #070711 PA #68-00463 NY #1408 CT #H-0671 KY #90124 DE HSCA Approved

Project Information

2a) Project: Harrison Sub-Residency

2b) Project Mgr: James Robinson

2c) Project Location (City/State): Harrison, NJ

2d) Quote/PO # (If Applicable): 138525

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-438-1458
Service Center: 137-D Gailther Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Customer Information

1a) Customer: TEC Engineers

Address: 1430 Broadway 10th Fl

New York, NY 10018

1b) Email/Cell/Fax/Pr: [] [] [] []

1c) Send Invoice to: [] [] [] []

1d) Send Report to: [] [] [] []

FOR LAB USE ONLY

Matrix Codes

DW - Drinking Water S - Soil A - Air

GW - Ground Water SL - Sludge Surface water

WW - Waste Water OL - Oil Sediment

OT - Other (please specify under item 9, Comments)

7B - Trip Blank

4) Customer Sample ID

5) Matrix

6) Sample

7) Analysis (specify methods & parameter lists)

8) # of Bottles

9) Comments

10) Relinquished by:

Accepted by:

Date:

Time:

11) Sampler (print name): James Robinson

Date: 10/18/18

Additional Notes

Please match auto style report with other Harrison

Sub-Residency samples received on 10/15-10/17/2018

Internal use: sampling plan (check box) HC [] or client [] FSP#

Cooler Temperature

3.5

Project-Specific Reporting Limits

High Contaminant Concentrations

NJ LSRP Project (also check boxes above/right)

Please note NUMBERED items. If not completed your analytical work may be delayed.

A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [] or client [] FSP#

Cooler Temperature

3.5

PROJECT MODIFICATIONS

Client: TRC-NYC

HC Project #: 8101509

Project: Harrison Sub Residency

maureen192.168.1.71
11/7/2018 2:47:27 PM

Per James Robinson all Harrison COC's from 10/15/18 through 10/23/18 should be batched together in one report. (AD07118, AD07137, AD07161 & AD07325)
MS 11/7/18

CONDITION UPON RECEIPT

Batch Number AD07118

Entered By: Ricardo

Date Entered 10/15/2018 4:36:00 PM

-
1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 3.7
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify The collection time on the bottle for LMW-2-102018 is 12:00.
14	NA	Corrective actions (Specify item number and corrective action taken).

CONDITION UPON RECEIPT

Batch Number AD07137

Entered By: Frantz

Date Entered 10/16/2018 4:11:00 PM

-
- 1 Yes Is there a corresponding COC included with the samples?
 - 2 Yes Are the samples in a container such as a cooler or Ice chest?
 - 3 No Are the COC seals intact?
 - 4 T0056 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.0
 - 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
 - 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
 - 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
 - 8 Yes Are all of the sample labels or numbers legible? If no specify:
 - 9 Yes Do the contents match the COC? If no, specify
 - 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
 - 11 Yes Are samples preserved correctly?
 - 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
 - 13 NA Other comments ...Specify
Two TB's were received. COC has TB-1 and TB-2 listed but TB-1 is crossed out. Per James Robinson via email dated 10/17/18 the COC received on 10/15/18 should have TB-1 listed on it. One of the TB's received with this COC will be labeled AD07118-009 as TB-1. MS 10/17/18
 - 14 NA Corrective actions (Specify item number and corrective action taken).

CONDITION UPON RECEIPT

Batch Number AD07161

Entered By: Frantz

Date Entered 10/17/2018 4:49:00 PM

-
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T0056 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.4,2.6
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 No Do the contents match the COC? If no, specify
Two sets of samples received for SD-3-102018. One of the sets have a collection date/time of 10/17/18/ at 10:35.
SD-2-102018 was not received.
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 Yes Other comments ...Specify
Samples for voc received on 10/18/18 at 15:30 cooler temp=3.5
- 14 Yes Corrective actions (Specify item number and corrective action taken).
9-Per James Robinson via email dated 10/19/18 the set of samples labeled SD-3-102018 with the collection date/time of 10/17/18/ at 10:35 should be labeled SD-2-102018. MS 10/19/18

CONDITION UPON RECEIPT

Batch Number AD07325

Entered By: ricardo

Date Entered 10/25/2018 12:26:00 PM

- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T0054 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.4
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify
- 14 NA Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AD07118

Entered By: Ricardo

Date Entered 10/15/2018 4:20:00 PM

Lab#	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07118-001	40ML	G	VO	HCL	189699	1	HC849161
AD07118-001	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-001	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-003	40ML	G	VO	HCL	189699	1	HC849161
AD07118-003	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-003	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-005	40ML	G	VO	HCL	189699	1	HC849161
AD07118-005	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-005	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-007	40ML	G	VO	HCL	189699	1	HC849161
AD07118-007	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-007	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA

PRESERVATION DOCUMENT

Batch Number AD07137

Entered By: Frantz

Date Entered 10/16/2018 4:11:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07137-001	40ml	G	VO	HCL	189699	1	HC849161
AD07137-001	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-002	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-003	40ml	G	VO	HCL	189699	1	HC849161
AD07137-003	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-004	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-005	40ml	G	VO	HCL	189699	1	HC849161
AD07137-005	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-006	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-007	40ml	G	VO	HCL	189699	1	HC849161

PRESERVATION DOCUMENT

Batch Number AD07161

Entered By: Frantz

Date Entered 10/17/2018 4:51:00 PM

Lab#:	Container	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07161-001	40ML	g	VO	HCL	189699	1	HC849161
AD07161-001	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-002	NA	NA	NA	NA	NA	NA	NA
AD07161-003	40ml	G	VO	HCL	189699	1	HC849161
AD07161-003	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-004	NA	NA	NA	NA	NA	NA	NA
AD07161-005	40ml	G	VO	HCL	189699	1	HC849161
AD07161-005	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-006	NA	NA	NA	NA	NA	NA	NA
AD07161-007	40ml	G	VO	HCL	189699	1	HC849161
AD07161-008	40ml	G	VO	HCL	189699	1	HC849161
AD07161-008	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-009	NA	NA	NA	NA	NA	NA	NA
AD07161-010	NA	NA	NA	NA	NA	NA	NA

PRESERVATION DOCUMENT

Batch Number AD07325

Entered By: ricardo

Date Entered 10/25/2018 12:30:00 PM

Lab#	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07325-001	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161
AD07325-002	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161
AD07325-003	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161

Internal Chain of Custody

8101509 0099

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07118-001	10/15/18 16:01	RICAR	0	M	Received
AD07118-001	10/15/18 16:15	RICAR	0	M	Login
AD07118-001	10/16/18 08:34	R31	1	A	PH/CHECK
AD07118-001	10/16/18 08:36	R31	2	A	NONE
AD07118-001	10/16/18 08:36	R31	3	A	NONE
AD07118-001	10/22/18 08:45	WP	3	A	VOA
AD07118-001	10/15/18 16:48	R12	4	A	NONE
AD07118-001	10/22/18 10:37	JW	4	A	IC
AD07118-001	10/22/18 17:14	R12	4	A	NONE
AD07118-001	10/15/18 16:48	R12	5	A	NONE
AD07118-001	10/17/18 08:47	JMP	5	A	CN
AD07118-001	10/17/18 12:23	R12	5	A	NONE
AD07118-001	10/15/18 16:48	R12	6	A	NONE
AD07118-001	10/18/18 11:34	JN	6	A	BN/BNA
AD07118-001	10/15/18 16:48	R12	7	A	NONE
AD07118-002	10/15/18 16:01	RICAR	0	M	Received
AD07118-002	10/15/18 16:15	RICAR	0	M	Login
AD07118-002	10/15/18 16:48	R12	1	A	NONE
AD07118-002	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-002	10/18/18 10:33	R12	1	A	NONE
AD07118-002	10/23/18 10:18	AM	1	A	tdwi
AD07118-002	10/23/18 10:19	R12	1	A	NONE
AD07118-003	10/15/18 16:01	RICAR	0	M	Received
AD07118-003	10/15/18 16:15	RICAR	0	M	Login
AD07118-003	10/16/18 08:36	R31	1	A	NONE
AD07118-003	10/22/18 08:45	WP	1	A	VOA
AD07118-003	10/16/18 08:36	R31	2	A	NONE
AD07118-003	10/16/18 08:36	R31	3	A	NONE
AD07118-003	10/15/18 16:48	R12	4	A	NONE
AD07118-003	10/22/18 10:37	JW	4	A	IC
AD07118-003	10/22/18 17:14	R12	4	A	NONE
AD07118-003	10/15/18 16:48	R12	5	A	NONE
AD07118-003	10/15/18 16:59	JW	5	A	IC
AD07118-003	10/15/18 17:02	R12	5	A	NONE
AD07118-003	10/15/18 16:48	R12	6	A	NONE
AD07118-003	10/22/18 08:35	JIR	6	A	BN
AD07118-003	10/15/18 16:48	R12	7	A	NONE
AD07118-003	10/18/18 11:34	JN	7	A	BN/BNA
AD07118-003	10/16/18 13:18	BCT	10	A	ALKALINITY
AD07118-003	10/15/18 16:48	R12	11	A	NONE
AD07118-003	10/17/18 08:47	JMP	11	A	CN
AD07118-003	10/17/18 12:23	R12	11	A	NONE
AD07118-003	10/15/18 16:48	R12	12	A	NONE
AD07118-003	10/15/18 16:48	R12	13	A	NONE
AD07118-004	10/15/18 16:01	RICAR	0	M	Received
AD07118-004	10/15/18 16:15	RICAR	0	M	Login
AD07118-004	10/15/18 16:48	R12	1	A	NONE
AD07118-004	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-004	10/18/18 10:33	R12	1	A	NONE
AD07118-004	10/23/18 10:18	AM	1	A	tdwi
AD07118-004	10/23/18 10:19	R12	1	A	NONE
AD07118-005	10/15/18 16:01	RICAR	0	M	Received
AD07118-005	10/15/18 16:15	RICAR	0	M	Login
AD07118-005	10/16/18 08:36	R31	1	A	NONE
AD07118-005	10/22/18 08:45	WP	1	A	VOA
AD07118-005	10/16/18 08:36	R31	2	A	NONE
AD07118-005	10/16/18 08:34	R31	3	A	PH/CHECK
AD07118-005	10/15/18 16:48	R12	4	A	NONE
AD07118-005	10/18/18 11:34	JN	4	A	BN/BNA
AD07118-005	10/15/18 16:48	R12	5	A	NONE
AD07118-005	10/22/18 10:37	JW	5	A	IC
AD07118-005	10/22/18 10:38	JW	5	A	IC
AD07118-005	10/22/18 17:14	R12	5	A	NONE
AD07118-005	10/15/18 16:48	R12	6	A	NONE
AD07118-005	10/17/18 08:47	JMP	6	A	CN
AD07118-005	10/17/18 12:23	R12	6	A	NONE
AD07118-006	10/15/18 16:01	RICAR	0	M	Received
AD07118-006	10/15/18 16:15	RICAR	0	M	Login
AD07118-006	10/15/18 16:48	R12	1	A	NONE
AD07118-006	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-006	10/18/18 10:33	R12	1	A	NONE
AD07118-006	10/23/18 10:18	AM	1	A	tdwi
AD07118-006	10/23/18 10:19	R12	1	A	NONE
AD07118-007	10/15/18 16:01	RICAR	0	M	Received
AD07118-007	10/15/18 16:15	RICAR	0	M	Login

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07118-007	10/16/18 08:34	R31	1	A	PH/CHECK
AD07118-007	10/16/18 08:36	R31	2	A	NONE
AD07118-007	10/16/18 08:36	R31	3	A	NONE
AD07118-007	10/22/18 08:45	WP	3	A	VOA
AD07118-007	10/16/18 13:18	BCT	6	A	ALKALINITY
AD07118-007	10/15/18 16:48	R12	7	A	NONE
AD07118-007	10/15/18 16:48	R12	8	A	NONE
AD07118-007	10/18/18 11:34	JN	8	A	BN/BNA
AD07118-007	10/15/18 16:48	R12	9	A	NONE
AD07118-007	10/15/18 16:59	JW	9	A	IC
AD07118-007	10/15/18 17:02	R12	9	A	NONE
AD07118-007	10/22/18 10:37	JW	9	A	IC
AD07118-007	10/22/18 17:14	R12	9	A	NONE
AD07118-007	10/15/18 16:48	R12	10	A	NONE
AD07118-007	10/15/18 16:48	R12	11	A	NONE
AD07118-008	10/15/18 16:01	RICAR	0	M	Received
AD07118-008	10/15/18 16:15	RICAR	0	M	Login
AD07118-008	10/15/18 16:48	R12	1	A	NONE
AD07118-008	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-008	10/18/18 10:33	R12	1	A	NONE
AD07118-008	10/23/18 10:18	AM	1	A	tdwi
AD07118-008	10/23/18 10:19	R12	1	A	NONE
AD07118-009	10/15/18 16:01	RICAR	0	M	Received
AD07118-009	10/22/18 15:33	RICAR	0	M	Login
AD07118-009	10/29/18 14:35	SG	1	A	VOA
AD07137-001	10/16/18 16:05	FRAN	0	M	Received
AD07137-001	10/16/18 16:11	FRAN	0	M	Login
AD07137-001	10/16/18 17:24	R12	1	A	NONE
AD07137-001	10/19/18 10:39	JN	1	A	BN/BNA
AD07137-001	10/16/18 17:24	R12	2	A	NONE
AD07137-001	10/23/18 11:29	JN	2	A	BN/BNA
AD07137-001	10/16/18 17:24	R12	3	A	NONE
AD07137-001	10/26/18 12:13	JW	3	A	IC
AD07137-001	10/26/18 17:18	R12	3	A	NONE
AD07137-001	10/16/18 17:24	R12	4	A	NONE
AD07137-001	10/17/18 08:47	JMP	4	A	CN
AD07137-001	10/17/18 12:23	R12	4	A	NONE
AD07137-001	10/16/18 17:58	R31	5	A	NONE
AD07137-001	10/16/18 17:58	R31	6	A	NONE
AD07137-001	10/22/18 08:45	WP	6	A	VOA
AD07137-001	10/16/18 17:58	R31	7	A	NONE
AD07137-002	10/16/18 16:05	FRAN	0	M	Received
AD07137-002	10/16/18 16:11	FRAN	0	M	Login
AD07137-002	10/16/18 17:24	R12	1	A	NONE
AD07137-002	10/18/18 09:32	AM	1	M	TDWI/HG
AD07137-002	10/18/18 10:33	R12	1	A	NONE
AD07137-002	10/23/18 10:18	AM	1	A	tdwi
AD07137-002	10/23/18 10:19	R12	1	A	NONE
AD07137-003	10/16/18 16:05	FRAN	0	M	Received
AD07137-003	10/16/18 16:11	FRAN	0	M	Login
AD07137-003	10/16/18 17:58	R31	1	A	NONE
AD07137-003	10/22/18 08:45	WP	1	A	VOA
AD07137-003	10/16/18 17:58	R31	2	A	NONE
AD07137-003	10/16/18 17:58	R31	3	A	NONE
AD07137-003	10/16/18 17:24	R12	4	A	NONE
AD07137-003	10/16/18 17:24	R12	5	A	NONE
AD07137-003	10/19/18 10:39	JN	5	A	BN/BNA
AD07137-003	10/16/18 17:24	R12	6	A	NONE
AD07137-003	10/26/18 12:13	JW	6	A	IC
AD07137-003	10/26/18 17:18	R12	6	A	NONE
AD07137-003	10/17/18 08:47	JMP	7	A	CN
AD07137-003	10/17/18 12:23	R12	7	A	NONE
AD07137-004	10/16/18 16:05	FRAN	0	M	Received
AD07137-004	10/16/18 16:11	FRAN	0	M	Login
AD07137-004	10/16/18 17:24	R12	1	A	NONE
AD07137-004	10/18/18 09:32	AM	1	M	TDWI/HG
AD07137-004	10/18/18 10:33	R12	1	A	NONE
AD07137-004	10/23/18 10:18	AM	1	A	tdwi
AD07137-004	10/23/18 10:19	R12	1	A	NONE
AD07137-005	10/16/18 16:05	FRAN	0	M	Received
AD07137-005	10/16/18 16:11	FRAN	0	M	Login
AD07137-005	10/16/18 17:24	R12	1	A	NONE
AD07137-005	10/16/18 17:24	R12	2	A	NONE
AD07137-005	10/19/18 10:39	JN	2	A	BN/BNA
AD07137-005	10/16/18 17:24	R12	3	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

8101509 0100

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07137-005	10/26/18 12:13	JW	3	A	IC	AD07161-003	10/19/18 09:10	AM	3	M	TDW/HG
AD07137-005	10/26/18 17:18	R12	3	A	NONE	AD07161-003	10/19/18 10:46	R12	3	A	NONE
AD07137-005	10/16/18 17:24	R12	4	A	NONE	AD07161-003	10/26/18 17:18	R12	4	A	NONE
AD07137-005	10/17/18 08:47	JMP	4	A	CN	AD07161-003	10/17/18 17:18	R12	5	A	NONE
AD07137-005	10/17/18 12:23	R12	4	A	NONE	AD07161-003	10/26/18 13:48	JW	5	A	IC
AD07137-005	10/16/18 17:58	R31	5	A	NONE	AD07161-003	10/19/18 09:13	R31	6	A	NONE
AD07137-005	10/16/18 17:58	R31	6	A	NONE	AD07161-003	10/19/18 09:10	R31	7	A	PH/CHECK
AD07137-005	10/22/18 08:45	WP	6	A	VOA	AD07161-003	10/19/18 09:13	R31	8	A	NONE
AD07137-005	10/16/18 17:58	R31	7	A	NONE	AD07161-003	10/27/18 15:55	SG	8	A	VOA
AD07137-006	10/16/18 16:05	FRAN	0	M	Received	AD07161-004	10/17/18 16:15	FRAN	0	M	Received
AD07137-006	10/16/18 16:11	FRAN	0	M	Login	AD07161-004	10/17/18 16:42	FRAN	0	M	Login
AD07137-006	10/16/18 17:24	R12	1	A	NONE	AD07161-004	10/17/18 17:18	R12	1	A	NONE
AD07137-006	10/18/18 09:32	AM	1	M	TDW/HG	AD07161-004	10/17/18 21:39	PA	1	A	mix
AD07137-006	10/18/18 10:33	R12	1	A	NONE	AD07161-004	10/17/18 21:39	R12	1	A	NONE
AD07137-006	10/23/18 10:18	AM	1	A	tdwi	AD07161-004	10/18/18 07:50	JMP	1	M	solids
AD07137-006	10/23/18 10:19	R12	1	A	NONE	AD07161-004	10/18/18 09:20	R12	1	A	NONE
AD07137-007	10/16/18 16:05	FRAN	0	M	Received	AD07161-004	10/18/18 10:17	BA	1	A	TDSI/HG
AD07137-007	10/16/18 16:11	FRAN	0	M	Login	AD07161-004	10/18/18 12:57	BA	1	A	R12
AD07137-007	10/16/18 17:58	R31	1	A	NONE	AD07161-004	10/18/18 14:51	JW	1	A	ic
AD07137-007	10/16/18 17:58	R31	2	A	NONE	AD07161-004	10/19/18 11:08	LV	1	A	BN/BNA
AD07137-007	10/22/18 08:45	WP	2	A	VOA	AD07161-004	10/19/18 11:08	R12	1	A	NONE
AD07137-007	10/23/18 10:53	WP	2	A	VOA	AD07161-004	10/22/18 08:49	JMP	1	A	cn
AD07137-007	10/16/18 17:58	R31	3	A	NONE	AD07161-004	10/23/18 10:17	AM	1	A	tdsi/hg
AD07161-001	10/17/18 16:15	FRAN	0	M	Received	AD07161-004	10/23/18 10:19	R12	1	A	NONE
AD07161-001	10/17/18 16:42	FRAN	0	M	Login	AD07161-004	10/18/18 16:11	F19	3	A	NONE
AD07161-001	10/17/18 17:18	R12	1	A	NONE	AD07161-004	10/30/18 16:48	SG	3	A	VOA
AD07161-001	10/22/18 12:14	JN	1	A	BN/BNA	AD07161-004	10/18/18 16:10	R21	4	A	NONE
AD07161-001	10/22/18 13:56	R12	1	A	NONE	AD07161-004	10/19/18 11:42	WP	4	A	VOA
AD07161-001	10/24/18 12:51	JN	1	A	BN/BNA	AD07161-004	10/19/18 12:47	R31	4	A	NONE
AD07161-001	10/17/18 17:18	R12	2	A	NONE	AD07161-004	10/18/18 16:11	F19	5	A	NONE
AD07161-001	10/22/18 12:14	JN	2	A	BN/BNA	AD07161-004	10/26/18 12:51	WP	5	A	VOA
AD07161-001	10/17/18 17:18	R12	3	A	NONE	AD07161-005	10/17/18 16:15	FRAN	0	M	Received
AD07161-001	10/18/18 09:32	AM	3	M	TDW/HG	AD07161-005	10/17/18 16:42	FRAN	0	M	Login
AD07161-001	10/18/18 10:33	R12	3	A	NONE	AD07161-005	10/17/18 17:18	R12	1	A	NONE
AD07161-001	10/19/18 09:10	AM	3	M	TDW/HG	AD07161-005	10/25/18 12:36	JN	1	A	BN/BNA
AD07161-001	10/19/18 10:46	R12	3	A	NONE	AD07161-005	10/17/18 17:18	R12	2	A	NONE
AD07161-001	10/17/18 17:18	R12	4	A	NONE	AD07161-005	10/22/18 12:14	JN	2	A	BN/BNA
AD07161-001	10/26/18 13:48	JW	4	A	IC	AD07161-005	10/17/18 17:18	R12	3	A	NONE
AD07161-001	10/26/18 17:18	R12	4	A	NONE	AD07161-005	10/26/18 13:48	JW	3	A	IC
AD07161-001	10/17/18 17:18	R12	5	A	NONE	AD07161-005	10/26/18 17:18	R12	3	A	NONE
AD07161-001	10/19/18 09:10	R31	6	A	PH/CHECK	AD07161-005	10/17/18 17:18	R12	4	A	NONE
AD07161-001	10/19/18 09:13	R31	7	A	NONE	AD07161-005	10/18/18 09:32	AM	4	M	TDW/HG
AD07161-001	10/27/18 15:55	SG	7	A	VOA	AD07161-005	10/18/18 10:33	R12	4	A	NONE
AD07161-001	10/19/18 09:13	R31	8	A	NONE	AD07161-005	10/19/18 09:10	AM	4	M	TDW/HG
AD07161-002	10/17/18 16:15	FRAN	0	M	Received	AD07161-005	10/19/18 10:46	R12	4	A	NONE
AD07161-002	10/17/18 16:42	FRAN	0	M	Login	AD07161-005	10/17/18 17:18	R12	5	A	NONE
AD07161-002	10/17/18 17:18	R12	2	A	NONE	AD07161-005	10/19/18 09:13	R31	6	A	NONE
AD07161-002	10/17/18 21:39	R12	2	A	NONE	AD07161-005	10/27/18 15:55	SG	6	A	VOA
AD07161-002	10/17/18 21:39	PA	2	A	mix	AD07161-005	10/19/18 09:13	R31	7	A	NONE
AD07161-002	10/18/18 07:50	JMP	2	M	solids	AD07161-005	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-002	10/18/18 09:20	R12	2	A	NONE	AD07161-006	10/17/18 16:15	FRAN	0	M	Received
AD07161-002	10/18/18 10:17	BA	2	A	TDSI/HG	AD07161-006	10/17/18 16:42	FRAN	0	M	Login
AD07161-002	10/18/18 12:57	BA	2	A	R12	AD07161-006	10/17/18 17:18	R12	1	A	NONE
AD07161-002	10/18/18 14:51	JW	2	A	ic	AD07161-006	10/23/18 10:17	AM	1	A	tdsi/hg
AD07161-002	10/19/18 11:08	LV	2	A	BN/BNA	AD07161-006	10/23/18 10:19	R12	1	A	NONE
AD07161-002	10/19/18 11:08	R12	2	A	NONE	AD07161-006	10/17/18 17:18	R12	2	A	NONE
AD07161-002	10/22/18 08:49	JMP	2	A	cn	AD07161-006	10/17/18 21:39	R12	2	A	NONE
AD07161-002	10/23/18 10:17	AM	2	A	tdsi/hg	AD07161-006	10/17/18 21:39	PA	2	A	mix
AD07161-002	10/23/18 10:19	R12	2	A	NONE	AD07161-006	10/18/18 07:50	JMP	2	M	solids
AD07161-002	10/18/18 16:10	R21	3	A	NONE	AD07161-006	10/18/18 09:20	R12	2	A	NONE
AD07161-002	10/19/18 11:42	WP	3	A	VOA	AD07161-006	10/18/18 10:17	BA	2	A	TDSI/HG
AD07161-002	10/19/18 12:47	R31	3	A	NONE	AD07161-006	10/18/18 12:57	BA	2	A	R12
AD07161-002	10/18/18 16:11	F19	4	A	NONE	AD07161-006	10/18/18 14:51	JW	2	A	ic
AD07161-002	10/26/18 12:51	WP	4	A	VOA	AD07161-006	10/19/18 11:08	LV	2	A	BN/BNA
AD07161-002	10/30/18 16:48	SG	4	A	VOA	AD07161-006	10/19/18 11:08	R12	2	A	NONE
AD07161-002	10/18/18 16:11	F19	5	A	NONE	AD07161-006	10/22/18 08:49	JMP	2	A	cn
AD07161-003	10/17/18 16:15	FRAN	0	M	Received	AD07161-006	10/18/18 16:11	F19	3	A	NONE
AD07161-003	10/17/18 16:42	FRAN	0	M	Login	AD07161-006	10/30/18 16:48	SG	3	A	VOA
AD07161-003	10/17/18 17:18	R12	1	A	NONE	AD07161-006	10/18/18 16:10	R21	4	A	NONE
AD07161-003	10/22/18 12:14	JN	1	A	BN/BNA	AD07161-006	10/19/18 11:42	WP	4	A	VOA
AD07161-003	10/17/18 17:18	R12	2	A	NONE	AD07161-006	10/19/18 12:47	R31	4	A	NONE
AD07161-003	10/25/18 12:36	JN	2	A	BN/BNA	AD07161-006	10/18/18 16:11	F19	5	A	NONE
AD07161-003	10/17/18 17:18	R12	3	A	NONE	AD07161-006	10/26/18 12:51	WP	5	A	VOA
AD07161-003	10/18/18 09:32	AM	3	M	TDW/HG	AD07161-007	10/17/18 16:15	FRAN	0	M	Received
AD07161-003	10/18/18 10:33	R12	3	A	NONE	AD07161-007	10/17/18 16:42	FRAN	0	M	Login

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

8101509 0101

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD07161-007	10/17/18 17:18	R12	1	A	NONE
AD07161-007	10/22/18 12:14	JN	1	A	BN/BNA
AD07161-007	10/17/18 17:18	R12	2	A	NONE
AD07161-007	10/25/18 12:36	JN	2	A	BN/BNA
AD07161-007	10/17/18 17:18	R12	3	A	NONE
AD07161-007	10/18/18 09:32	AM	3	M	TDW/HG
AD07161-007	10/18/18 10:33	R12	3	A	NONE
AD07161-007	10/19/18 09:10	AM	3	M	TDW/HG
AD07161-007	10/19/18 10:46	R12	3	A	NONE
AD07161-007	10/17/18 17:18	R12	4	A	NONE
AD07161-007	10/26/18 13:48	JW	4	A	IC
AD07161-007	10/26/18 17:18	R12	4	A	NONE
AD07161-007	10/17/18 17:18	R12	5	A	NONE
AD07161-007	10/19/18 09:13	R31	6	A	NONE
AD07161-007	10/27/18 15:55	SG	6	A	VOA
AD07161-007	10/19/18 09:13	R31	7	A	NONE
AD07161-007	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-008	10/17/18 16:15	FRAN	0	M	Received
AD07161-008	10/17/18 16:42	FRAN	0	M	Login
AD07161-008	10/17/18 17:18	R12	1	A	NONE
AD07161-008	10/26/18 13:48	JW	1	A	IC
AD07161-008	10/26/18 17:18	R12	1	A	NONE
AD07161-008	10/17/18 17:18	R12	2	A	NONE
AD07161-008	10/17/18 17:18	R12	3	A	NONE
AD07161-008	10/22/18 12:14	JN	3	A	BN/BNA
AD07161-008	10/17/18 17:18	R12	4	A	NONE
AD07161-008	10/25/18 12:36	JN	4	A	BN/BNA
AD07161-008	10/17/18 17:18	R12	5	A	NONE
AD07161-008	10/18/18 09:32	AM	5	M	TDW/HG
AD07161-008	10/18/18 10:33	R12	5	A	NONE
AD07161-008	10/19/18 09:10	AM	5	M	TDW/HG
AD07161-008	10/19/18 10:46	R12	5	A	NONE
AD07161-008	10/19/18 09:13	R31	6	A	NONE
AD07161-008	10/27/18 15:55	SG	6	A	VOA
AD07161-008	10/19/18 09:13	R31	7	A	NONE
AD07161-008	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-009	10/17/18 16:15	FRAN	0	M	Received
AD07161-009	10/17/18 16:42	FRAN	0	M	Login
AD07161-009	10/17/18 17:18	R12	4	A	NONE
AD07161-009	10/17/18 17:18	R12	5	A	NONE
AD07161-009	10/17/18 21:39	PA	5	A	mix
AD07161-009	10/17/18 21:39	R12	5	A	NONE
AD07161-009	10/18/18 07:50	JMP	5	M	solids
AD07161-009	10/18/18 09:20	R12	5	A	NONE
AD07161-009	10/18/18 10:17	BA	5	A	TDSI/HG
AD07161-009	10/18/18 12:57	BA	5	A	R12
AD07161-009	10/18/18 14:51	JW	5	A	ic
AD07161-009	10/19/18 11:08	LV	5	A	BN/BNA
AD07161-009	10/19/18 11:08	R12	5	A	NONE
AD07161-009	10/22/18 08:49	JMP	5	A	cn
AD07161-009	10/23/18 10:17	AM	5	A	ldsi/hg
AD07161-009	10/23/18 10:19	R12	5	A	NONE
AD07161-009	10/18/18 16:10	R21	6	A	NONE
AD07161-009	10/19/18 11:42	WP	6	A	VOA
AD07161-009	10/19/18 12:47	R31	6	A	NONE
AD07161-009	10/18/18 16:11	F19	7	A	NONE
AD07161-009	10/26/18 12:51	WP	7	A	VOA
AD07161-009	10/18/18 16:11	F19	8	A	NONE
AD07161-009	10/30/18 16:48	SG	8	A	VOA
AD07161-010	10/17/18 16:15	RICAR	0	M	Received
AD07161-010	10/18/18 15:55	RICAR	0	M	Login
AD07161-010	10/19/18 09:13	R31	1	A	NONE
AD07161-010	10/24/18 13:24	WP	1	A	VOA
AD07161-010	10/19/18 09:13	R31	2	A	NONE
AD07161-010	10/19/18 09:10	R31	3	A	PH/CHECK
AD07325-001	10/24/18 21:04	RICAR	0	M	Received
AD07325-001	10/25/18 12:26	RICAR	0	M	Login
AD07325-001	10/29/18 08:29	JMP	1	A	sulfide
AD07325-001	10/29/18 11:39	R12	1	M	NONE
AD07325-002	10/24/18 21:04	RICAR	0	M	Received
AD07325-002	10/25/18 12:26	RICAR	0	M	Login
AD07325-002	10/29/18 08:29	JMP	1	A	sulfide
AD07325-002	10/29/18 11:39	R12	1	M	NONE
AD07325-003	10/24/18 21:04	RICAR	0	M	Received
AD07325-003	10/25/18 12:26	RICAR	0	M	Login

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD07325-003	10/29/18 08:29	JMP	1	A	sulfide
AD07325-003	10/29/18 11:39	R12	1	M	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Base Neutral/Acid Extractable Data

**GC/MS Base Neutral/Acid Extractable Data
QC Summary**

FORM2

Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
9M88665.D	SMB71480	S	10/19/18 18:17	1		109	112	104	111	109	122
9M88680.D	AD07161-002	S	10/20/18 00:07	1		97	99	98	102	110	115
9M88681.D	AD07161-004	S	10/20/18 00:31	1		104	105	86	86	89	90
9M88682.D	AD07161-006	S	10/20/18 00:54	1		109	111	102	111	118	129
9M88683.D	AD07161-009	S	10/20/18 01:17	1		111	115	108	111	118	127
10M71458.D	SMB71480(MS)	S	10/19/18 18:08	1		119	124	102	110	115	116
10M71459.D	AD07136-003	S	10/19/18 18:30	1		106	108	103	107	107	103
10M71460.D	AD07136-003(MS)	S	10/19/18 18:52	1		114	117	111	115	114	111
10M71461.D	AD07136-003(MSD)	S	10/19/18 19:14	1		117	124	107	105	117	119

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8270D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

FORM2

Surrogate Recovery

Method: EPA 625.1

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
5M105872.D	WMB71471	A	10/19/18 10:48	1		35	23 *	59	64	57	82
5M105913.D	WMB71496	A	10/22/18 14:49	0.5		42	28	69	74	70	96
5M105877.D	AD07118-001	A	10/19/18 12:44	1		41	27	64	70	66	85
10M71486.D	AD07118-003(R)	A	10/22/18 16:15	1		25 *	17 *	90	105	35 *	115
5M105878.D	AD07118-003	A	10/19/18 13:08	1		30	21 *	46 *	54	55	72
5M105879.D	AD07118-005	A	10/19/18 13:31	1		36	24 *	61	67	67	88
5M105880.D	AD07118-007	A	10/19/18 13:55	1		33	22 *	59	60	57	75
10M71439.D	WMB71471(MS)	A	10/19/18 10:35	1		41	31	72	77	76	84
10M71441.D	AD07093-001(T)	A	10/19/18 11:20	1		73	69	74	79	81	80
10M71442.D	AD07093-001(T)(MS)	A	10/19/18 11:42	1		6.7 *	10 *	70	64	17 *	85
10M71443.D	AD07093-001(T)(MSD)	A	10/19/18 12:04	1		78	81	86	82	94	94
5M105911.D	WMB71496(MS)	A	10/22/18 14:01	1		91	60	149 *	142 *	144	170 *

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 625.1

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

FORM2

Surrogate Recovery

Method: EPA 625.1

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
5M105881.DWMB71479		A	10/19/18 14:23	1		35	23*	55	62	56	77
5M105905.DAD07137-001		A	10/22/18 11:41	1		33	22*	48*	51*	52*	59
5M105957.DAD07137-001(R)		A	10/24/18 14:03	1		33	22*	50*	56	49*	66
5M105906.DAD07137-003		A	10/22/18 12:04	1		70	47	106	109	114	136
5M105907.DAD07137-005		A	10/22/18 12:28	1		39	25*	60	65	63	78
5M105897.DAD06939-001(T)		A	10/22/18 08:35	1		47	36	59	58	62	76
5M105898.DAD06939-001(T)(MS)		A	10/22/18 08:58	1		75	73	86	75	94	105
5M105899.DAD06939-001(T)(MSD)		A	10/22/18 09:21	1		70	66	85	69	93	99
7M95306.DWMB71479(MS)		A	10/19/18 14:26	1		39	26*	69	72	73	79

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 625.1

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

FORM2

Surrogate Recovery

Method: EPA 625.1

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
5M105969.D	WMB71518	A	10/25/18 10:28	1		52	32	83	87	69	104
5M105980.D	WMB71532	A	10/25/18 14:53	1		46	31	75	75	69	101
7M95313.D	WMB71497	A	10/23/18 11:54	1		38	25*	60	66	54	76
5M105976.D	AD07161-001(R)	A	10/25/18 13:19	1		63	53	80	81	64	104
7M95317.D	AD07161-003	A	10/24/18 09:32	1		15*	9.4*	42*	46*	31*	49*
7M95353.D	AD07161-003(R)	A	10/26/18 13:16	1		22*	15*	61	57	57	82
7M95318.D	AD07161-005	A	10/24/18 09:55	1		25*	18*	41*	45*	43*	49*
7M95354.D	AD07161-005(R)	A	10/26/18 13:38	1		35	26*	57	60	64	77
7M95319.D	AD07161-007	A	10/24/18 10:18	1		30	21*	43*	45*	46*	52*
7M95355.D	AD07161-007(R)	A	10/26/18 14:01	1		40	28	68	73	73	89
7M95320.D	AD07161-008	A	10/24/18 10:41	1		16*	10*	44*	47*	35*	50*
7M95356.D	AD07161-008(R)	A	10/26/18 14:25	1		15*	12*	68	73	57	100
5M105925.D	WMB71497(MS)	A	10/23/18 09:35	1		34	23*	69	66	75	77
5M105927.D	AD07161-001	A	10/23/18 10:21	1		14*	9.1*	35*	39*	28*	48*
5M105928.D	AD07161-001(MS)	A	10/23/18 10:45	1		50	49	55	53	63	70
5M105929.D	AD07161-001(MSD)	A	10/23/18 11:08	1		40	40	52	46*	60	64
5M105968.D	WMB71518(MS)	A	10/25/18 10:04	1		59	36	102	99	100	107
5M105990.D	WMB71532(MS)	A	10/26/18 09:22	1		58	37	109	105	106	121

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 625.1

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71471

8101509 0108

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71439.D		WMB71471(MS)		10/19/2018 10:35:00 A			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	58.7193	0	100	59	20	160
Pyridine	1	21.4565	0	100	21	1	150
N-Nitrosodimethylamine	1	54.1138	0	100	54	20	150
Benzaldehyde	1	133.308	0	100	133	20	234
Aniline	1	57.4314	0	100	57	20	150
Pentachloroethane	1	86.0463	0	100	86	5	140
bis(2-Chloroethyl)ether	1	78.9651	0	100	79	43	126
Phenol	1	41.2804	0	100	41	17	120
2-Chlorophenol	1	80.223	0	100	80	36	120
N-Decane	1	77.6748	0	100	78	40	130
1,3-Dichlorobenzene	1	75.4158	0	100	75	20	130
1,4-Dichlorobenzene	1	78.4649	0	100	78	25	130
1,2-Dichlorobenzene	1	77.3967	0	100	77	25	130
Benzyl alcohol	1	84.5033	0	100	85	35	130
bis(2-chloroisopropyl)ether	1	72.7897	0	100	73	63	139
2-Methylphenol	1	77.3698	0	100	77	35	130
Acetophenone	1	103.3882	0	100	103	50	130
Hexachloroethane	1	79.9235	0	100	80	55	120
N-Nitroso-di-n-propylamine	1	84.0365	0	100	84	14	198
3&4-Methylphenol	1	79.0404	0	100	79	30	130
Nitrobenzene	1	88.2765	0	100	88	54	158
Isophorone	1	87.8729	0	100	88	47	180
2-Nitrophenol	1	94.2597	0	100	94	45	167
2,4-Dimethylphenol	1	84.1755	0	100	84	42	120
Benzoic Acid	1	13.5158	0	100	14	1	130
bis(2-Chloroethoxy)methane	1	87.4569	0	100	87	49	165
2,4-Dichlorophenol	1	94.4443	0	100	94	53	122
1,2,4-Trichlorobenzene	1	86.4136	0	100	86	57	130
Naphthalene	1	90.456	0	100	90	36	120
4-Chloroaniline	1	112.8356	0	100	113	30	170
Hexachlorobutadiene	1	82.9372	0	100	83	38	120
Caprolactam	1	49.153	0	100	49	5	130
4-Chloro-3-methylphenol	1	101.289	0	100	101	41	128
2-Methylnaphthalene	1	93.7869	0	100	94	40	130
1-Methylnaphthalene	1	107.6412	0	100	108	50	130
1,1'-Biphenyl	1	90.2454	0	100	90	50	130
1,2,4,5-Tetrachlorobenzene	1	101.2096	0	100	101	60	140
Hexachlorocyclopentadiene	1	81.8697	0	100	82	20	130
2,4,6-Trichlorophenol	1	95.547	0	100	96	52	129
2,4,5-Trichlorophenol	1	96.6632	0	100	97	50	130
2-Chloronaphthalene	1	89.6118	0	100	90	65	120
1,4-Dimethylnaphthalene	1	88.6287	0	100	89	50	130
Diphenyl Ether	1	106.2983	0	100	106	50	140
2-Nitroaniline	1	97.7805	0	100	98	40	150
Coumarin	1	102.3881	0	100	102	1	180
Acenaphthylene	1	99.4373	0	100	99	54	126
Dimethylphthalate	1	91.0318	0	100	91	1	120
2,6-Dinitrotoluene	1	94.0558	0	100	94	68	137
Acenaphthene	1	88.9111	0	100	89	60	132
3-Nitroaniline	1	105.7086	0	100	106	40	150
2,4-Dinitrophenol	1	82.7426	0	100	83	1	173
Dibenzofuran	1	94.0314	0	100	94	50	130
2,4-Dinitrotoluene	1	85.0567	0	100	85	48	127
4-Nitrophenol	1	43.384	0	100	43	13	129
2,3,4,6-Tetrachlorophenol	1	87.684	0	100	88	50	130
Fluorene	1	88.324	0	100	88	70	120
4-Chlorophenyl-phenylether	1	88.7056	0	100	89	38	145
Diethylphthalate	1	87.6197	0	100	88	1	120
4-Nitroaniline	1	97.6938	0	100	98	40	150
Atrazine	1	88.4145	0	100	88	40	150
4,6-Dinitro-2-methylphenol	1	103.9226	0	100	104	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

8101509 0109

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.6501	0	100	78	30	130
1,2-Diphenylhydrazine	1	96.8691	0	100	97	40	130
4-Bromophenyl-phenylether	1	94.4694	0	100	94	65	120
Hexachlorobenzene	1	90.1156	0	100	90	8	142
N-Octadecane	1	94.1389	0	100	94	50	130
Pentachlorophenol	1	104.599	0	100	105	38	152
Phenanthrene	1	92.2224	0	100	92	65	120
Anthracene	1	89.6239	0	100	90	43	120
Carbazole	1	104.6686	0	100	105	40	130
Di-n-butylphthalate	1	91.0111	0	100	91	8	120
Fluoranthene	1	95.9092	0	100	96	43	121
Pyrene	1	95.8684	0	100	96	70	120
Benzidine	1	22.1051	0	100	22	1	134
Butylbenzylphthalate	1	94.1343	0	100	94	1	140
3,3'-Dichlorobenzidine	1	93.097	0	100	93	8	213
Benzo[a]anthracene	1	92.4141	0	100	92	42	133
Chrysene	1	86.1945	0	100	86	44	140
bis(2-Ethylhexyl)phthalate	1	98.0988	0	100	98	29	137
Di-n-octylphthalate	1	93.4639	0	100	93	19	132
Benzo[b]fluoranthene	1	93.5776	0	100	94	42	140
Benzo[k]fluoranthene	1	96.4853	0	100	96	25	146
Benzo[a]pyrene	1	89.348	0	100	89	32	148
Indeno[1,2,3-cd]pyrene	1	92.0281	0	100	92	1	151
Dibenzo[a,h]anthracene	1	95.4942	0	100	95	1	200
Benzo[g,h,i]perylene	1	91.2238	0	100	91	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71479

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M95306.D	WMB71479(MS)	10/19/2018 2:26:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 625.1

Matrix: Aqueous

QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	69.0027	0	100	69	20	160
Pyridine	1	36.267	0	100	36	1	150
N-Nitrosodimethylamine	1	58.1228	0	100	58	20	150
Benzaldehyde	1	136.4587	0	100	136	20	234
Aniline	1	78.1613	0	100	78	20	150
Pentachloroethane	1	88.4306	0	100	88	5	140
bis(2-Chloroethyl)ether	1	78.9094	0	100	79	43	126
Phenol	1	39.122	0	100	39	17	120
2-Chlorophenol	1	75.2627	0	100	75	36	120
N-Decane	1	75.1357	0	100	75	40	130
1,3-Dichlorobenzene	1	72.4267	0	100	72	20	130
1,4-Dichlorobenzene	1	81.4073	0	100	81	25	130
1,2-Dichlorobenzene	1	81.6788	0	100	82	25	130
Benzyl alcohol	1	82.4281	0	100	82	35	130
bis(2-chloroisopropyl)ether	1	73.6381	0	100	74	63	139
2-Methylphenol	1	77.8179	0	100	78	35	130
Acetophenone	1	106.7914	0	100	107	50	130
Hexachloroethane	1	79.8436	0	100	80	55	120
N-Nitroso-di-n-propylamine	1	78.982	0	100	79	14	198
3&4-Methylphenol	1	72.799	0	100	73	30	130
Nitrobenzene	1	92.0091	0	100	92	54	158
Isophorone	1	89.7629	0	100	90	47	180
2-Nitrophenol	1	92.9104	0	100	93	45	167
2,4-Dimethylphenol	1	87.4787	0	100	87	42	120
Benzoic Acid	1	21.532	0	100	22	1	130
bis(2-Chloroethoxy)methane	1	86.8441	0	100	87	49	165
2,4-Dichlorophenol	1	91.7642	0	100	92	53	122
1,2,4-Trichlorobenzene	1	87.4633	0	100	87	57	130
Naphthalene	1	83.3188	0	100	83	36	120
4-Chloroaniline	1	114.0252	0	100	114	30	170
Hexachlorobutadiene	1	86.7801	0	100	87	38	120
Caprolactam	1	52.5262	0	100	53	5	130
4-Chloro-3-methylphenol	1	93.2287	0	100	93	41	128
2-Methylnaphthalene	1	94.1586	0	100	94	40	130
1-Methylnaphthalene	1	114.3009	0	100	114	50	130
1,1'-Biphenyl	1	95.484	0	100	95	50	130
1,2,4,5-Tetrachlorobenzene	1	114.2755	0	100	114	60	140
Hexachlorocyclopentadiene	1	101.6695	0	100	102	20	130
2,4,6-Trichlorophenol	1	102.3739	0	100	102	52	129
2,4,5-Trichlorophenol	1	93.077	0	100	93	50	130
2-Chloronaphthalene	1	89.7704	0	100	90	65	120
1,4-Dimethylnaphthalene	1	96.6729	0	100	97	50	130
Diphenyl Ether	1	114.7718	0	100	115	50	140
2-Nitroaniline	1	106.9342	0	100	107	40	150
Coumarin	1	107.9373	0	100	108	1	180
Acenaphthylene	1	98.4582	0	100	98	54	126
Dimethylphthalate	1	92.738	0	100	93	1	120
2,6-Dinitrotoluene	1	95.9042	0	100	96	68	137
Acenaphthene	1	92.2175	0	100	92	60	132
3-Nitroaniline	1	115.917	0	100	116	40	150
2,4-Dinitrophenol	1	112.3621	0	100	112	1	173
Dibenzofuran	1	97.1048	0	100	97	50	130
2,4-Dinitrotoluene	1	92.2794	0	100	92	48	127
4-Nitrophenol	1	50.0916	0	100	50	13	129
2,3,4,6-Tetrachlorophenol	1	86.9346	0	100	87	50	130
Fluorene	1	90.6281	0	100	91	70	120
4-Chlorophenyl-phenylether	1	90.2356	0	100	90	38	145
Diethylphthalate	1	90.3525	0	100	90	1	120
4-Nitroaniline	1	97.5264	0	100	98	40	150
Atrazine	1	100.6168	0	100	101	40	150
4,6-Dinitro-2-methylphenol	1	118.5253	0	100	119	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

n-Nitrosodiphenylamine	1	76.0463	0	100	76	30	130
1,2-Diphenylhydrazine	1	92.6807	0	100	93	40	130
4-Bromophenyl-phenylether	1	90.3439	0	100	90	65	120
Hexachlorobenzene	1	90.3596	0	100	90	8	142
N-Octadecane	1	97.6617	0	100	98	50	130
Pentachlorophenol	1	95.0418	0	100	95	38	152
Phenanthrene	1	91.2947	0	100	91	65	120
Anthracene	1	91.7377	0	100	92	43	120
Carbazole	1	106.2112	0	100	106	40	130
Di-n-butylphthalate	1	94.5892	0	100	95	8	120
Fluoranthene	1	92.048	0	100	92	43	121
Pyrene	1	94.7814	0	100	95	70	120
Benidine	1	16.9657	0	100	17	1	134
Butylbenzylphthalate	1	90.2116	0	100	90	1	140
3,3'-Dichlorobenzidine	1	90.5397	0	100	91	8	213
Benzo[a]anthracene	1	91.8853	0	100	92	42	133
Chrysene	1	87.2932	0	100	87	44	140
bis(2-Ethylhexyl)phthalate	1	89.4472	0	100	89	29	137
Di-n-octylphthalate	1	85.1444	0	100	85	19	132
Benzo[b]fluoranthene	1	88.9253	0	100	89	42	140
Benzo[k]fluoranthene	1	100.1275	0	100	100	25	146
Benzo[a]pyrene	1	90.9848	0	100	91	32	148
Indeno[1,2,3-cd]pyrene	1	93.6849	0	100	94	1	151
Dibenzo[a,h]anthracene	1	94.6008	0	100	95	1	200
Benzo[g,h,i]perylene	1	93.6662	0	100	94	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: SMB71480

8101509 0112

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71458.D		SMB71480(MS)		10/19/2018 6:08:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	28.202	0	50	56	1	150
N-Nitrosodimethylamine	1	39.3025	0	50	79	50	130
Benzaldehyde	1	72.143	0	50	144	20	220
Aniline	1	23.9218	0	50	48	20	150
Pentachloroethane	1	44.8925	0	50	90	50	130
bis(2-Chloroethyl)ether	1	42.9403	0	50	86	50	130
Phenol	1	91.3638	0	100	91	20	150
2-Chlorophenol	1	90.7398	0	100	91	50	130
N-Decane	1	38.1105	0	50	76	20	130
1,3-Dichlorobenzene	1	40.6487	0	50	81	60	130
1,4-Dichlorobenzene	1	40.0966	0	50	80	60	130
1,2-Dichlorobenzene	1	40.3895	0	50	81	50	130
Benzyl alcohol	1	43.4013	0	50	87	20	130
bis(2-chloroisopropyl)ether	1	35.8778	0	50	72	40	130
2-Methylphenol	1	90.1464	0	100	90	50	130
Acetophenone	1	50.4493	0	50	101	50	130
Hexachloroethane	1	41.5687	0	50	83	50	130
N-Nitroso-di-n-propylamine	1	44.6399	0	50	89	40	130
3&4-Methylphenol	1	99.9003	0	100	100	70	130
Nitrobenzene	1	42.5702	0	50	85	70	130
Isophorone	1	42.2394	0	50	84	60	130
2-Nitrophenol	1	83.9975	0	100	84	70	130
2,4-Dimethylphenol	1	87.1553	0	100	87	50	130
Benzoic Acid	1	46.3262	0	100	46	20	130
bis(2-Chloroethoxy)methane	1	43.5543	0	50	87	60	130
2,4-Dichlorophenol	1	89.009	0	100	89	70	130
1,2,4-Trichlorobenzene	1	42.1855	0	50	84	50	130
Naphthalene	1	42.4433	0	50	85	50	130
4-Chloroaniline	1	29.9013	0	50	60	10	150
Hexachlorobutadiene	1	40.0143	0	50	80	60	130
Caprolactam	1	51.6812	0	50	103	50	130
4-Chloro-3-methylphenol	1	92.0829	0	100	92	50	130
2-Methylnaphthalene	1	42.5668	0	50	85	70	130
1-Methylnaphthalene	1	49.1462	0	50	98	70	130
1,1'-Biphenyl	1	41.6084	0	50	83	60	130
1,2,4,5-Tetrachlorobenzene	1	46.9705	0	50	94	70	130
Hexachlorocyclopentadiene	1	36.9806	0	50	74	20	160
2,4,6-Trichlorophenol	1	95.1549	0	100	95	70	130
2,4,5-Trichlorophenol	1	91.3435	0	100	91	70	130
2-Chloronaphthalene	1	43.1069	0	50	86	70	130
1,4-Dimethylnaphthalene	1	42.1061	0	50	84	70	130
Diphenyl Ether	1	49.3646	0	50	99	70	130
2-Nitroaniline	1	44.2043	0	50	88	50	130
Coumarin	1	45.5689	0	50	91	70	130
Acenaphthylene	1	45.9629	0	50	92	70	130
Dimethylphthalate	1	43.8624	0	50	88	70	130
2,6-Dinitrotoluene	1	45.4201	0	50	91	70	130
Acenaphthene	1	44.2505	0	50	89	50	130
3-Nitroaniline	1	30.3417	0	50	61	10	130
2,4-Dinitrophenol	1	68.1514	0	100	68	20	150
Dibenzofuran	1	42.0026	0	50	84	70	130
2,4-Dinitrotoluene	1	40.1025	0	50	80	40	130
4-Nitrophenol	1	80.0494	0	100	80	20	150
2,3,4,6-Tetrachlorophenol	1	82.5607	0	100	83	70	130
Fluorene	1	43.9972	0	50	88	50	130
4-Chlorophenyl-phenylether	1	43.4783	0	50	87	70	130
Diethylphthalate	1	44.1763	0	50	88	70	130
4-Nitroaniline	1	41.0915	0	50	82	50	130
Atrazine	1	50.3632	0	50	101	50	130
4,6-Dinitro-2-methylphenol	1	83.5957	0	100	84	70	130
n-Nitrosodiphenylamine	1	36.3496	0	50	73	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	47.5244	0	50	95	70	130
4-Bromophenyl-phenylether	1	45.8316	0	50	92	70	130
Hexachlorobenzene	1	43.1999	0	50	86	70	130
N-Octadecane	1	41.2285	0	50	82	70	130
Pentachlorophenol	1	92.4051	0	100	92	40	130
Phenanthrene	1	45.534	0	50	91	70	130
Anthracene	1	45.1579	0	50	90	70	130
Carbazole	1	43.0496	0	50	86	70	130
Di-n-butylphthalate	1	43.224	0	50	86	70	130
Fluoranthene	1	46.8452	0	50	94	70	130
Pyrene	1	45.1072	0	50	90	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	46.2318	0	50	92	50	130
3,3'-Dichlorobenzidine	1	21.664	0	50	43	10	130
Benzo[a]anthracene	1	43.0244	0	50	86	70	130
Chrysene	1	40.6083	0	50	81	60	130
bis(2-Ethylhexyl)phthalate	1	45.6641	0	50	91	70	130
Di-n-octylphthalate	1	45.7069	0	50	91	70	130
Benzo[b]fluoranthene	1	45.6545	0	50	91	70	130
Benzo[k]fluoranthene	1	51.6746	0	50	103	70	130
Benzo[a]pyrene	1	42.5649	0	50	85	70	130
Indeno[1,2,3-cd]pyrene	1	46.1916	0	50	92	70	130
Dibenzo[a,h]anthracene	1	47.0664	0	50	94	60	130
Benzo[g,h,i]perylene	1	43.7819	0	50	88	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71496

8101509 0114

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105911.D		WMB71496(MS)		10/22/2018 2:01:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	64.7632	0	100	65	20	160
Pyridine	1	60.6331	0	100	61	1	150
N-Nitrosodimethylamine	1	65.3107	0	100	65	20	150
Benzaldehyde	1	148.3097	0	100	148	20	234
Aniline	1	91.8636	0	100	92	20	150
Pentachloroethane	1	94.2442	0	100	94	5	140
bis(2-Chloroethyl)ether	1	90.3106	0	100	90	43	126
Phenol	1	49.6041	0	100	50	17	120
2-Chlorophenol	1	94.364	0	100	94	36	120
N-Decane	1	84.68	0	100	85	40	130
1,3-Dichlorobenzene	1	88.6504	0	100	89	20	130
1,4-Dichlorobenzene	1	92.9726	0	100	93	25	130
1,2-Dichlorobenzene	1	93.1074	0	100	93	25	130
Benzyl alcohol	1	91.4135	0	100	91	35	130
bis(2-chloroisopropyl)ether	1	84.4418	0	100	84	63	139
2-Methylphenol	1	93.8456	0	100	94	35	130
Acetophenone	1	104.0474	0	100	104	50	130
Hexachloroethane	1	92.1418	0	100	92	55	120
N-Nitroso-di-n-propylamine	1	91.4586	0	100	91	14	198
3&4-Methylphenol	1	82.3905	0	100	82	30	130
Nitrobenzene	1	97.577	0	100	98	54	158
Isophorone	1	99.5552	0	100	100	47	180
2-Nitrophenol	1	105.8593	0	100	106	45	167
2,4-Dimethylphenol	1	93.6033	0	100	94	42	120
Benzoic Acid	1	17.7912	0	100	18	1	130
bis(2-Chloroethoxy)methane	1	95.5852	0	100	96	49	165
2,4-Dichlorophenol	1	104.6322	0	100	105	53	122
1,2,4-Trichlorobenzene	1	96.3014	0	100	96	57	130
Naphthalene	1	90.9299	0	100	91	36	120
4-Chloroaniline	1	114.3614	0	100	114	30	170
Hexachlorobutadiene	1	95.0275	0	100	95	38	120
Caprolactam	1	43.5698	0	100	44	5	130
4-Chloro-3-methylphenol	1	105.7048	0	100	106	41	128
2-Methylnaphthalene	1	98.4589	0	100	98	40	130
1-Methylnaphthalene	1	106.368	0	100	106	50	130
1,1'-Biphenyl	1	89.388	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	104.9541	0	100	105	60	140
Hexachlorocyclopentadiene	1	93.8181	0	100	94	20	130
2,4,6-Trichlorophenol	1	109.5392	0	100	110	52	129
2,4,5-Trichlorophenol	1	108.5806	0	100	109	50	130
2-Chloronaphthalene	1	97.068	0	100	97	65	120
1,4-Dimethylnaphthalene	1	85.7191	0	100	86	50	130
Diphenyl Ether	1	108.542	0	100	109	50	140
2-Nitroaniline	1	97.4064	0	100	97	40	150
Coumarin	1	100.0713	0	100	100	1	180
Acenaphthylene	1	109.3586	0	100	109	54	126
Dimethylphthalate	1	101.1701	0	100	101	1	120
2,6-Dinitrotoluene	1	94.7275	0	100	95	68	137
Acenaphthene	1	98.8273	0	100	99	60	132
3-Nitroaniline	1	107.7116	0	100	108	40	150
2,4-Dinitrophenol	1	96.7183	0	100	97	1	173
Dibenzofuran	1	98.2799	0	100	98	50	130
2,4-Dinitrotoluene	1	98.2775	0	100	98	48	127
4-Nitrophenol	1	49.3032	0	100	49	13	129
2,3,4,6-Tetrachlorophenol	1	99.8679	0	100	100	50	130
Fluorene	1	101.3255	0	100	101	70	120
4-Chlorophenyl-phenylether	1	99.928	0	100	100	38	145
Diethylphthalate	1	102.1885	0	100	102	1	120
4-Nitroaniline	1	96.7903	0	100	97	40	150
Atrazine	1	104.3752	0	100	104	40	150
4,6-Dinitro-2-methylphenol	1	116.3409	0	100	116	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71496

n-Nitrosodiphenylamine	1	85.2018	0	100	85	30	130
1,2-Diphenylhydrazine	1	99.0804	0	100	99	40	130
4-Bromophenyl-phenylether	1	107.5056	0	100	108	65	120
Hexachlorobenzene	1	103.2218	0	100	103	8	142
N-Octadecane	1	83.1169	0	100	83	50	130
Pentachlorophenol	1	113.9555	0	100	114	38	152
Phenanthrene	1	103.0639	0	100	103	65	120
Anthracene	1	103.0442	0	100	103	43	120
Carbazole	1	98.3681	0	100	98	40	130
Di-n-butylphthalate	1	99.5785	0	100	100	8	120
Fluoranthene	1	100.4953	0	100	100	43	121
Pyrene	1	110.017	0	100	110	70	120
Benidine	1	17.1392	0	100	17	1	134
Butylbenzylphthalate	1	102.5386	0	100	103	1	140
3,3'-Dichlorobenzidine	1	109.6232	0	100	110	8	213
Benzo[a]anthracene	1	105.313	0	100	105	42	133
Chrysene	1	95.9479	0	100	96	44	140
bis(2-Ethylhexyl)phthalate	1	101.3916	0	100	101	29	137
Di-n-octylphthalate	1	101.7064	0	100	102	19	132
Benzo[b]fluoranthene	1	111.5369	0	100	112	42	140
Benzo[k]fluoranthene	1	113.9547	0	100	114	25	146
Benzo[a]pyrene	1	100.5125	0	100	101	32	148
Indeno[1,2,3-cd]pyrene	1	101.877	0	100	102	1	151
Dibenzo[a,h]anthracene	1	101.875	0	100	102	1	200
Benzo[g,h,i]perylene	1	101.299	0	100	101	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71497

8101509 0116

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105925.D		WMB71497(MS)		10/23/2018 9:35:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	53.0069	0	100	53	20	160
Pyridine	1	21.1511	0	100	21	1	150
N-Nitrosodimethylamine	1	52.7103	0	100	53	20	150
Benzaldehyde	1	125.5905	0	100	126	20	234
Aniline	1	55.2225	0	100	55	20	150
Pentachloroethane	1	75.9432	0	100	76	5	140
bis(2-Chloroethyl)ether	1	68.0886	0	100	68	43	126
Phenol	1	32.1749	0	100	32	17	120
2-Chlorophenol	1	66.2886	0	100	66	36	120
N-Decane	1	63.4835	0	100	63	40	130
1,3-Dichlorobenzene	1	66.6863	0	100	67	20	130
1,4-Dichlorobenzene	1	71.2104	0	100	71	25	130
1,2-Dichlorobenzene	1	72.686	0	100	73	25	130
Benzyl alcohol	1	89.5934	0	100	90	35	130
bis(2-chloroisopropyl)ether	1	65.1174	0	100	65	63	139
2-Methylphenol	1	68.1506	0	100	68	35	130
Acetophenone	1	95.0871	0	100	95	50	130
Hexachloroethane	1	67.4131	0	100	67	55	120
N-Nitroso-di-n-propylamine	1	74.3506	0	100	74	14	198
3&4-Methylphenol	1	60.4851	0	100	60	30	130
Nitrobenzene	1	81.5761	0	100	82	54	158
Isophorone	1	87.6215	0	100	88	47	180
2-Nitrophenol	1	83.5626	0	100	84	45	167
2,4-Dimethylphenol	1	69.639	0	100	70	42	120
Benzoic Acid	1	15.9754	0	100	16	1	130
bis(2-Chloroethoxy)methane	1	81.5234	0	100	82	49	165
2,4-Dichlorophenol	1	80.6862	0	100	81	53	122
1,2,4-Trichlorobenzene	1	79.4017	0	100	79	57	130
Naphthalene	1	77.6791	0	100	78	36	120
4-Chloroaniline	1	117.0319	0	100	117	30	170
Hexachlorobutadiene	1	78.1038	0	100	78	38	120
Caprolactam	1	51.1066	0	100	51	5	130
4-Chloro-3-methylphenol	1	82.6556	0	100	83	41	128
2-Methylnaphthalene	1	99.8825	0	100	100	40	130
1-Methylnaphthalene	1	101.9348	0	100	102	50	130
1,1'-Biphenyl	1	88.7145	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	97.1347	0	100	97	60	140
Hexachlorocyclopentadiene	1	76.1999	0	100	76	20	130
2,4,6-Trichlorophenol	1	85.0894	0	100	85	52	129
2,4,5-Trichlorophenol	1	84.5973	0	100	85	50	130
2-Chloronaphthalene	1	85.9859	0	100	86	65	120
1,4-Dimethylnaphthalene	1	83.1301	0	100	83	50	130
Diphenyl Ether	1	101.9591	0	100	102	50	140
2-Nitroaniline	1	95.7188	0	100	96	40	150
Coumarin	1	99.6953	0	100	100	1	180
Acenaphthylene	1	94.4285	0	100	94	54	126
Dimethylphthalate	1	90.0501	0	100	90	1	120
2,6-Dinitrotoluene	1	85.2405	0	100	85	68	137
Acenaphthene	1	86.2264	0	100	86	60	132
3-Nitroaniline	1	113.42	0	100	113	40	150
2,4-Dinitrophenol	1	83.3186	0	100	83	1	173
Dibenzofuran	1	102.7905	0	100	103	50	130
2,4-Dinitrotoluene	1	88.1408	0	100	88	48	127
4-Nitrophenol	1	29.9052	0	100	30	13	129
2,3,4,6-Tetrachlorophenol	1	78.0003	0	100	78	50	130
Fluorene	1	90.6357	0	100	91	70	120
4-Chlorophenyl-phenylether	1	89.6735	0	100	90	38	145
Diethylphthalate	1	86.1218	0	100	86	1	120
4-Nitroaniline	1	102.9223	0	100	103	40	150
Atrazine	1	100.394	0	100	100	40	150
4,6-Dinitro-2-methylphenol	1	98.1741	0	100	98	53	130

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	72.891	0	100	73	30	130
1,2-Diphenylhydrazine	1	87.3321	0	100	87	40	130
4-Bromophenyl-phenylether	1	93.2631	0	100	93	65	120
Hexachlorobenzene	1	90.2638	0	100	90	8	142
N-Octadecane	1	79.5228	0	100	80	50	130
Pentachlorophenol	1	88.6987	0	100	89	38	152
Phenanthrene	1	88.9204	0	100	89	65	120
Anthracene	1	90.9866	0	100	91	43	120
Carbazole	1	100.7168	0	100	101	40	130
Di-n-butylphthalate	1	86.2762	0	100	86	8	120
Fluoranthene	1	90.3642	0	100	90	43	121
Pyrene	1	93.5296	0	100	94	70	120
Benzidine	1	21.1067	0	100	21	1	134
Butylbenzylphthalate	1	81.9251	0	100	82	1	140
3,3'-Dichlorobenzidine	1	87.7538	0	100	88	8	213
Benzo[a]anthracene	1	90.3826	0	100	90	42	133
Chrysene	1	84.5684	0	100	85	44	140
bis(2-Ethylhexyl)phthalate	1	78.343	0	100	78	29	137
Di-n-octylphthalate	1	78.1737	0	100	78	19	132
Benzo[b]fluoranthene	1	100.5186	0	100	101	42	140
Benzo[k]fluoranthene	1	96.159	0	100	96	25	146
Benzo[a]pyrene	1	88.7339	0	100	89	32	148
Indeno[1,2,3-cd]pyrene	1	91.9515	0	100	92	1	151
Dibenzo[a,h]anthracene	1	92.2738	0	100	92	1	200
Benzo[g,h,i]perylene	1	91.0223	0	100	91	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71518

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105968.D		WMB71518(MS)		10/25/2018 10:04:00 A			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	63.3712	0	100	63	20	160
Pyridine	1	26.351	0	100	26	1	150
N-Nitrosodimethylamine	1	61.7632	0	100	62	20	150
Benzaldehyde	1	133.1941	0	100	133	20	234
Aniline	1	54.8464	0	100	55	20	150
Pentachloroethane	1	87.0938	0	100	87	5	140
bis(2-Chloroethyl)ether	1	79.2769	0	100	79	43	126
Phenol	1	37.7516	0	100	38	17	120
2-Chlorophenol	1	80.7457	0	100	81	36	120
N-Decane	1	73.843	0	100	74	40	130
1,3-Dichlorobenzene	1	79.3421	0	100	79	20	130
1,4-Dichlorobenzene	1	87.8714	0	100	88	25	130
1,2-Dichlorobenzene	1	87.3298	0	100	87	25	130
Benzyl alcohol	1	83.3455	0	100	83	35	130
bis(2-chloroisopropyl)ether	1	77.2426	0	100	77	63	139
2-Methylphenol	1	82.5655	0	100	83	35	130
Acetophenone	1	100.5671	0	100	101	50	130
Hexachloroethane	1	84.5375	0	100	85	55	120
N-Nitroso-di-n-propylamine	1	84.5867	0	100	85	14	198
3&4-Methylphenol	1	70.7191	0	100	71	30	130
Nitrobenzene	1	92.0601	0	100	92	54	158
Isophorone	1	94.3482	0	100	94	47	180
2-Nitrophenol	1	95.186	0	100	95	45	167
2,4-Dimethylphenol	1	78.4316	0	100	78	42	120
Benzoic Acid	1	14.5515	0	100	15	1	130
bis(2-Chloroethoxy)methane	1	89.0505	0	100	89	49	165
2,4-Dichlorophenol	1	90.8829	0	100	91	53	122
1,2,4-Trichlorobenzene	1	90.78	0	100	91	57	130
Naphthalene	1	86.5	0	100	86	36	120
4-Chloroaniline	1	107.6197	0	100	108	30	170
Hexachlorobutadiene	1	91.4818	0	100	91	38	120
Caprolactam	1	41.967	0	100	42	5	130
4-Chloro-3-methylphenol	1	90.3375	0	100	90	41	128
2-Methylnaphthalene	1	92.0404	0	100	92	40	130
1-Methylnaphthalene	1	102.8469	0	100	103	50	130
1,1'-Biphenyl	1	87.0596	0	100	87	50	130
1,2,4,5-Tetrachlorobenzene	1	100.5878	0	100	101	60	140
Hexachlorocyclopentadiene	1	94.9378	0	100	95	20	130
2,4,6-Trichlorophenol	1	94.7731	0	100	95	52	129
2,4,5-Trichlorophenol	1	92.9766	0	100	93	50	130
2-Chloronaphthalene	1	93.1269	0	100	93	65	120
1,4-Dimethylnapthalene	1	84.1938	0	100	84	50	130
Diphenyl Ether	1	103.2512	0	100	103	50	140
2-Nitroaniline	1	89.568	0	100	90	40	150
Coumarin	1	96.3666	0	100	96	1	180
Acenaphthylene	1	100.2359	0	100	100	54	126
Dimethylphthalate	1	94.044	0	100	94	1	120
2,6-Dinitrotoluene	1	89.6968	0	100	90	68	137
Acenaphthene	1	92.023	0	100	92	60	132
3-Nitroaniline	1	101.6772	0	100	102	40	150
2,4-Dinitrophenol	1	87.3667	0	100	87	1	173
Dibenzofuran	1	89.42	0	100	89	50	130
2,4-Dinitrotoluene	1	92.0757	0	100	92	48	127
4-Nitrophenol	1	31.517	0	100	32	13	129
2,3,4,6-Tetrachlorophenol	1	86.2798	0	100	86	50	130
Fluorene	1	91.9172	0	100	92	70	120
4-Chlorophenyl-phenylether	1	93.0513	0	100	93	38	145
Diethylphthalate	1	92.3725	0	100	92	1	120
4-Nitroaniline	1	92.4458	0	100	92	40	150
Atrazine	1	90.4564	0	100	90	40	150
4,6-Dinitro-2-methylphenol	1	105.9085	0	100	106	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71518

n-Nitrosodiphenylamine	1	80.1879	0	100	80	30	130
1,2-Diphenylhydrazine	1	93.4133	0	100	93	40	130
4-Bromophenyl-phenylether	1	97.8922	0	100	98	65	120
Hexachlorobenzene	1	98.3314	0	100	98	8	142
N-Octadecane	1	79.8691	0	100	80	50	130
Pentachlorophenol	1	91.3806	0	100	91	38	152
Phenanthrene	1	94.4508	0	100	94	65	120
Anthracene	1	95.8335	0	100	96	43	120
Carbazole	1	98.2781	0	100	98	40	130
Di-n-butylphthalate	1	86.7878	0	100	87	8	120
Fluoranthene	1	93.6341	0	100	94	43	121
Pyrene	1	98.3413	0	100	98	70	120
Benzidine	1	25.6015	0	100	26	1	134
Butylbenzylphthalate	1	75.2506	0	100	75	1	140
3,3'-Dichlorobenzidine	1	97.0344	0	100	97	8	213
Benzo[a]anthracene	1	94.7499	0	100	95	42	133
Chrysene	1	96.6785	0	100	97	44	140
bis(2-Ethylhexyl)phthalate	1	71.3845	0	100	71	29	137
Di-n-octylphthalate	1	72.6209	0	100	73	19	132
Benzo[b]fluoranthene	1	99.4596	0	100	99	42	140
Benzo[k]fluoranthene	1	101.2751	0	100	101	25	146
Benzo[a]pyrene	1	92.0881	0	100	92	32	148
Indeno[1,2,3-cd]pyrene	1	91.412	0	100	91	1	151
Dibenzo[a,h]anthracene	1	91.006	0	100	91	1	200
Benzo[g,h,i]perylene	1	90.503	0	100	91	1	195

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71532

8101509 0120

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105990.D		WMB71532(MS)		10/26/2018 9:22:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	63.6211	0	100	64	20	160
Pyridine	1	20.5269	0	100	21	1	150
N-Nitrosodimethylamine	1	61.8601	0	100	62	20	150
Benzaldehyde	1	136.0759	0	100	136	20	234
Aniline	1	51.7296	0	100	52	20	150
Pentachloroethane	1	84.6698	0	100	85	5	140
bis(2-Chloroethyl)ether	1	80.5579	0	100	81	43	126
Phenol	1	36.4041	0	100	36	17	120
2-Chlorophenol	1	78.8295	0	100	79	36	120
N-Decane	1	72.7133	0	100	73	40	130
1,3-Dichlorobenzene	1	78.4067	0	100	78	20	130
1,4-Dichlorobenzene	1	88.0187	0	100	88	25	130
1,2-Dichlorobenzene	1	89.3419	0	100	89	25	130
Benzyl alcohol	1	84.9118	0	100	85	35	130
bis(2-chloroisopropyl)ether	1	78.3665	0	100	78	63	139
2-Methylphenol	1	81.4584	0	100	81	35	130
Acetophenone	1	101.3579	0	100	101	50	130
Hexachloroethane	1	86.8006	0	100	87	55	120
N-Nitroso-di-n-propylamine	1	87.0509	0	100	87	14	198
3&4-Methylphenol	1	69.5412	0	100	70	30	130
Nitrobenzene	1	94.5265	0	100	95	54	158
Isophorone	1	98.334	0	100	98	47	180
2-Nitrophenol	1	95.0391	0	100	95	45	167
2,4-Dimethylphenol	1	79.1413	0	100	79	42	120
Benzoic Acid	1	0	0	100	0*	1	130
bis(2-Chloroethoxy)methane	1	89.9466	0	100	90	49	165
2,4-Dichlorophenol	1	91.2236	0	100	91	53	122
1,2,4-Trichlorobenzene	1	92.0306	0	100	92	57	130
Naphthalene	1	88.4357	0	100	88	36	120
4-Chloroaniline	1	113.2639	0	100	113	30	170
Hexachlorobutadiene	1	91.7795	0	100	92	38	120
Caprolactam	1	45.0804	0	100	45	5	130
4-Chloro-3-methylphenol	1	93.2584	0	100	93	41	128
2-Methylnaphthalene	1	92.9019	0	100	93	40	130
1-Methylnaphthalene	1	107.5698	0	100	108	50	130
1,1'-Biphenyl	1	90.9607	0	100	91	50	130
1,2,4,5-Tetrachlorobenzene	1	104.6292	0	100	105	60	140
Hexachlorocyclopentadiene	1	94.9895	0	100	95	20	130
2,4,6-Trichlorophenol	1	95.5905	0	100	96	52	129
2,4,5-Trichlorophenol	1	95.373	0	100	95	50	130
2-Chloronaphthalene	1	95.7092	0	100	96	65	120
1,4-Dimethylnaphthalene	1	86.1181	0	100	86	50	130
Diphenyl Ether	1	106.3425	0	100	106	50	140
2-Nitroaniline	1	94.333	0	100	94	40	150
Coumarin	1	101.4235	0	100	101	1	180
Acenaphthylene	1	107.4991	0	100	107	54	126
Dimethylphthalate	1	101.649	0	100	102	1	120
2,6-Dinitrotoluene	1	94.2676	0	100	94	68	137
Acenaphthene	1	98.127	0	100	98	60	132
3-Nitroaniline	1	111.8016	0	100	112	40	150
2,4-Dinitrophenol	1	72.421	0	100	72	1	173
Dibenzofuran	1	95.0938	0	100	95	50	130
2,4-Dinitrotoluene	1	97.43	0	100	97	48	127
4-Nitrophenol	1	35.7197	0	100	36	13	129
2,3,4,6-Tetrachlorophenol	1	88.6974	0	100	89	50	130
Fluorene	1	100.1094	0	100	100	70	120
4-Chlorophenyl-phenylether	1	99.08	0	100	99	38	145
Diethylphthalate	1	99.133	0	100	99	1	120
4-Nitroaniline	1	97.6676	0	100	98	40	150
Atrazine	1	92.6557	0	100	93	40	150
4,6-Dinitro-2-methylphenol	1	100.5688	0	100	101	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71532

n-Nitrosodiphenylamine	1	80.9124	0	100	81	30	130
1,2-Diphenylhydrazine	1	96.2705	0	100	96	40	130
4-Bromophenyl-phenylether	1	102.7711	0	100	103	65	120
Hexachlorobenzene	1	102.1146	0	100	102	8	142
N-Octadecane	1	81.2652	0	100	81	50	130
Pentachlorophenol	1	90.4718	0	100	90	38	152
Phenanthrene	1	98.7322	0	100	99	65	120
Anthracene	1	99.1306	0	100	99	43	120
Carbazole	1	101.2382	0	100	101	40	130
Di-n-butylphthalate	1	94.7186	0	100	95	8	120
Fluoranthene	1	98.4808	0	100	98	43	121
Pyrene	1	103.7808	0	100	104	70	120
Benzidine	1	12.1422	0	100	12	1	134
Butylbenzylphthalate	1	84.5102	0	100	85	1	140
3,3'-Dichlorobenzidine	1	104.2028	0	100	104	8	213
Benzo[a]anthracene	1	103.348	0	100	103	42	133
Chrysene	1	103.0892	0	100	103	44	140
bis(2-Ethylhexyl)phthalate	1	84.1485	0	100	84	29	137
Di-n-octylphthalate	1	83.674	0	100	84	19	132
Benzo[b]fluoranthene	1	108.9401	0	100	109	42	140
Benzo[k]fluoranthene	1	105.7867	0	100	106	25	146
Benzo[a]pyrene	1	98.6343	0	100	99	32	148
Indeno[1,2,3-cd]pyrene	1	99.4451	0	100	99	1	151
Dibenzo[a,h]anthracene	1	99.0807	0	100	99	1	200
Benzo[g,h,i]perylene	1	99.4292	0	100	99	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71471

8101509 0122

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71442.D		AD07093-001(T)(MS)		10/19/2018 11:42:00 A			
Non Spike(If applicable): 10M71441.D		AD07093-001(T)		10/19/2018 11:20:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	55.2785	0	100	55	20	160
Pyridine	1	32.6502	0	100	33	1	150
N-Nitrosodimethylamine	1	62.0201	0	100	62	20	150
Benzaldehyde	1	129.9332	0	100	130	20	234
Aniline	1	50.9197	0	100	51	20	150
Pentachloroethane	1	69.6055	0	100	70	5	140
bis(2-Chloroethyl)ether	1	74.7132	0	100	75	12	158
Phenol	1	14.9508	0	100	15	5	120
2-Chlorophenol	1	12.2624	0	100	12*	23	134
N-Decane	1	64.4722	0	100	64	40	130
1,3-Dichlorobenzene	1	64.3333	0	100	64	20	130
1,4-Dichlorobenzene	1	70.3069	0	100	70	25	130
1,2-Dichlorobenzene	1	69.5202	0	100	70	25	130
Benzyl alcohol	1	82.3174	0	100	82	35	130
bis(2-chloroisopropyl)ether	1	66.7257	0	100	67	36	166
2-Methylphenol	1	34.987	0	100	35	35	130
Acetophenone	1	96.3639	0	100	96	50	130
Hexachloroethane	1	72.6457	0	100	73	40	120
N-Nitroso-di-n-propylamine	1	83.1737	0	100	83	1	230
3&4-Methylphenol	1	32.4659	0	100	32	30	130
Nitrobenzene	1	86.3474	0	100	86	35	180
Isophorone	1	87.0064	0	100	87	21	196
2-Nitrophenol	1	12.7144	0	100	13*	29	182
2,4-Dimethylphenol	1	61.2862	0	100	61	32	120
Benzoic Acid	1	0	0	100	0*	1	130
bis(2-Chloroethoxy)methane	1	85.3877	0	100	85	33	184
2,4-Dichlorophenol	1	15.9488	0	100	16*	39	135
1,2,4-Trichlorobenzene	1	81.0444	0	100	81	44	142
Naphthalene	1	83.7282	0	100	84	21	133
4-Chloroaniline	1	65.1713	0	100	65	30	170
Hexachlorobutadiene	1	80.553	0	100	81	24	120
Caprolactam	1	86.7465	0	100	87	5	130
4-Chloro-3-methylphenol	1	31.7955	0	100	32	22	147
2-Methylnaphthalene	1	85.0747	0	100	85	40	130
1-Methylnaphthalene	1	101.3638	0	100	101	50	130
1,1'-Biphenyl	1	80.5449	0	100	81	50	130
1,2,4,5-Tetrachlorobenzene	1	96.8	0	100	97	60	140
Hexachlorocyclopentadiene	1	78.1443	0	100	78	20	130
2,4,6-Trichlorophenol	1	17.9304	0	100	18*	37	144
2,4,5-Trichlorophenol	1	18.0698	0	100	18*	50	130
2-Chloronaphthalene	1	87.9111	0	100	88	60	120
1,4-Dimethylnaphthalene	1	89.044	0	100	89	50	130
Diphenyl Ether	1	106.0297	0	100	106	50	140
2-Nitroaniline	1	86.5766	0	100	87	40	150
Coumarin	1	100.9706	0	100	101	1	180
Acenaphthylene	1	100.5225	0	100	101	33	145
Dimethylphthalate	1	94.2715	0	100	94	1	120
2,6-Dinitrotoluene	1	97.9195	0	100	98	50	158
Acenaphthene	1	90.4985	0	100	90	47	145
3-Nitroaniline	1	65.9536	0	100	66	40	150
2,4-Dinitrophenol	1	0	0	100	0*	1	191
Dibenzofuran	1	94.397	0	100	94	50	130
2,4-Dinitrotoluene	1	90.3419	0	100	90	39	139
4-Nitrophenol	1	7.4489	0	100	7.4	1	132
2,3,4,6-Tetrachlorophenol	1	18.9132	0	100	19*	50	130
Fluorene	1	95.0732	0	100	95	59	121
4-Chlorophenyl-phenylether	1	95.0356	0	100	95	1	132
Diethylphthalate	1	94.4871	0	100	94	1	120
4-Nitroaniline	1	47.2109	0	100	47	40	150
Atrazine	1	91.6642	0	100	92	40	150
4,6-Dinitro-2-methylphenol	1	16.3941	0	100	16	1	181

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.1501	0	100	77	30	130
1,2-Diphenylhydrazine	1	99.3004	0	100	99	40	130
4-Bromophenyl-phenylether	1	98.0859	0	100	98	53	127
Hexachlorobenzene	1	92.5694	0	100	93	1	152
N-Octadecane	1	90.6702	0	100	91	50	130
Pentachlorophenol	1	17.6426	0	100	18	14	176
Phenanthrene	1	96.0675	0	100	96	54	120
Anthracene	1	97.2628	0	100	97	27	133
Carbazole	1	99.6684	0	100	100	40	130
Di-n-butylphthalate	1	94.9101	0	100	95	1	120
Fluoranthene	1	98.6962	0	100	99	26	137
Pyrene	1	97.5634	0	100	98	52	120
Benzidine	1	17.6601	0	100	18	1	130
Butylbenzylphthalate	1	95.6995	0	100	96	1	152
3,3'-Dichlorobenzidine	1	14.2338	0	100	14	1	262
Benzo[a]anthracene	1	94.5712	0	100	95	33	143
Chrysene	1	85.3424	0	100	85	17	168
bis(2-Ethylhexyl)phthalate	1	98.8794	0	100	99	8	158
Di-n-octylphthalate	1	96.1084	0	100	96	4	146
Benzo[b]fluoranthene	1	96.9413	0	100	97	42	159
Benzo[k]fluoranthene	1	97.7971	0	100	98	11	162
Benzo[a]pyrene	1	92.9984	0	100	93	17	163
Indeno[1,2,3-cd]pyrene	1	94.603	0	100	95	1	171
Dibenzo[a,h]anthracene	1	99.0239	0	100	99	1	227
Benzo[g,h,i]perylene	1	92.8413	0	100	93	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71471

8101509 0124

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71443.D		AD07093-001(T)(MSD)		10/19/2018 12:04:00 P			
Non Spike(If applicable): 10M71441.D		AD07093-001(T)		10/19/2018 11:20:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	88.3305	0	100	88	20	160
Pyridine	1	45.0047	0	100	45	1	150
N-Nitrosodimethylamine	1	84.1121	0	100	84	20	150
Benzaldehyde	1	5.2704	0	100	5.3 *	20	234
Aniline	1	53.4628	0	100	53	20	150
Pentachloroethane	1	98.3648	0	100	98	5	140
bis(2-Chloroethyl)ether	1	90.1403	0	100	90	43	126
Phenol	1	7.1413	0	100	7.1 *	17	120
2-Chlorophenol	1	88.9105	0	100	89	36	120
N-Decane	1	91.7086	0	100	92	40	130
1,3-Dichlorobenzene	1	84.6408	0	100	85	20	130
1,4-Dichlorobenzene	1	84.5044	0	100	85	25	130
1,2-Dichlorobenzene	1	81.216	0	100	81	25	130
Benzyl alcohol	1	93.475	0	100	93	35	130
bis(2-chloroisopropyl)ether	1	76.3363	0	100	76	63	139
2-Methylphenol	1	87.5182	0	100	88	35	130
Acetophenone	1	109.4396	0	100	109	50	130
Hexachloroethane	1	88.7666	0	100	89	55	120
N-Nitroso-di-n-propylamine	1	90.1977	0	100	90	14	198
3&4-Methylphenol	1	96.6319	0	100	97	30	130
Nitrobenzene	1	94.429	0	100	94	54	158
Isophorone	1	91.0974	0	100	91	47	180
2-Nitrophenol	1	92.7584	0	100	93	45	167
2,4-Dimethylphenol	1	81.6805	0	100	82	42	120
Benzoic Acid	1	66.3912	0	100	66	1	130
bis(2-Chloroethoxy)methane	1	89.0525	0	100	89	49	165
2,4-Dichlorophenol	1	95.1159	0	100	95	53	122
1,2,4-Trichlorobenzene	1	93.4757	0	100	93	57	130
Naphthalene	1	95.1742	0	100	95	36	120
4-Chloroaniline	1	66.2253	0	100	66	30	170
Hexachlorobutadiene	1	91.406	0	100	91	38	120
Caprolactam	1	92.9287	0	100	93	5	130
4-Chloro-3-methylphenol	1	99.8015	0	100	100	41	128
2-Methylnaphthalene	1	94.5012	0	100	95	40	130
1-Methylnaphthalene	1	110.9245	0	100	111	50	130
1,1'-Biphenyl	1	95.0403	0	100	95	50	130
1,2,4,5-Tetrachlorobenzene	1	111.4509	0	100	111	60	140
Hexachlorocyclopentadiene	1	95.3923	0	100	95	20	130
2,4,6-Trichlorophenol	1	106.4675	0	100	106	52	129
2,4,5-Trichlorophenol	1	95.0322	0	100	95	50	130
2-Chloronaphthalene	1	96.4045	0	100	96	65	120
1,4-Dimethylnaphthalene	1	95.8254	0	100	96	50	130
Diphenyl Ether	1	114.1075	0	100	114	50	140
2-Nitroaniline	1	87.6347	0	100	88	40	150
Coumarin	1	106.6203	0	100	107	1	180
Acenaphthylene	1	104.7829	0	100	105	54	126
Dimethylphthalate	1	96.0941	0	100	96	1	120
2,6-Dinitrotoluene	1	101.8529	0	100	102	68	137
Acenaphthene	1	94.8585	0	100	95	60	132
3-Nitroaniline	1	67.8766	0	100	68	40	150
2,4-Dinitrophenol	1	82.5761	0	100	83	1	173
Dibenzofuran	1	96.4206	0	100	96	50	130
2,4-Dinitrotoluene	1	89.6786	0	100	90	48	127
4-Nitrophenol	1	79.7018	0	100	80	13	129
2,3,4,6-Tetrachlorophenol	1	90.4734	0	100	90	50	130
Fluorene	1	95.1927	0	100	95	70	120
4-Chlorophenyl-phenylether	1	94.174	0	100	94	38	145
Diethylphthalate	1	95.4744	0	100	95	1	120
4-Nitroaniline	1	51.3524	0	100	51	40	150
Atrazine	1	90.1065	0	100	90	40	150
4,6-Dinitro-2-methylphenol	1	99.9576	0	100	100	53	130

* - Indicates outside of limits

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Form3
Recovery Data Laboratory Limits

8101509 0125

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.5825	0	100	78	30	130
1,2-Diphenylhydrazine	1	101.9052	0	100	102	40	130
4-Bromophenyl-phenylether	1	101.1868	0	100	101	65	120
Hexachlorobenzene	1	91.5121	0	100	92	8	142
N-Octadecane	1	98.3309	0	100	98	50	130
Pentachlorophenol	1	105.5476	0	100	106	38	152
Phenanthrene	1	95.0333	0	100	95	65	120
Anthracene	1	96.5921	0	100	97	43	120
Carbazole	1	107.655	0	100	108	40	130
Di-n-butylphthalate	1	95.4054	0	100	95	8	120
Fluoranthene	1	99.4451	0	100	99	43	121
Pyrene	1	97.3258	0	100	97	70	120
Benidine	1	2.5529	0	100	2.6	1	134
Butylbenzylphthalate	1	92.8719	0	100	93	1	140
3,3'-Dichlorobenzidine	1	13.9974	0	100	14	8	213
Benzo[a]anthracene	1	93.9256	0	100	94	42	133
Chrysene	1	86.1337	0	100	86	44	140
bis(2-Ethylhexyl)phthalate	1	99.4964	0	100	99	29	137
Di-n-octylphthalate	1	96.5511	0	100	97	19	132
Benzo[b]fluoranthene	1	95.6713	0	100	96	42	140
Benzo[k]fluoranthene	1	99.6312	0	100	100	25	146
Benzo[a]pyrene	1	91.8774	0	100	92	32	148
Indeno[1,2,3-cd]pyrene	1	93.0319	0	100	93	1	151
Dibenzo[a,h]anthracene	1	98.3406	0	100	98	1	200
Benzo[g,h,i]perylene	1	92.7831	0	100	93	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits

8101509 0126

QC Batch: WMB71471

Data File	Sample ID:	Analysis Date
Spike or Dup: 10M71443.D	AD07093-001(T)(MSD)	10/19/2018 12:04:00 P
Duplicate(If applicable): 10M71442.D	AD07093-001(T)(MS)	10/19/2018 11:42:00 A
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MSD Conc	Sample/MS/MSB Conc	RPD	Limit
1,4-Dioxane	1	88.3305	55.2785	46 *	20
Pyridine	1	45.0047	32.6502	32	40
N-Nitrosodimethylamine	1	84.1121	62.0201	30 *	20
Benzaldehyde	1	5.2704	129.9332	184 *	20
Aniline	1	53.4628	50.9197	4.9	20
Pentachloroethane	1	98.3648	69.6055	34 *	20
bis(2-Chloroethyl)ether	1	90.1403	74.7132	19	108
Phenol	1	7.1413	14.9508	71 *	64
2-Chlorophenol	1	88.9105	12.2624	152 *	61
N-Decane	1	91.7086	64.4722	35 *	20
1,3-Dichlorobenzene	1	84.6408	64.3333	27 *	20
1,4-Dichlorobenzene	1	84.5044	70.3069	18	40
1,2-Dichlorobenzene	1	81.216	69.5202	16	20
Benzyl alcohol	1	93.475	82.3174	13	20
bis(2-chloroisopropyl)ether	1	76.3363	66.7257	13	76
2-Methylphenol	1	87.5182	34.987	86 *	40
Acetophenone	1	109.4396	96.3639	13	20
Hexachloroethane	1	88.7666	72.6457	20	52
N-Nitroso-di-n-propylamine	1	90.1977	83.1737	8.1	87
3&4-Methylphenol	1	96.6319	32.4659	99 *	40
Nitrobenzene	1	94.429	86.3474	8.9	62
Isophorone	1	91.0974	87.0064	4.6	93
2-Nitrophenol	1	92.7584	12.7144	152 *	55
2,4-Dimethylphenol	1	81.6805	61.2862	29	58
Benzoic Acid	1	66.3912	0	200 *	20
bis(2-Chloroethoxy)methane	1	89.0525	85.3877	4.2	54
2,4-Dichlorophenol	1	95.1159	15.9488	143 *	50
1,2,4-Trichlorobenzene	1	93.4757	81.0444	14	50
Naphthalene	1	95.1742	83.7282	13	65
4-Chloroaniline	1	66.2253	65.1713	1.6	20
Hexachlorobutadiene	1	91.406	80.553	13	62
Caprolactam	1	92.9287	86.7465	6.9	20
4-Chloro-3-methylphenol	1	99.8015	31.7955	103 *	73
2-Methylnaphthalene	1	94.5012	85.0747	10	20
1-Methylnaphthalene	1	110.9245	101.3638	9	20
1,1'-Biphenyl	1	95.0403	80.5449	17	20
1,2,4,5-Tetrachlorobenzene	1	111.4509	96.8	14	20
Hexachlorocyclopentadiene	1	95.3923	78.1443	20	20
2,4,6-Trichlorophenol	1	106.4675	17.9304	142 *	58
2,4,5-Trichlorophenol	1	95.0322	18.0698	136 *	40
2-Chloronaphthalene	1	96.4045	87.9111	9.2	24
1,4-Dimethylnaphthalene	1	95.8254	89.044	7.3	20
Diphenyl Ether	1	114.1075	106.0297	7.3	20
2-Nitroaniline	1	87.6347	86.5766	1.2	20
Coumarin	1	106.6203	100.9706	5.4	20
Acenaphthylene	1	104.7829	100.5225	4.2	74
Dimethylphthalate	1	96.0941	94.2715	1.9	183
2,6-Dinitrotoluene	1	101.8529	97.9195	3.9	48
Acenaphthene	1	94.8585	90.4985	4.7	48
3-Nitroaniline	1	67.8766	65.9536	2.9	20
2,4-Dinitrophenol	1	82.5761	0	200 *	132
Dibenzofuran	1	96.4206	94.397	2.1	20
2,4-Dinitrotoluene	1	89.6786	90.3419	0.74	42
4-Nitrophenol	1	79.7018	7.4489	166 *	131
2,3,4,6-Tetrachlorophenol	1	90.4734	18.9132	131 *	20
Fluorene	1	95.1927	95.0732	0.13	38
4-Chlorophenyl-phenylether	1	94.174	95.0356	0.91	61
Diethylphthalate	1	95.4744	94.4871	1	100
4-Nitroaniline	1	51.3524	47.2109	8.4	20
Atrazine	1	90.1065	91.6642	1.7	20
4,6-Dinitro-2-methylphenol	1	99.9576	16.3941	144	203
n-Nitrosodiphenylamine	1	77.5825	77.1501	0.56	20
1,2-Diphenylhydrazine	1	101.9052	99.3004	2.6	20

Form3
RPD Data Laboratory Limits

8101509 0127

QC Batch: WMB71471

4-Bromophenyl-phenylether	1	101.1868	98.0859	3.1	43
Hexachlorobenzene	1	91.5121	92.5694	1.1	55
N-Octadecane	1	98.3309	90.6702	8.1	20
Pentachlorophenol	1	105.5476	17.6426	143 *	86
Phenanthrene	1	95.0333	96.0675	1.1	39
Anthracene	1	96.5921	97.2628	0.69	66
Carbazole	1	107.655	99.6684	7.7	20
Di-n-butylphthalate	1	95.4054	94.9101	0.52	47
Fluoranthene	1	99.4451	98.6962	0.76	66
Pyrene	1	97.3258	97.5634	0.24	49
Benzidine	1	2.5529	17.6601	149 *	20
Butylbenzylphthalate	1	92.8719	95.6995	3	60
3,3'-Dichlorobenzidine	1	13.9974	14.2338	1.7	108
Benzo[a]anthracene	1	93.9256	94.5712	0.68	53
Chrysene	1	86.1337	85.3424	0.92	87
bis(2-Ethylhexyl)phthalate	1	99.4964	98.8794	0.62	82
Di-n-octylphthalate	1	96.5511	96.1084	0.46	69
Benzo[b]fluoranthene	1	95.6713	96.9413	1.3	71
Benzo[k]fluoranthene	1	99.6312	97.7971	1.9	63
Benzo[a]pyrene	1	91.8774	92.9984	1.2	72
Indeno[1,2,3-cd]pyrene	1	93.0319	94.603	1.7	99
Dibenzo[a,h]anthracene	1	98.3406	99.0239	0.69	126
Benzo[g,h,i]perylene	1	92.7831	92.8413	0.06	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71479

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105898.D	AD06939-001(T)(MS)	10/22/2018 8:58:00 AM
Non Spike(If applicable): 5M105897.D	AD06939-001(T)	10/22/2018 8:35:00 AM
Inst Blank(If applicable):		

Method: 625.1

Matrix: Aqueous

QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	77.857	0	100	78	20	160
Pyridine	1	7.983	0	100	8	1	150
N-Nitrosodimethylamine	1	86.8562	0	100	87	20	150
Benzaldehyde	1	141.2897	0	100	141	20	234
Aniline	1	35.8284	0	100	36	20	150
Pentachloroethane	1	86.9434	0	100	87	5	140
bis(2-Chloroethyl)ether	1	87.5754	0	100	88	12	158
N-Decane	1	70.4172	0	100	70	40	130
1,3-Dichlorobenzene	1	82.7246	0	100	83	20	130
1,4-Dichlorobenzene	1	83.6878	0	100	84	25	130
1,2-Dichlorobenzene	1	84.6299	0	100	85	25	130
Benzyl alcohol	1	102.3139	0	100	102	35	130
bis(2-chloroisopropyl)ether	1	77.4704	0	100	77	36	166
Acetophenone	1	98.2235	0	100	98	50	130
Hexachloroethane	1	81.9007	0	100	82	40	120
N-Nitroso-di-n-propylamine	1	84.8854	0	100	85	1	230
Nitrobenzene	1	94.825	0	100	95	35	180
Isophorone	1	99.9692	0	100	100	21	196
Benzoic Acid	1	44.0751	0	100	44	1	130
bis(2-Chloroethoxy)methane	1	95.544	0	100	96	33	184
1,2,4-Trichlorobenzene	1	93.5408	0	100	94	44	142
Naphthalene	1	92.2102	7.6512	100	85	21	133
4-Chloroaniline	1	105.1189	0	100	105	30	170
Hexachlorobutadiene	1	93.1214	0	100	93	24	120
Caprolactam	1	102.6359	0	100	103	5	130
2-Methylnaphthalene	1	103.4607	0	100	103	40	130
1-Methylnaphthalene	1	110.2842	0	100	110	50	130
1,1'-Biphenyl	1	91.0241	0	100	91	50	130
1,2,4,5-Tetrachlorobenzene	1	107.0762	0	100	107	60	140
Hexachlorocyclopentadiene	1	96.9201	0	100	97	20	130
2-Chloronaphthalene	1	103.2298	0	100	103	60	120
1,4-Dimethylnaphthalene	1	89.7472	0	100	90	50	130
Diphenyl Ether	1	110.7226	0	100	111	50	140
2-Nitroaniline	1	97.5482	0	100	98	40	150
Coumarin	1	103.8067	0	100	104	1	180
Acenaphthylene	1	111.5918	0	100	112	33	145
Dimethylphthalate	1	105.915	0	100	106	1	120
2,6-Dinitrotoluene	1	100.5232	0	100	101	50	158
Acenaphthene	1	102.3924	0	100	102	47	145
3-Nitroaniline	1	118.0802	0	100	118	40	150
Dibenzofuran	1	101.5379	0	100	102	50	130
2,4-Dinitrotoluene	1	101.0231	0	100	101	39	139
Fluorene	1	105.124	0	100	105	59	121
4-Chlorophenyl-phenylether	1	105.706	0	100	106	1	132
Diethylphthalate	1	105.2871	0	100	105	1	120
4-Nitroaniline	1	103.0135	0	100	103	40	150
Atrazine	1	105.6294	0	100	106	40	150
n-Nitrosodiphenylamine	1	82.2599	0	100	82	30	130
1,2-Diphenylhydrazine	1	90.8987	0	100	91	40	130
4-Bromophenyl-phenylether	1	108.8576	0	100	109	53	127
Hexachlorobenzene	1	106.1678	0	100	106	1	152
N-Octadecane	1	81.4795	0	100	81	50	130
Phenanthrene	1	101.4946	0	100	101	54	120
Anthracene	1	104.5216	0	100	105	27	133
Carbazole	1	103.0421	0	100	103	40	130
Di-n-butylphthalate	1	98.1155	0	100	98	1	120
Fluoranthene	1	101.0344	0	100	101	26	137
Pyrene	1	110.9075	0	100	111	52	120
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	101.2463	0	100	101	1	152
3,3'-Dichlorobenzidine	1	97.2949	0	100	97	1	262

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

Benzo[a]anthracene	1	108.0028	0	100	108	33	143
Chrysene	1	97.4313	0	100	97	17	168
bis(2-Ethylhexyl)phthalate	1	99.563	0	100	100	8	158
Di-n-octylphthalate	1	102.6505	0	100	103	4	146
Benzo[b]fluoranthene	1	116.2156	0	100	116	42	159
Benzo[k]fluoranthene	1	114.4713	0	100	114	11	162
Benzo[a]pyrene	1	101.046	0	100	101	17	163
Indeno[1,2,3-cd]pyrene	1	102.6149	0	100	103	1	171
Dibenzo[a,h]anthracene	1	104.7473	0	100	105	1	227
Benzo[g,h,i]perylene	1	105.0016	0	100	105	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71479

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105899.D	AD06939-001(T)(MSD)	10/22/2018 9:21:00 AM
Non Spike(If applicable): 5M105897.D	AD06939-001(T)	10/22/2018 8:35:00 AM
Inst Blank(If applicable):		

Method: 625.1		Matrix: Aqueous			QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	76.3499	0	100	76	20	160
Pyridine	1	11.552	0	100	12	1	150
N-Nitrosodimethylamine	1	84.4133	0	100	84	20	150
Benzaldehyde	1	147.0652	0	100	147	20	234
Aniline	1	35.1592	0	100	35	20	150
Pentachloroethane	1	91.8136	0	100	92	5	140
bis(2-Chloroethyl)ether	1	85.5288	0	100	86	43	126
N-Decane	1	76.564	0	100	77	40	130
1,3-Dichlorobenzene	1	79.8158	0	100	80	20	130
1,4-Dichlorobenzene	1	84.5277	0	100	85	25	130
1,2-Dichlorobenzene	1	87.1238	0	100	87	25	130
Benzyl alcohol	1	106.5976	0	100	107	35	130
bis(2-chloroisopropyl)ether	1	79.2527	0	100	79	63	139
Acetophenone	1	104.9483	0	100	105	50	130
Hexachloroethane	1	84.3678	0	100	84	55	120
N-Nitroso-di-n-propylamine	1	85.1915	0	100	85	14	198
Nitrobenzene	1	96.3637	0	100	96	54	158
Isophorone	1	100.1544	0	100	100	47	180
Benzoic Acid	1	54.5759	0	100	55	1	130
bis(2-Chloroethoxy)methane	1	95.3517	0	100	95	49	165
1,2,4-Trichlorobenzene	1	93.6737	0	100	94	57	130
Naphthalene	1	92.6424	7.6512	100	85	36	120
4-Chloroaniline	1	105.2263	0	100	105	30	170
Hexachlorobutadiene	1	96.2439	0	100	96	38	120
Caprolactam	1	111.1943	0	100	111	5	130
2-Methylnaphthalene	1	106.2374	0	100	106	40	130
1-Methylnaphthalene	1	116.412	0	100	116	50	130
1,1'-Biphenyl	1	96.76	0	100	97	50	130
1,2,4,5-Tetrachlorobenzene	1	113.785	0	100	114	60	140
Hexachlorocyclopentadiene	1	102.1635	0	100	102	20	130
2-Chloronaphthalene	1	102.5285	0	100	103	65	120
1,4-Dimethylnaphthalene	1	93.9595	0	100	94	50	130
Diphenyl Ether	1	117.8408	0	100	118	50	140
2-Nitroaniline	1	99.2824	0	100	99	40	150
Coumarin	1	107.7802	0	100	108	1	180
Acenaphthylene	1	110.0305	0	100	110	54	126
Dimethylphthalate	1	104.3451	0	100	104	1	120
2,6-Dinitrotoluene	1	97.3107	0	100	97	68	137
Acenaphthene	1	99.6918	0	100	100	60	132
3-Nitroaniline	1	116.3944	0	100	116	40	150
Dibenzofuran	1	101.9938	0	100	102	50	130
2,4-Dinitrotoluene	1	100.4151	0	100	100	48	127
Fluorene	1	102.5783	0	100	103	70	120
4-Chlorophenyl-phenylether	1	103.3601	0	100	103	38	145
Diethylphthalate	1	100.8704	0	100	101	1	120
4-Nitroaniline	1	103.8011	0	100	104	40	150
Atrazine	1	108.1861	0	100	108	40	150
n-Nitrosodiphenylamine	1	84.05	0	100	84	30	130
1,2-Diphenylhydrazine	1	99.3625	0	100	99	40	130
4-Bromophenyl-phenylether	1	108.3889	0	100	108	65	120
Hexachlorobenzene	1	106.0492	0	100	106	8	142
N-Octadecane	1	87.2404	0	100	87	50	130
Phenanthrene	1	104.4312	0	100	104	65	120
Anthracene	1	104.2935	0	100	104	43	120
Carbazole	1	110.2573	0	100	110	40	130
Di-n-butylphthalate	1	99.3534	0	100	99	8	120
Fluoranthene	1	102.8683	0	100	103	43	121
Pyrene	1	107.8023	0	100	108	70	120
Benzidine	1	2.389	0	100	2.4	1	134
Butylbenzylphthalate	1	100.872	0	100	101	1	140
3,3'-Dichlorobenzidine	1	96.9888	0	100	97	8	213

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

Benzo[a]anthracene	1	102.2728	0	100	102	42	133
Chrysene	1	93.8333	0	100	94	44	140
bis(2-Ethylhexyl)phthalate	1	98.532	0	100	99	29	137
Di-n-octylphthalate	1	99.4593	0	100	99	19	132
Benzo[b]fluoranthene	1	112.0012	0	100	112	42	140
Benzo[k]fluoranthene	1	108.7855	0	100	109	25	146
Benzo[a]pyrene	1	97.9594	0	100	98	32	148
Indeno[1,2,3-cd]pyrene	1	99.5223	0	100	100	1	151
Dibenzo[a,h]anthracene	1	100.8959	0	100	101	1	200
Benzo[g,h,i]perylene	1	100.3366	0	100	100	1	195

Form3

RPD Data Laboratory Limits

QC Batch: WMB71479

Data File Sample ID: Analysis Date
 Spike or Dup: 5M105899.D AD06939-001(T)(MSD) 10/22/2018 9:21:00 AM
 Duplicate(If applicable): 5M105898.D AD06939-001(T)(MS) 10/22/2018 8:58:00 AM
 Inst Blank(If applicable):

Method: 625.1

Matrix: Aqueous

QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD		Sample/MS/MBS		RPD	Limit
		Conc		Conc			
1,4-Dioxane	1	76.3499		77.857		2	20
Pyridine	1	11.552		7.983		37	40
N-Nitrosodimethylamine	1	84.4133		86.8562		2.9	20
Benzaldehyde	1	147.0652		141.2897		4	20
Aniline	1	35.1592		35.8284		1.9	20
Pentachloroethane	1	91.8136		86.9434		5.4	20
bis(2-Chloroethyl)ether	1	85.5288		87.5754		2.4	108
N-Decane	1	76.564		70.4172		8.4	20
1,3-Dichlorobenzene	1	79.8158		82.7246		3.6	20
1,4-Dichlorobenzene	1	84.5277		83.6878		1	40
1,2-Dichlorobenzene	1	87.1238		84.6299		2.9	20
Benzyl alcohol	1	106.5976		102.3139		4.1	20
bis(2-chloroisopropyl)ether	1	79.2527		77.4704		2.3	76
Acetophenone	1	104.9483		98.2235		6.6	20
Hexachloroethane	1	84.3678		81.9007		3	52
N-Nitroso-di-n-propylamine	1	85.1915		84.8854		0.36	87
Nitrobenzene	1	96.3637		94.825		1.6	62
Isophorone	1	100.1544		99.9692		0.19	93
Benzoic Acid	1	54.5759		44.0751		21 *	20
bis(2-Chloroethoxy)methane	1	95.3517		95.544		0.2	54
1,2,4-Trichlorobenzene	1	93.6737		93.5408		0.14	50
Naphthalene	1	92.6424		92.2102		0.47	65
4-Chloroaniline	1	105.2263		105.1189		0.1	20
Hexachlorobutadiene	1	96.2439		93.1214		3.3	62
Caprolactam	1	111.1943		102.6359		8	20
2-Methylnaphthalene	1	106.2374		103.4607		2.6	20
1-Methylnaphthalene	1	116.412		110.2842		5.4	20
1,1'-Biphenyl	1	96.76		91.0241		6.1	20
1,2,4,5-Tetrachlorobenzene	1	113.785		107.0762		6.1	20
Hexachlorocyclopentadiene	1	102.1635		96.9201		5.3	20
2-Chloronaphthalene	1	102.5285		103.2298		0.68	24
1,4-Dimethylnaphthalene	1	93.9595		89.7472		4.6	20
Diphenyl Ether	1	117.8408		110.7226		6.2	20
2-Nitroaniline	1	99.2824		97.5482		1.8	20
Coumarin	1	107.7802		103.8067		3.8	20
Acenaphthylene	1	110.0305		111.5918		1.4	74
Dimethylphthalate	1	104.3451		105.915		1.5	183
2,6-Dinitrotoluene	1	97.3107		100.5232		3.2	48
Acenaphthene	1	99.6918		102.3924		2.7	48
3-Nitroaniline	1	116.3944		118.0802		1.4	20
Dibenzofuran	1	101.9938		101.5379		0.45	20
2,4-Dinitrotoluene	1	100.4151		101.0231		0.6	42
Fluorene	1	102.5783		105.124		2.5	38
4-Chlorophenyl-phenylether	1	103.3601		105.706		2.2	61
Diethylphthalate	1	100.8704		105.2871		4.3	100
4-Nitroaniline	1	103.8011		103.0135		0.76	20
Atrazine	1	108.1861		105.6294		2.4	20
n-Nitrosodiphenylamine	1	84.05		82.2599		2.2	20
1,2-Diphenylhydrazine	1	99.3625		90.8987		8.9	20
4-Bromophenyl-phenylether	1	108.3889		108.8576		0.43	43
Hexachlorobenzene	1	106.0492		106.1678		0.11	55
N-Octadecane	1	87.2404		81.4795		6.8	20
Phenanthrene	1	104.4312		101.4946		2.9	39
Anthracene	1	104.2935		104.5216		0.22	66
Carbazole	1	110.2573		103.0421		6.8	20
Di-n-butylphthalate	1	99.3534		98.1155		1.3	47
Fluoranthene	1	102.8683		101.0344		1.8	66
Pyrene	1	107.8023		110.9075		2.8	49
Benzidine	1	2.389		0		200 *	20
Butylbenzylphthalate	1	100.872		101.2463		0.37	60
3,3'-Dichlorobenzidine	1	96.9888		97.2949		0.32	108
Benzo[a]anthracene	1	102.2728		108.0028		5.4	53
Chrysene	1	93.8333		97.4313		3.8	87

Form3
RPD Data Laboratory Limits

QC Batch: WMB71479

bis(2-Ethylhexyl)phthalate	1	98.532	99.563	1	82
Di-n-octylphthalate	1	99.4593	102.6505	3.2	69
Benzo[b]fluoranthene	1	112.0012	116.2156	3.7	71
Benzo[k]fluoranthene	1	108.7855	114.4713	5.1	63
Benzo[a]pyrene	1	97.9594	101.046	3.1	72
Indeno[1,2,3-cd]pyrene	1	99.5223	102.6149	3.1	99
Dibenzo[a,h]anthracene	1	100.8959	104.7473	3.7	126
Benzo[g,h,i]perylene	1	100.3366	105.0016	4.5	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: SMB71480

8101509 0134

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71460.D		AD07136-003(MS)		10/19/2018 6:52:00 PM			
Non Spike(If applicable): 10M71459.D		AD07136-003		10/19/2018 6:30:00 PM			
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	23.1032	0	50	46	1	150
N-Nitrosodimethylamine	1	34.3013	0	50	69	50	130
Benzaldehyde	1	73.1107	0	50	146	20	220
Aniline	1	26.0648	0	50	52	20	150
Pentachloroethane	1	40.8681	0	50	82	50	130
bis(2-Chloroethyl)ether	1	37.9532	0	50	76	50	130
Phenol	1	87.559	0	100	88	20	150
2-Chlorophenol	1	85.5731	0	100	86	50	130
N-Decane	1	34.1942	0	50	68	20	130
1,3-Dichlorobenzene	1	36.6728	0	50	73	60	130
1,4-Dichlorobenzene	1	37.5176	0	50	75	60	130
1,2-Dichlorobenzene	1	35.5485	0	50	71	50	130
Benzyl alcohol	1	42.2052	0	50	84	20	130
bis(2-chloroisopropyl)ether	1	34.7892	0	50	70	40	130
2-Methylphenol	1	85.7146	0	100	86	50	130
Acetophenone	1	46.8707	0	50	94	50	130
Hexachloroethane	1	38.2785	0	50	77	50	130
N-Nitroso-di-n-propylamine	1	40.6172	0	50	81	40	130
3&4-Methylphenol	1	94.9835	0	100	95	70	130
Nitrobenzene	1	40.5831	0	50	81	70	130
Isophorone	1	41.2265	0	50	82	60	130
2-Nitrophenol	1	87.613	0	100	88	70	130
2,4-Dimethylphenol	1	87.1908	0	100	87	50	130
Benzoic Acid	1	45.4584	0	100	45	20	130
bis(2-Chloroethoxy)methane	1	41.8846	0	50	84	60	130
2,4-Dichlorophenol	1	89.4897	0	100	89	70	130
1,2,4-Trichlorobenzene	1	39.8779	0	50	80	50	130
Naphthalene	1	39.6058	0	50	79	50	130
4-Chloroaniline	1	32.6478	0	50	65	10	150
Hexachlorobutadiene	1	39.2935	0	50	79	60	130
Caprolactam	1	51.0936	0	50	102	50	130
4-Chloro-3-methylphenol	1	95.2708	0	100	95	50	130
2-Methylnaphthalene	1	42.0726	0	50	84	70	130
1-Methylnaphthalene	1	45.9973	0	50	92	70	130
1,1'-Biphenyl	1	40.923	0	50	82	60	130
1,2,4,5-Tetrachlorobenzene	1	49.2296	0	50	98	70	130
Hexachlorocyclopentadiene	1	24.3635	0	50	49	20	160
2,4,6-Trichlorophenol	1	98.4871	0	100	98	70	130
2,4,5-Trichlorophenol	1	96.2235	0	100	96	70	130
2-Chloronaphthalene	1	44.4398	0	50	89	70	130
1,4-Dimethylnaphthalene	1	43.6087	0	50	87	70	130
Diphenyl Ether	1	50.945	0	50	102	70	130
2-Nitroaniline	1	45.1334	0	50	90	50	130
Coumarin	1	48.3697	0	50	97	70	130
Acenaphthylene	1	48.224	0	50	96	70	130
Dimethylphthalate	1	43.1029	0	50	86	70	130
2,6-Dinitrotoluene	1	46.7449	0	50	93	70	130
Acenaphthene	1	45.007	0	50	90	50	130
3-Nitroaniline	1	34.7015	0	50	69*	70	130
2,4-Dinitrophenol	1	76.4823	0	100	76	20	150
Dibenzofuran	1	43.7587	0	50	88	70	130
2,4-Dinitrotoluene	1	41.4652	0	50	83	40	130
4-Nitrophenol	1	88.9843	0	100	89	20	150
2,3,4,6-Tetrachlorophenol	1	93.3059	0	100	93	70	130
Fluorene	1	44.6241	0	50	89	50	130
4-Chlorophenyl-phenylether	1	43.3181	0	50	87	70	130
Diethylphthalate	1	43.8555	0	50	88	70	130
4-Nitroaniline	1	42.5611	0	50	85	50	130
Atrazine	1	50.0199	0	50	100	50	130
4,6-Dinitro-2-methylphenol	1	87.0177	0	100	87	70	130
n-Nitrosodiphenylamine	1	35.7089	0	50	71	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	45.7115	0	50	91	70	130
4-Bromophenyl-phenylether	1	43.4579	0	50	87	70	130
Hexachlorobenzene	1	41.4945	0	50	83	70	130
N-Octadecane	1	40.1622	0	50	80	70	130
Pentachlorophenol	1	101.0389	0	100	101	40	130
Phenanthrene	1	42.7047	0	50	85	70	130
Anthracene	1	42.8769	0	50	86	70	130
Carbazole	1	44.0177	0	50	88	70	130
Di-n-butylphthalate	1	42.0591	0.5347	50	83	70	130
Fluoranthene	1	44.8359	0	50	90	70	130
Pyrene	1	41.6923	0	50	83	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	45.2858	0	50	91	50	130
3,3'-Dichlorobenzidine	1	27.5678	0	50	55	10	130
Benzo[a]anthracene	1	41.8312	0	50	84	70	130
Chrysene	1	39.6551	0	50	79	60	130
bis(2-Ethylhexyl)phthalate	1	44.1528	0	50	88	70	130
Di-n-octylphthalate	1	44.734	0	50	89	70	130
Benzo[b]fluoranthene	1	47.294	0	50	95	70	130
Benzo[k]fluoranthene	1	44.772	0	50	90	70	130
Benzo[a]pyrene	1	42.5841	0	50	85	70	130
Indeno[1,2,3-cd]pyrene	1	43.4521	0	50	87	70	130
Dibenzo[a,h]anthracene	1	44.3127	0	50	89	60	130
Benzo[g,h,i]perylene	1	40.8198	0	50	82	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB71480

8101509 0136

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71461.D		AD07136-003(MSD)		10/19/2018 7:14:00 PM			
Non Spike(If applicable): 10M71459.D		AD07136-003		10/19/2018 6:30:00 PM			
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	19.474	0	50	39	1	150
N-Nitrosodimethylamine	1	39.5078	0	50	79	50	130
Benzaldehyde	1	71.3589	0	50	143	20	220
Aniline	1	26.6193	0	50	53	20	150
Pentachloroethane	1	41.5957	0	50	83	50	130
bis(2-Chloroethyl)ether	1	39.8034	0	50	80	50	130
Phenol	1	92.2058	0	100	92	20	150
2-Chlorophenol	1	89.6034	0	100	90	50	130
N-Decane	1	32.3133	0	50	65	20	130
1,3-Dichlorobenzene	1	37.5716	0	50	75	60	130
1,4-Dichlorobenzene	1	36.3549	0	50	73	60	130
1,2-Dichlorobenzene	1	35.4587	0	50	71	50	130
Benzyl alcohol	1	43.0866	0	50	86	20	130
bis(2-chloroisopropyl)ether	1	34.9248	0	50	70	40	130
2-Methylphenol	1	87.2462	0	100	87	50	130
Acetophenone	1	47.6852	0	50	95	50	130
Hexachloroethane	1	36.6893	0	50	73	50	130
N-Nitroso-di-n-propylamine	1	42.3294	0	50	85	40	130
3&4-Methylphenol	1	97.1521	0	100	97	70	130
Nitrobenzene	1	41.0967	0	50	82	70	130
Isophorone	1	40.762	0	50	82	60	130
2-Nitrophenol	1	85.1588	0	100	85	70	130
2,4-Dimethylphenol	1	85.8001	0	100	86	50	130
Benzoic Acid	1	44.2023	0	100	44	20	130
bis(2-Chloroethoxy)methane	1	41.2245	0	50	82	60	130
2,4-Dichlorophenol	1	88.6255	0	100	89	70	130
1,2,4-Trichlorobenzene	1	39.0631	0	50	78	50	130
Naphthalene	1	40.4026	0	50	81	50	130
4-Chloroaniline	1	32.5696	0	50	65	10	150
Hexachlorobutadiene	1	38.4966	0	50	77	60	130
Caprolactam	1	52.1146	0	50	104	50	130
4-Chloro-3-methylphenol	1	94.4724	0	100	94	50	130
2-Methylnaphthalene	1	41.6256	0	50	83	70	130
1-Methylnaphthalene	1	47.0952	0	50	94	70	130
1,1'-Biphenyl	1	38.0481	0	50	76	60	130
1,2,4,5-Tetrachlorobenzene	1	43.5229	0	50	87	70	130
Hexachlorocyclopentadiene	1	20.688	0	50	41	20	160
2,4,6-Trichlorophenol	1	93.8013	0	100	94	70	130
2,4,5-Trichlorophenol	1	93.3347	0	100	93	70	130
2-Chloronaphthalene	1	42.3291	0	50	85	70	130
1,4-Dimethylnaphthalene	1	39.9849	0	50	80	70	130
Diphenyl Ether	1	45.9768	0	50	92	70	130
2-Nitroaniline	1	44.5067	0	50	89	50	130
Coumarin	1	46.0893	0	50	92	70	130
Acenaphthylene	1	44.3178	0	50	89	70	130
Dimethylphthalate	1	43.279	0	50	87	70	130
2,6-Dinitrotoluene	1	46.0087	0	50	92	70	130
Acenaphthene	1	42.7284	0	50	85	50	130
3-Nitroaniline	1	33.4218	0	50	67*	70	130
2,4-Dinitrophenol	1	78.3257	0	100	78	20	150
Dibenzofuran	1	42.5902	0	50	85	70	130
2,4-Dinitrotoluene	1	40.3454	0	50	81	40	130
4-Nitrophenol	1	90.2347	0	100	90	20	150
2,3,4,6-Tetrachlorophenol	1	84.4188	0	100	84	70	130
Fluorene	1	42.6159	0	50	85	50	130
4-Chlorophenyl-phenylether	1	42.3303	0	50	85	70	130
Diethylphthalate	1	43.3161	0	50	87	70	130
4-Nitroaniline	1	39.9267	0	50	80	50	130
Atrazine	1	48.9531	0	50	98	50	130
4,6-Dinitro-2-methylphenol	1	93.7333	0	100	94	70	130
n-Nitrosodiphenylamine	1	37.4593	0	50	75	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	46.1069	0	50	92	70	130
4-Bromophenyl-phenylether	1	45.0178	0	50	90	70	130
Hexachlorobenzene	1	43.1155	0	50	86	70	130
N-Octadecane	1	40.0609	0	50	80	70	130
Pentachlorophenol	1	105.1929	0	100	105	40	130
Phenanthrene	1	43.76	0	50	88	70	130
Anthracene	1	44.9908	0	50	90	70	130
Carbazole	1	44.0964	0	50	88	70	130
Di-n-butylphthalate	1	43.5521	0.5347	50	86	70	130
Fluoranthene	1	46.7431	0	50	93	70	130
Pyrene	1	44.5291	0	50	89	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	46.0475	0	50	92	50	130
3,3'-Dichlorobenzidine	1	28.1281	0	50	56	10	130
Benzo[a]anthracene	1	44.8842	0	50	90	70	130
Chrysene	1	41.3473	0	50	83	60	130
bis(2-Ethylhexyl)phthalate	1	47.4486	0	50	95	70	130
Di-n-octylphthalate	1	45.8937	0	50	92	70	130
Benzo[b]fluoranthene	1	48.8028	0	50	98	70	130
Benzo[k]fluoranthene	1	47.0116	0	50	94	70	130
Benzo[a]pyrene	1	43.5192	0	50	87	70	130
Indeno[1,2,3-cd]pyrene	1	45.4832	0	50	91	70	130
Dibenzo[a,h]anthracene	1	47.4901	0	50	95	60	130
Benzo[g,h,i]perylene	1	44.0135	0	50	88	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: SMB71480

8101509 0138

Data File	Sample ID:	Analysis Date
Spike or Dup: 10M71461.D	AD07136-003(MSD)	10/19/2018 7:14:00 PM
Duplicate(If applicable): 10M71460.D	AD07136-003(MS)	10/19/2018 6:52:00 PM
Inst Blank(If applicable):		
Method: 8270D	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MSD Conc	Sample/MS/MSB Conc	RPD	Limit
Pyridine	1	19.474	23.1032	17	30
N-Nitrosodimethylamine	1	39.5078	34.3013	14	30
Benzaldehyde	1	71.3589	73.1107	2.4	30
Aniline	1	26.6193	26.0648	2.1	30
Pentachloroethane	1	41.5957	40.8681	1.8	30
bis(2-Chloroethyl)ether	1	39.8034	37.9532	4.8	30
Phenol	1	92.2058	87.559	5.2	40
2-Chlorophenol	1	89.6034	85.5731	4.6	40
N-Decane	1	32.3133	34.1942	5.7	30
1,3-Dichlorobenzene	1	37.5716	36.6728	2.4	30
1,4-Dichlorobenzene	1	36.3549	37.5176	3.1	40
1,2-Dichlorobenzene	1	35.4587	35.5485	0.25	30
Benzyl alcohol	1	43.0866	42.2052	2.1	30
bis(2-chloroisopropyl)ether	1	34.9248	34.7892	0.39	30
2-Methylphenol	1	87.2462	85.7146	1.8	40
Acetophenone	1	47.6852	46.8707	1.7	30
Hexachloroethane	1	36.6893	38.2785	4.2	30
N-Nitroso-di-n-propylamine	1	42.3294	40.6172	4.1	40
3&4-Methylphenol	1	97.1521	94.9835	2.3	30
Nitrobenzene	1	41.0967	40.5831	1.3	30
Isophorone	1	40.762	41.2265	1.1	30
2-Nitrophenol	1	85.1588	87.613	2.8	30
2,4-Dimethylphenol	1	85.8001	87.1908	1.6	40
Benzoic Acid	1	44.2023	45.4584	2.8	30
bis(2-Chloroethoxy)methane	1	41.2245	41.8846	1.6	30
2,4-Dichlorophenol	1	88.6255	89.4897	0.97	30
1,2,4-Trichlorobenzene	1	39.0631	39.8779	2.1	40
Naphthalene	1	40.4026	39.6058	2	40
4-Chloroaniline	1	32.5696	32.6478	0.24	30
Hexachlorobutadiene	1	38.4966	39.2935	2	30
Caprolactam	1	52.1146	51.0936	2	30
4-Chloro-3-methylphenol	1	94.4724	95.2708	0.84	40
2-Methylnaphthalene	1	41.6256	42.0726	1.1	30
1-Methylnaphthalene	1	47.0952	45.9973	2.4	30
1,1'-Biphenyl	1	38.0481	40.923	7.3	30
1,2,4,5-Tetrachlorobenzene	1	43.5229	49.2296	12	30
Hexachlorocyclopentadiene	1	20.688	24.3635	16	30
2,4,6-Trichlorophenol	1	93.8013	98.4871	4.9	30
2,4,5-Trichlorophenol	1	93.3347	96.2235	3	30
2-Chloronaphthalene	1	42.3291	44.4398	4.9	30
1,4-Dimethylnaphthalene	1	39.9849	43.6087	8.7	30
Diphenyl Ether	1	45.9768	50.945	10	30
2-Nitroaniline	1	44.5067	45.1334	1.4	30
Coumarin	1	46.0893	48.3697	4.8	30
Acenaphthylene	1	44.3178	48.224	8.4	30
Dimethylphthalate	1	43.279	43.1029	0.41	30
2,6-Dinitrotoluene	1	46.0087	46.7449	1.6	30
Acenaphthene	1	42.7284	45.007	5.2	40
3-Nitroaniline	1	33.4218	34.7015	3.8	30
2,4-Dinitrophenol	1	78.3257	76.4823	2.4	30
Dibenzofuran	1	42.5902	43.7587	2.7	30
2,4-Dinitrotoluene	1	40.3454	41.4652	2.7	40
4-Nitrophenol	1	90.2347	88.9843	1.4	40
2,3,4,6-Tetrachlorophenol	1	84.4188	93.3059	10	30
Fluorene	1	42.6159	44.6241	4.6	40
4-Chlorophenyl-phenylether	1	42.3303	43.3181	2.3	30
Diethylphthalate	1	43.3161	43.8555	1.2	30
4-Nitroaniline	1	39.9267	42.5611	6.4	30
Atrazine	1	48.9531	50.0199	2.2	30
4,6-Dinitro-2-methylphenol	1	93.7333	87.0177	7.4	30
n-Nitrosodiphenylamine	1	37.4593	35.7089	4.8	30
1,2-Diphenylhydrazine	1	46.1069	45.7115	0.86	30
4-Bromophenyl-phenylether	1	45.0178	43.4579	3.5	30

Form3

RPD Data Laboratory Limits

QC Batch: SMB71480

Hexachlorobenzene	1	43.1155	41.4945	3.8	30
N-Octadecane	1	40.0609	40.1622	0.25	30
Pentachlorophenol	1	105.1929	101.0389	4	40
Phenanthrene	1	43.76	42.7047	2.4	30
Anthracene	1	44.9908	42.8769	4.8	30
Carbazole	1	44.0964	44.0177	0.18	30
Di-n-butylphthalate	1	43.5521	42.0591	3.5	30
Fluoranthene	1	46.7431	44.8359	4.2	30
Pyrene	1	44.5291	41.6923	6.6	40
Benzidine	1	0	0	NA	30
Butylbenzylphthalate	1	46.0475	45.2858	1.7	40
3,3'-Dichlorobenzidine	1	28.1281	27.5678	2	30
Benzo[a]anthracene	1	44.8842	41.8312	7	30
Chrysene	1	41.3473	39.6551	4.2	30
bis(2-Ethylhexyl)phthalate	1	47.4486	44.1528	7.2	30
Di-n-octylphthalate	1	45.8937	44.734	2.6	30
Benzo[b]fluoranthene	1	48.8028	47.294	3.1	30
Benzo[k]fluoranthene	1	47.0116	44.772	4.9	30
Benzo[a]pyrene	1	43.5192	42.5841	2.2	30
Indeno[1,2,3-cd]pyrene	1	45.4832	43.4521	4.6	30
Dibenzo[a,h]anthracene	1	47.4901	44.3127	6.9	30
Benzo[g,h,i]perylene	1	44.0135	40.8198	7.5	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71497

8101509 0140

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105928.D		AD07161-001(MS)		10/23/2018 10:45:00 A			
Non Spike(If applicable): 5M105927.D		AD07161-001		10/23/2018 10:21:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	79.05	0	100	79	20	160
Pyridine	1	42.8366	0	100	43	1	150
N-Nitrosodimethylamine	1	74.2596	0	100	74	20	150
Benzaldehyde	1	138.2068	0	100	138	20	234
Aniline	1	66.4807	0	100	66	20	150
Pentachloroethane	1	87.705	0	100	88	5	140
bis(2-Chloroethyl)ether	1	77.0152	0	100	77	12	158
Phenol	1	76.0985	0	100	76	5	120
2-Chlorophenol	1	86.984	0	100	87	23	134
N-Decane	1	75.8828	0	100	76	40	130
1,3-Dichlorobenzene	1	72.8177	0	100	73	20	130
1,4-Dichlorobenzene	1	75.3521	0	100	75	25	130
1,2-Dichlorobenzene	1	76.9314	0	100	77	25	130
Benzyl alcohol	1	100.2758	0	100	100	35	130
bis(2-chloroisopropyl)ether	1	69.7337	0	100	70	36	166
2-Methylphenol	1	91.9522	0	100	92	35	130
Acetophenone	1	99.8858	0	100	100	50	130
Hexachloroethane	1	74.7076	0	100	75	40	120
N-Nitroso-di-n-propylamine	1	76.4543	0	100	76	1	230
3&4-Methylphenol	1	86.7057	0	100	87	30	130
Nitrobenzene	1	83.2033	0	100	83	35	180
Isophorone	1	85.3608	0	100	85	21	196
2-Nitrophenol	1	93.5174	0	100	94	29	182
2,4-Dimethylphenol	1	80.9145	0	100	81	32	120
Benzoic Acid	1	38.437	0	100	38	1	130
bis(2-Chloroethoxy)methane	1	80.3537	0	100	80	33	184
2,4-Dichlorophenol	1	91.7772	0	100	92	39	135
1,2,4-Trichlorobenzene	1	80.8283	0	100	81	44	142
Naphthalene	1	80.0422	0	100	80	21	133
4-Chloroaniline	1	103.1922	0	100	103	30	170
Hexachlorobutadiene	1	82.8454	0	100	83	24	120
Caprolactam	1	99.4056	0	100	99	5	130
4-Chloro-3-methylphenol	1	93.8997	0	100	94	22	147
2-Methylnaphthalene	1	100.3154	0	100	100	40	130
1-Methylnaphthalene	1	104.404	0	100	104	50	130
1,1'-Biphenyl	1	89.4267	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	104.4884	0	100	104	60	140
Hexachlorocyclopentadiene	1	78.9205	0	100	79	20	130
2,4,6-Trichlorophenol	1	95.9188	0	100	96	37	144
2,4,5-Trichlorophenol	1	95.8201	0	100	96	50	130
2-Chloronaphthalene	1	87.2742	0	100	87	60	120
1,4-Dimethylnaphthalene	1	83.1617	0	100	83	50	130
Diphenyl Ether	1	106.3235	0	100	106	50	140
2-Nitroaniline	1	97.8076	0	100	98	40	150
Coumarin	1	97.0873	0	100	97	1	180
Acenaphthylene	1	94.5488	0	100	95	33	145
Dimethylphthalate	1	88.9533	0	100	89	1	120
2,6-Dinitrotoluene	1	82.6502	0	100	83	50	158
Acenaphthene	1	89.1847	0	100	89	47	145
3-Nitroaniline	1	114.4031	0	100	114	40	150
2,4-Dinitrophenol	1	97.1961	0	100	97	1	191
Dibenzofuran	1	99.8598	0	100	100	50	130
2,4-Dinitrotoluene	1	87.1642	0	100	87	39	139
4-Nitrophenol	1	75.3343	0	100	75	1	132
2,3,4,6-Tetrachlorophenol	1	89.0021	0	100	89	50	130
Fluorene	1	88.352	0	100	88	59	121
4-Chlorophenyl-phenylether	1	88.6811	0	100	89	1	132
Diethylphthalate	1	86.2868	0	100	86	1	120
4-Nitroaniline	1	102.1912	0	100	102	40	150
Atrazine	1	96.9905	0	100	97	40	150
4,6-Dinitro-2-methylphenol	1	106.8505	0	100	107	1	181

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3 Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	71.3249	0	100	71	30	130
1,2-Diphenylhydrazine	1	85.5388	0	100	86	40	130
4-Bromophenyl-phenylether	1	91.4732	0	100	91	53	127
Hexachlorobenzene	1	90.6183	0	100	91	1	152
N-Octadecane	1	80.5188	0	100	81	50	130
Pentachlorophenol	1	97.7678	0	100	98	14	176
Phenanthrene	1	87.0894	0	100	87	54	120
Anthracene	1	88.5778	0	100	89	27	133
Carbazole	1	98.0528	0	100	98	40	130
Di-n-butylphthalate	1	83.6981	0	100	84	1	120
Fluoranthene	1	88.1544	0	100	88	26	137
Pyrene	1	94.7395	0	100	95	52	120
Benzidine	1	20.4431	0	100	20	1	130
Butylbenzylphthalate	1	85.8754	0	100	86	1	152
3,3'-Dichlorobenzidine	1	83.0334	0	100	83	1	262
Benzo[a]anthracene	1	89.8715	0	100	90	33	143
Chrysene	1	84.295	0	100	84	17	168
bis(2-Ethylhexyl)phthalate	1	80.3978	0	100	80	8	158
Di-n-octylphthalate	1	80.2598	0	100	80	4	146
Benzo[b]fluoranthene	1	97.6704	0	100	98	42	159
Benzo[k]fluoranthene	1	95.7484	0	100	96	11	162
Benzo[a]pyrene	1	86.0635	0	100	86	17	163
Indeno[1,2,3-cd]pyrene	1	89.8322	0	100	90	1	171
Dibenzo[a,h]anthracene	1	90.1092	0	100	90	1	227
Benzo[g,h,i]perylene	1	87.6259	0	100	88	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71497

8101509 0142

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105929.D		AD07161-001(MSD)		10/23/2018 11:08:00 A			
Non Spike(If applicable): 5M105927.D		AD07161-001		10/23/2018 10:21:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	68.2816	0	100	68	20	160
Pyridine	1	44.349	0	100	44	1	150
N-Nitrosodimethylamine	1	71.8197	0	100	72	20	150
Benzaldehyde	1	125.3219	0	100	125	20	234
Aniline	1	69.1928	0	100	69	20	150
Pentachloroethane	1	80.7511	0	100	81	5	140
bis(2-Chloroethyl)ether	1	75.1887	0	100	75	43	126
Phenol	1	74.6329	0	100	75	17	120
2-Chlorophenol	1	78.1276	0	100	78	36	120
N-Decane	1	68.0295	0	100	68	40	130
1,3-Dichlorobenzene	1	69.1102	0	100	69	20	130
1,4-Dichlorobenzene	1	70.7609	0	100	71	25	130
1,2-Dichlorobenzene	1	71.9242	0	100	72	25	130
Benzyl alcohol	1	92.7663	0	100	93	35	130
bis(2-chloroisopropyl)ether	1	67.7582	0	100	68	63	139
2-Methylphenol	1	86.8524	0	100	87	35	130
Acetophenone	1	94.2778	0	100	94	50	130
Hexachloroethane	1	69.4415	0	100	69	55	120
N-Nitroso-di-n-propylamine	1	76.4395	0	100	76	14	198
3&4-Methylphenol	1	81.178	0	100	81	30	130
Nitrobenzene	1	82.7286	0	100	83	54	158
Isophorone	1	88.7169	0	100	89	47	180
2-Nitrophenol	1	89.8817	0	100	90	45	167
2,4-Dimethylphenol	1	78.5171	0	100	79	42	120
Benzoic Acid	1	41.4355	0	100	41	1	130
bis(2-Chloroethoxy)methane	1	83.3905	0	100	83	49	165
2,4-Dichlorophenol	1	88.7551	0	100	89	53	122
1,2,4-Trichlorobenzene	1	78.1487	0	100	78	57	130
Naphthalene	1	78.8212	0	100	79	36	120
4-Chloroaniline	1	99.6196	0	100	100	30	170
Hexachlorobutadiene	1	81.2486	0	100	81	38	120
Caprolactam	1	99.1742	0	100	99	5	130
4-Chloro-3-methylphenol	1	92.8232	0	100	93	41	128
2-Methylnaphthalene	1	97.0789	0	100	97	40	130
1-Methylnaphthalene	1	103.286	0	100	103	50	130
1,1'-Biphenyl	1	86.8566	0	100	87	50	130
1,2,4,5-Tetrachlorobenzene	1	96.3947	0	100	96	60	140
Hexachlorocyclopentadiene	1	81.2069	0	100	81	20	130
2,4,6-Trichlorophenol	1	90.732	0	100	91	52	129
2,4,5-Trichlorophenol	1	91.8772	0	100	92	50	130
2-Chloronaphthalene	1	87.747	0	100	88	65	120
1,4-Dimethylnaphthalene	1	82.7931	0	100	83	50	130
Diphenyl Ether	1	100.8384	0	100	101	50	140
2-Nitroaniline	1	95.1044	0	100	95	40	150
Coumarin	1	98.7609	0	100	99	1	180
Acenaphthylene	1	94.4233	0	100	94	54	126
Dimethylphthalate	1	90.3794	0	100	90	1	120
2,6-Dinitrotoluene	1	87.5912	0	100	88	68	137
Acenaphthene	1	86.3864	0	100	86	60	132
3-Nitroaniline	1	110.7095	0	100	111	40	150
2,4-Dinitrophenol	1	98.3072	0	100	98	1	173
Dibenzofuran	1	96.1558	0	100	96	50	130
2,4-Dinitrotoluene	1	88.613	0	100	89	48	127
4-Nitrophenol	1	72.8742	0	100	73	13	129
2,3,4,6-Tetrachlorophenol	1	85.4238	0	100	85	50	130
Fluorene	1	90.0064	0	100	90	70	120
4-Chlorophenyl-phenylether	1	88.9804	0	100	89	38	145
Diethylphthalate	1	90.7178	0	100	91	1	120
4-Nitroaniline	1	97.3619	0	100	97	40	150
Atrazine	1	96.2728	0	100	96	40	150
4,6-Dinitro-2-methylphenol	1	108.4842	0	100	108	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3 Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	74.5203	0	100	75	30	130
1,2-Diphenylhydrazine	1	89.0789	0	100	89	40	130
4-Bromophenyl-phenylether	1	94.5851	0	100	95	65	120
Hexachlorobenzene	1	92.6342	0	100	93	8	142
N-Octadecane	1	77.9372	0	100	78	50	130
Pentachlorophenol	1	99.9717	0	100	100	38	152
Phenanthrene	1	88.9241	0	100	89	65	120
Anthracene	1	92.0549	0	100	92	43	120
Carbazole	1	98.5842	0	100	99	40	130
Di-n-butylphthalate	1	87.89	0	100	88	8	120
Fluoranthene	1	91.0675	0	100	91	43	121
Pyrene	1	96.823	0	100	97	70	120
Benzidine	1	25.6712	0	100	26	1	134
Butylbenzylphthalate	1	90.5018	0	100	91	1	140
3,3'-Dichlorobenzidine	1	87.6906	0	100	88	8	213
Benzo[a]anthracene	1	94.1764	0	100	94	42	133
Chrysene	1	87.0349	0	100	87	44	140
bis(2-Ethylhexyl)phthalate	1	84.5013	0	100	85	29	137
Di-n-octylphthalate	1	82.2926	0	100	82	19	132
Benzo[b]fluoranthene	1	97.9836	0	100	98	42	140
Benzo[k]fluoranthene	1	99.8666	0	100	100	25	146
Benzo[a]pyrene	1	89.5215	0	100	90	32	148
Indeno[1,2,3-cd]pyrene	1	91.5163	0	100	92	1	151
Dibenzo[a,h]anthracene	1	90.6074	0	100	91	1	200
Benzo[g,h,i]perylene	1	90.1772	0	100	90	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB71497

8101509 0144

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105929.D	AD07161-001(MSD)	10/23/2018 11:08:00 A
Duplicate(If applicable): 5M105928.D	AD07161-001(MS)	10/23/2018 10:45:00 A
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	68.2816	79.05	15	20
Pyridine	1	44.349	42.8366	3.5	40
N-Nitrosodimethylamine	1	71.8197	74.2596	3.3	20
Benzaldehyde	1	125.3219	138.2068	9.8	20
Aniline	1	69.1928	66.4807	4	20
Pentachloroethane	1	80.7511	87.705	8.3	20
bis(2-Chloroethyl)ether	1	75.1887	77.0152	2.4	108
Phenol	1	74.6329	76.0985	1.9	64
2-Chlorophenol	1	78.1276	86.984	11	61
N-Decane	1	68.0295	75.8828	11	20
1,3-Dichlorobenzene	1	69.1102	72.8177	5.2	20
1,4-Dichlorobenzene	1	70.7609	75.3521	6.3	40
1,2-Dichlorobenzene	1	71.9242	76.9314	6.7	20
Benzyl alcohol	1	92.7663	100.2758	7.8	20
bis(2-chloroisopropyl)ether	1	67.7582	69.7337	2.9	76
2-Methylphenol	1	86.8524	91.9522	5.7	40
Acetophenone	1	94.2778	99.8858	5.8	20
Hexachloroethane	1	69.4415	74.7076	7.3	52
N-Nitroso-di-n-propylamine	1	76.4395	76.4543	0.02	87
3&4-Methylphenol	1	81.178	86.7057	6.6	40
Nitrobenzene	1	82.7286	83.2033	0.57	62
Isophorone	1	88.7169	85.3608	3.9	93
2-Nitrophenol	1	89.8817	93.5174	4	55
2,4-Dimethylphenol	1	78.5171	80.9145	3	58
Benzoic Acid	1	41.4355	38.437	7.5	20
bis(2-Chloroethoxy)methane	1	83.3905	80.3537	3.7	54
2,4-Dichlorophenol	1	88.7551	91.7772	3.3	50
1,2,4-Trichlorobenzene	1	78.1487	80.8283	3.4	50
Naphthalene	1	78.8212	80.0422	1.5	65
4-Chloroaniline	1	99.6196	103.1922	3.5	20
Hexachlorobutadiene	1	81.2486	82.8454	1.9	62
Caprolactam	1	99.1742	99.4056	0.23	20
4-Chloro-3-methylphenol	1	92.8232	93.8997	1.2	73
2-Methylnaphthalene	1	97.0789	100.3154	3.3	20
1-Methylnaphthalene	1	103.286	104.404	1.1	20
1,1'-Biphenyl	1	86.8566	89.4267	2.9	20
1,2,4,5-Tetrachlorobenzene	1	96.3947	104.4884	8.1	20
Hexachlorocyclopentadiene	1	81.2069	78.9205	2.9	20
2,4,6-Trichlorophenol	1	90.732	95.9188	5.6	58
2,4,5-Trichlorophenol	1	91.8772	95.8201	4.2	40
2-Chloronaphthalene	1	87.747	87.2742	0.54	24
1,4-Dimethylnaphthalene	1	82.7931	83.1617	0.44	20
Diphenyl Ether	1	100.8384	106.3235	5.3	20
2-Nitroaniline	1	95.1044	97.8076	2.8	20
Coumarin	1	98.7609	97.0873	1.7	20
Acenaphthylene	1	94.4233	94.5488	0.13	74
Dimethylphthalate	1	90.3794	88.9533	1.6	183
2,6-Dinitrotoluene	1	87.5912	82.6502	5.8	48
Acenaphthene	1	86.3864	89.1847	3.2	48
3-Nitroaniline	1	110.7095	114.4031	3.3	20
2,4-Dinitrophenol	1	98.3072	97.1961	1.1	132
Dibenzofuran	1	96.1558	99.8598	3.8	20
2,4-Dinitrotoluene	1	88.613	87.1642	1.6	42
4-Nitrophenol	1	72.8742	75.3343	3.3	131
2,3,4,6-Tetrachlorophenol	1	85.4238	89.0021	4.1	20
Fluorene	1	90.0064	88.352	1.9	38
4-Chlorophenyl-phenylether	1	88.9804	88.6811	0.34	61
Diethylphthalate	1	90.7178	86.2868	5	100
4-Nitroaniline	1	97.3619	102.1912	4.8	20
Atrazine	1	96.2728	96.9905	0.74	20
4,6-Dinitro-2-methylphenol	1	108.4842	106.8505	1.5	203
n-Nitrosodiphenylamine	1	74.5203	71.3249	4.4	20
1,2-Diphenylhydrazine	1	89.0789	85.5388	4.1	20

Form3
RPD Data Laboratory Limits

8101509 0145

QC Batch: WMB71497

4-Bromophenyl-phenylether	1	94.5851	91.4732	3.3	43
Hexachlorobenzene	1	92.6342	90.6183	2.2	55
N-Octadecane	1	77.9372	80.5188	3.3	20
Pentachlorophenol	1	99.9717	97.7678	2.2	86
Phenanthrene	1	88.9241	87.0894	2.1	39
Anthracene	1	92.0549	88.5778	3.8	66
Carbazole	1	98.5842	98.0528	0.54	20
Di-n-butylphthalate	1	87.89	83.6981	4.9	47
Fluoranthene	1	91.0675	88.1544	3.3	66
Pyrene	1	96.823	94.7395	2.2	49
Benzidine	1	25.6712	20.4431	23 *	20
Butylbenzylphthalate	1	90.5018	85.8754	5.2	60
3,3'-Dichlorobenzidine	1	87.6906	83.0334	5.5	108
Benzo[a]anthracene	1	94.1764	89.8715	4.7	53
Chrysene	1	87.0349	84.295	3.2	87
bis(2-Ethylhexyl)phthalate	1	84.5013	80.3978	5	82
Di-n-octylphthalate	1	82.2926	80.2598	2.5	69
Benzo[b]fluoranthene	1	97.9836	97.6704	0.32	71
Benzo[k]fluoranthene	1	99.8666	95.7484	4.2	63
Benzo[a]pyrene	1	89.5215	86.0635	3.9	72
Indeno[1,2,3-cd]pyrene	1	91.5163	89.8322	1.9	99
Dibenzo[a,h]anthracene	1	90.6074	90.1092	0.55	126
Benzo[g,h,i]perylene	1	90.1772	87.6259	2.9	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB71471
Blank Data File: 5M105872.D
Matrix: Aqueous

Blank Analysis Date: 10/19/18 10:48
Blank Extraction Date: 10/18/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07118-001	5M105877.D	10/19/18 12:44
AD07118-003	5M105878.D	10/19/18 13:08
AD07118-005	5M105879.D	10/19/18 13:31
AD07118-007	5M105880.D	10/19/18 13:55
AD07093-001(T)(M	10M71443.D	10/19/18 12:04
AD07093-001(T)(M	10M71442.D	10/19/18 11:42
AD07093-001(T)	10M71441.D	10/19/18 11:20
WMB71471(MS)	10M71439.D	10/19/18 10:35

FORM 4
Blank Summary

Blank Number: WMB71479
Blank Data File: 5M105881.D
Matrix: Aqueous

Blank Analysis Date: 10/19/18 14:23
Blank Extraction Date: 10/19/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07137-001	5M105905.D	10/22/18 11:41
AD07137-003	5M105906.D	10/22/18 12:04
AD07137-005	5M105907.D	10/22/18 12:28
WMB71479(MS)	7M95306.D	10/19/18 14:26
AD06939-001(T)(M	5M105899.D	10/22/18 09:21
AD06939-001(T)(M	5M105898.D	10/22/18 08:58
AD06939-001(T)	5M105897.D	10/22/18 08:35

FORM 4
Blank Summary

Blank Number: SMB71480
Blank Data File: 9M88665.D
Matrix: Soil

Blank Analysis Date: 10/19/18 18:17
Blank Extraction Date: 10/19/18
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD07161-002	9M88680.D	10/20/18 00:07
AD07161-004	9M88681.D	10/20/18 00:31
AD07161-006	9M88682.D	10/20/18 00:54
AD07161-009	9M88683.D	10/20/18 01:17
SMB71480(MS)	10M71458.D	10/19/18 18:08
AD07136-003	10M71459.D	10/19/18 18:30
AD07136-003(MS)	10M71460.D	10/19/18 18:52
AD07136-003(MSD)	10M71461.D	10/19/18 19:14

FORM 4
Blank Summary

Blank Number: WMB71496
Blank Data File: 5M105913.D
Matrix: Aqueous

Blank Analysis Date: 10/22/18 14:49
Blank Extraction Date: 10/22/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07118-003(R)	10M71486.D	10/22/18 16:15
WMB71496(MS)	5M105911.D	10/22/18 14:01

FORM 4
Blank Summary

Blank Number: WMB71497
Blank Data File: 7M95313.D
Matrix: Aqueous

Blank Analysis Date: 10/23/18 11:54
Blank Extraction Date: 10/22/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07161-003	7M95317.D	10/24/18 09:32
AD07161-005	7M95318.D	10/24/18 09:55
AD07161-007	7M95319.D	10/24/18 10:18
AD07161-008	7M95320.D	10/24/18 10:41
AD07161-001(MSD)	5M105929.D	10/23/18 11:08
AD07161-001(MS)	5M105928.D	10/23/18 10:45
AD07161-001	5M105927.D	10/23/18 10:21
WMB71497(MS)	5M105925.D	10/23/18 09:35

FORM 4
Blank Summary

Blank Number: WMB71518
Blank Data File: 5M105969.D
Matrix: Aqueous

Blank Analysis Date: 10/25/18 10:28
Blank Extraction Date: 10/24/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07161-001(R)	5M105976.D	10/25/18 13:19
WMB71518(MS)	5M105968.D	10/25/18 10:04

FORM 4
Blank Summary

Blank Number: WMB71532
Blank Data File: 5M105980.D
Matrix: Aqueous

Blank Analysis Date: 10/25/18 14:53
Blank Extraction Date: 10/25/18
(If Applicable)
Method: EPA 625.1

Sample Number	Data File	Analysis Date
AD07161-003(R)	7M95353.D	10/26/18 13:16
AD07161-005(R)	7M95354.D	10/26/18 13:38
AD07161-007(R)	7M95355.D	10/26/18 14:01
AD07161-008(R)	7M95356.D	10/26/18 14:25
WMB71532(MS)	5M105990.D	10/26/18 09:22

Form 5

8101509 0153

Tune Name: CAL DFTPP

Data File: 10M71228.D

Instrument: GCMS 10

Analysis Date: 10/08/18 08:27

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.071 to 10.076 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	33.7	31368	PASS
68	69	0.00	2	1.5	506	PASS
69	198	0.00	100	37.0	34444	PASS
70	69	0.00	2	0.4	151	PASS
127	198	40	60	48.5	45148	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93088	PASS
199	198	5	9	5.8	5379	PASS
275	198	10	30	23.9	22288	PASS
365	198	1	100	2.8	2610	PASS
441	443	0.01	100	66.2	8665	PASS
442	198	40	100	69.8	64968	PASS
443	442	17	23	20.2	13098	PASS

Data File	Sample Number	Analysis Date:
10M71229.D	CAL BNA@10PPM	10/08/18 08:51
10M71230.D	CAL BNA@2PPM	10/08/18 09:15
10M71231.D	CAL BNA@196PP	10/08/18 09:38
10M71232.D	CAL BNA@160PP	10/08/18 10:00
10M71233.D	CAL BNA@120PP	10/08/18 10:22
10M71234.D	CAL BNA@80PPM	10/08/18 10:44
10M71235.D	CAL BNA@20PPM	10/08/18 11:06
10M71236.D	CAL BNA@.5PPM	10/08/18 11:28
10M71237.D	CAL BNA@50PPM	10/08/18 11:51
10M71238.D	ICV BNA@50PPM	10/08/18 12:15

Form 5

8101509 0154

Tune Name: CAL DFTPP

Data File: 5M105686.D

Instrument: GCMS 5

Analysis Date: 10/08/18 08:31

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.893 to 9.898 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	42.9	49432	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.9	48280	PASS
70	69	0.00	2	0.6	274	PASS
127	198	40	60	51.9	59880	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	115296	PASS
199	198	5	9	6.9	7977	PASS
275	198	10	30	19.9	22916	PASS
365	198	1	100	2.2	2483	PASS
441	443	0.01	100	78.8	7853	PASS
442	198	40	100	43.7	50428	PASS
443	442	17	23	19.8	9961	PASS

Data File	Sample Number	Analysis Date:
5M105687.D	CAL BNA@10PPM	10/08/18 08:57
5M105688.D	CAL BNA@2PPM	10/08/18 09:20
5M105689.D	CAL BNA@196PP	10/08/18 09:45
5M105690.D	CAL BNA@160PP	10/08/18 10:11
5M105691.D	CAL BNA@120PP	10/08/18 10:34
5M105692.D	CAL BNA@80PPM	10/08/18 10:57
5M105693.D	CAL BNA@20PPM	10/08/18 11:26
5M105694.D	CAL BNA@.5PPM	10/08/18 11:49
5M105695.D	CAL BNA@50PPM	10/08/18 12:12
5M105696.D	CAL BNA@2PPM	10/08/18 12:40
5M105697.D	ICV BNA@50PPM	10/08/18 13:09

Form 5

Tune Name: CAL DFTPP

Data File: 7M95168.D

Instrument: GCMS 7

Analysis Date: 10/08/18 12:40

Method: EPA 625.1

Tune Scan/Time Range: Scan 1442

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60	37.5	38048		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	44.4	45008		PASS
70	69	0.00	2	1.5	676		PASS
127	198	40	60	55.7	56512		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	101376		PASS
199	198	5	9	7.2	7306		PASS
275	198	10	30	20.2	20520		PASS
365	198	1	100	1.9	1910		PASS
441	443	0.01	100	71.6	6775		PASS
442	198	40	100	44.9	45488		PASS
443	442	17	23	20.8	9464		PASS

Data File	Sample Number	Analysis Date:
7M95169.D	CAL BNA@10PPM	10/08/18 13:05
7M95170.D	CAL BNA@196PP	10/08/18 13:29
7M95171.D	CAL BNA@160PP	10/08/18 13:53
7M95172.D	CAL BNA@120PP	10/08/18 14:16
7M95173.D	CAL BNA@80PPM	10/08/18 14:40
7M95174.D	CAL BNA@20PPM	10/08/18 15:03
7M95175.D	CAL BNA@2PPM	10/08/18 15:27
7M95176.D	CAL BNA@0.5PP	10/08/18 15:50
7M95177.D	CAL BNA@50PPM	10/08/18 16:13
7M95178.D	ICV BNA@50PPM	10/08/18 16:37
7M95179.D	OMB71379	10/08/18 17:00
7M95180.D	OMB71380	10/08/18 17:23
7M95181.D	AD06831-001	10/08/18 17:47
7M95182.D	AD06831-003	10/08/18 18:10
7M95183.D	AD06831-004	10/08/18 18:33
7M95184.D	AD06831-005	10/08/18 18:56
7M95185.D	AD06832-001	10/08/18 19:20
7M95186.D	AD06832-002	10/08/18 19:43
7M95187.D	AD06832-003	10/08/18 20:06
7M95188.D	AD06832-004	10/08/18 20:29
7M95189.D	AD06832-005	10/08/18 20:52
7M95190.D	06832-005	10/08/18 21:15
7M95191.D	AD06832-006	10/08/18 21:38
7M95192.D	AD06832-004(MS)	10/08/18 22:01
7M95193.D	AD06832-004(MSD)	10/08/18 22:24

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M88300.D
Analysis Date: 10/08/18 09:00
Method: EPA 8270D

Tune Scan/Time Range: Scan 2729

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	38.5	33312	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	35104	PASS
70	69	0.00	2	1.1	399	PASS
127	198	40	60	50.6	43800	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	86488	PASS
199	198	5	9	7.9	6819	PASS
275	198	10	30	24.2	20936	PASS
365	198	1	100	2.4	2041	PASS
441	443	0.01	100	90.6	10462	PASS
442	198	40	100	63.4	54824	PASS
443	442	17	23	21.1	11550	PASS

Data File	Sample Number	Analysis Date:
9M88301.D	CAL BNA@10PPM	10/08/18 10:20
9M88302.D	CAL BNA@2PPM	10/08/18 10:42
9M88303.D	CAL BNA@196PP	10/08/18 11:05
9M88304.D	CAL BNA@160PP	10/08/18 11:29
9M88305.D	CAL BNA@120PP	10/08/18 11:52
9M88306.D	CAL BNA@80PPM	10/08/18 12:15
9M88307.D	CAL BNA@20PPM	10/08/18 12:38
9M88308.D	CAL BNA@.5PPM	10/08/18 13:02
9M88309.D	CAL BNA@50PPM	10/08/18 13:26
9M88310.D	ICV BNA@50PPM	10/08/18 13:50

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10

Data File: 10M71436.D
Analysis Date: 10/19/18 09:05
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.060 to 10.071 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Data File	Sample Number	Analysis Date:
10M71437.D	CAL BNA@50PPM	10/19/18 09:35
10M71438.D	WMB71471	10/19/18 10:13
10M71439.D	WMB71471(MS)	10/19/18 10:35
10M71440.D	SMB71470	10/19/18 10:58
10M71441.D	AD07093-001(T)	10/19/18 11:20
10M71442.D	AD07093-001(T)(M)	10/19/18 11:42
10M71443.D	AD07093-001(T)(M)	10/19/18 12:04
10M71444.D	SMB71470	10/19/18 12:26
10M71445.D	AD07121-001	10/19/18 12:48
10M71446.D	WMB71471	10/19/18 13:10
10M71447.D	AD07121-002	10/19/18 13:32
10M71448.D	AD07121-003	10/19/18 13:55
10M71449.D	AD07121-004	10/19/18 14:17
10M71450.D	WMB71479	10/19/18 14:39
10M71451.D	AD07121-006	10/19/18 15:01
10M71452.D	AD07121-007	10/19/18 15:23
10M71453.D	AD07121-008	10/19/18 15:45
10M71454.D	AD07037-001(10X)	10/19/18 16:08
10M71455.D	AD07037-002(20X)	10/19/18 16:30
10M71456.D	SMB71480	10/19/18 17:24
10M71457.D	SMB71481	10/19/18 17:46
10M71458.D	SMB71480(MS)	10/19/18 18:08
10M71459.D	AD07136-003	10/19/18 18:30
10M71460.D	AD07136-003(MS)	10/19/18 18:52
10M71461.D	AD07136-003(MSD)	10/19/18 19:14
10M71462.D	AD07185-007	10/19/18 19:37

Form 5

8101509 0158

Tune Name: CAL DFTPP

Data File: 10M71436.D

Instrument: GCMS 10

Analysis Date: 10/19/18 09:05

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.060 to 10.071 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Data File	Sample Number	Analysis Date:
10M71437.D	CAL BNA@50PPM	10/19/18 09:35
10M71438.D	WMB71471	10/19/18 10:13
10M71439.D	WMB71471(MS)	10/19/18 10:35
10M71440.D	SMB71470	10/19/18 10:58
10M71441.D	AD07093-001(T)	10/19/18 11:20
10M71442.D	AD07093-001(T)(M)	10/19/18 11:42
10M71443.D	AD07093-001(T)(M)	10/19/18 12:04
10M71444.D	SMB71470	10/19/18 12:26
10M71445.D	AD07121-001	10/19/18 12:48
10M71446.D	WMB71471	10/19/18 13:10
10M71447.D	AD07121-002	10/19/18 13:32
10M71448.D	AD07121-003	10/19/18 13:55
10M71449.D	AD07121-004	10/19/18 14:17
10M71450.D	WMB71479	10/19/18 14:39
10M71451.D	AD07121-006	10/19/18 15:01
10M71452.D	AD07121-007	10/19/18 15:23
10M71453.D	AD07121-008	10/19/18 15:45
10M71454.D	AD07037-001(10X)	10/19/18 16:08
10M71455.D	AD07037-002(20X)	10/19/18 16:30
10M71456.D	SMB71480	10/19/18 17:24
10M71457.D	SMB71481	10/19/18 17:46
10M71458.D	SMB71480(MS)	10/19/18 18:08
10M71459.D	AD07136-003	10/19/18 18:30
10M71460.D	AD07136-003(MS)	10/19/18 18:52
10M71461.D	AD07136-003(MSD)	10/19/18 19:14
10M71462.D	AD07185-007	10/19/18 19:37

Form 5

8101509 0159

Tune Name: CAL DFTPP

Data File: 5M105870.D

Instrument: GCMS 5

Analysis Date: 10/19/18 09:08

Method: EPA 625.1

Tune Scan/Time Range: Scan 1406

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	39.3	38408	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	36904	PASS
70	69	0.00	2	0.4	155	PASS
127	198	40	60	49.1	47968	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	97704	PASS
199	198	5	9	7.4	7230	PASS
275	198	10	30	20.5	20024	PASS
365	198	1	100	2.3	2243	PASS
441	443	0.01	100	75.7	7521	PASS
442	198	40	100	49.0	47904	PASS
443	442	17	23	20.7	9932	PASS

Data File	Sample Number	Analysis Date:
5M105871.D	CAL BNA@50PPM	10/19/18 09:44
5M105872.D	WMB71471	10/19/18 10:48
5M105873.D	AD07120-001	10/19/18 11:12
5M105874.D	AD07120-002	10/19/18 11:35
5M105875.D	AD07115-001	10/19/18 11:58
5M105876.D	AD07115-002	10/19/18 12:21
5M105877.D	AD07118-001	10/19/18 12:44
5M105878.D	AD07118-003	10/19/18 13:08
5M105879.D	AD07118-005	10/19/18 13:31
5M105880.D	AD07118-007	10/19/18 13:55
5M105881.D	WMB71479	10/19/18 14:23
5M105882.D	AD07072-007(R)	10/19/18 14:46
5M105883.D	AD07081-015(R)	10/19/18 16:02
5M105884.D	AD07081-017(R)	10/19/18 16:25
5M105885.D	AD07113-001(R)	10/19/18 16:48
5M105886.D	AD07113-001(5X)(	10/19/18 17:11
5M105887.D	SMB71481	10/19/18 17:34
5M105888.D	SMB71480	10/19/18 17:57
5M105889.D	SMB71481(MS)	10/19/18 18:21
5M105890.D	AD07178-001	10/19/18 18:43
5M105891.D	AD07178-001(MS)	10/19/18 19:06
5M105892.D	AD07178-001(MSD)	10/19/18 19:29
5M105893.D	AD07178-002	10/19/18 19:52
5M105894.D	AD07113-001(R)	10/19/18 20:15

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M95304.D
Analysis Date: 10/19/18 09:03
Method: EPA 625.1

Tune Scan/Time Range: Scan 1438

Time Scan: Time Range: Scan 1450						
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim		Abund	Abund	Fail
51	198	30	60	32.7	49008	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.0	59872	PASS
70	69	0.00	2	0.5	286	PASS
127	198	40	60	54.4	81440	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	149696	PASS
199	198	5	9	6.8	10117	PASS
275	198	10	30	21.2	31784	PASS
365	198	1	100	2.2	3289	PASS
441	443	0.01	100	75.7	10642	PASS
442	198	40	100	47.6	71184	PASS
443	442	17	23	19.7	14052	PASS

Data File	Sample Number	Analysis Date:
7M95305.D	CAL BNA@50PPM	10/19/18 09:41
7M95306.D	WMB71479(MS)	10/19/18 14:26
7M95307.D	WMB71479	10/19/18 14:49

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M88659.D
Analysis Date: 10/19/18 15:42
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.983 to 9.994 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	47.2	26370	PASS
68	69	0.00	2	0.6	145	PASS
69	198	0.00	100	45.0	25114	PASS
70	69	0.00	2	0.6	141	PASS
127	198	40	60	54.5	30442	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	55818	PASS
199	198	5	9	7.3	4061	PASS
275	198	10	30	24.8	13844	PASS
365	198	1	100	3.3	1855	PASS
441	443	0.01	100	16.7	1212	PASS
442	198	40	100	58.4	32579	PASS
443	442	17	23	22.2	7246	PASS

Data File	Sample Number	Analysis Date:
9M88660.D	CAL BNA@50PPM	10/19/18 16:02
9M88661.D	AD07079-016	10/19/18 16:43
9M88662.D	AD07079-017	10/19/18 17:06
9M88663.D	AD07116-005	10/19/18 17:30
9M88664.D	AD07116-003	10/19/18 17:52
9M88665.D	SMB71480	10/19/18 18:17
9M88666.D	SMB71481	10/19/18 18:40
9M88667.D	AD07116-001	10/19/18 19:03
9M88668.D	AD07116-002	10/19/18 19:27
9M88669.D	AD07116-004	10/19/18 19:50
9M88670.D	AD07079-013(3X)	10/19/18 20:13
9M88671.D	AD07109-002	10/19/18 20:37
9M88672.D	AD07079-004	10/19/18 21:00
9M88673.D	AD07079-002(3X)	10/19/18 21:24
9M88674.D	AD07079-003(3X)	10/19/18 21:47
9M88675.D	07131-001	10/19/18 22:10
9M88676.D	AD07136-001	10/19/18 22:34
9M88677.D	AD07136-002	10/19/18 22:57
9M88678.D	AD07136-004	10/19/18 23:20
9M88679.D	AD07159-001	10/19/18 23:44
9M88680.D	AD07161-002	10/20/18 00:07
9M88681.D	AD07161-004	10/20/18 00:31
9M88682.D	AD07161-006	10/20/18 00:54
9M88683.D	AD07161-009	10/20/18 01:17
9M88684.D	AD07177-001	10/20/18 01:41
9M88685.D	AD07185-002	10/20/18 02:05
9M88686.D	AD07185-004	10/20/18 02:28
9M88687.D	AD07185-006	10/20/18 02:51
9M88688.D	AD07185-001(3X)	10/20/18 03:15
9M88689.D	AD07185-003(3X)	10/20/18 03:38
9M88690.D	AD07185-005(3X)	10/20/18 04:02
9M88691.D	AD07185-011(3X)	10/20/18 04:25
9M88692.D	AD07152-001(10X)	10/20/18 04:49

Form 5

8101509 0162

Tune Name: CAL DFTPP

Data File: 5M105895.D

Instrument: GCMS 5

Analysis Date: 10/22/18 07:18

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.899 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	41.1	30557	PASS
68	69	0.00	2	2.0	590	PASS
69	198	0.00	100	39.7	29579	PASS
70	69	0.00	2	0.4	129	PASS
127	198	40	60	50.4	37533	PASS
197	198	0.00	1	0.3	230	PASS
198	198	100	100	100.0	74424	PASS
199	198	5	9	7.0	5229	PASS
275	198	10	30	21.0	15595	PASS
365	198	1	100	2.2	1660	PASS
441	443	0.01	100	79.1	5128	PASS
442	198	40	100	43.4	32304	PASS
443	442	17	23	20.1	6483	PASS

Data File	Sample Number	Analysis Date:
5M105896.D	CAL BNA@50PPM	10/22/18 07:52
5M105897.D	AD06939-001(T)	10/22/18 08:35
5M105898.D	AD06939-001(T)(M)	10/22/18 08:58
5M105899.D	AD06939-001(T)(M)	10/22/18 09:21
5M105900.D	AD07133-001	10/22/18 09:44
5M105901.D	AD07133-002	10/22/18 10:07
5M105902.D	AD07131-001	10/22/18 10:31
5M105903.D	AD07131-002	10/22/18 10:54
5M105904.D	AD07142-001	10/22/18 11:17
5M105905.D	AD07137-001	10/22/18 11:41
5M105906.D	AD07137-003	10/22/18 12:04
5M105907.D	AD07137-005	10/22/18 12:28
5M105908.D	AD06821-001(T)	10/22/18 12:52
5M105909.D	AD06980-005(T)	10/22/18 13:15
5M105910.D	EF-SPLP V-289066	10/22/18 13:38
5M105911.D	WMB71496(MS)	10/22/18 14:01
5M105912.D	AD07157-001(T)	10/22/18 14:25
5M105913.D	WMB71496	10/22/18 14:49
5M105914.D	EF-1 V-289820(10/	10/22/18 15:12
5M105915.D	AD07157-001(T)(M)	10/22/18 15:36
5M105916.D	AD07157-001(T)(M)	10/22/18 15:59
5M105917.D	AD07132-001(T)	10/22/18 16:22
5M105918.D	AD06943-001(T)	10/22/18 16:45
5M105919.D	EF-1 V-289820(10/	10/22/18 17:08
5M105920.D	EF-1 V-289820(10/	10/22/18 17:31
5M105921.D	EF-SPLP V-289066	10/22/18 17:54
5M105922.D	EF-SPLP V-289066	10/22/18 18:18

Form 5

8101509 0163

Tune Name: CAL DFTPP

Data File: 10M71463.D

Instrument: GCMS 10

Analysis Date: 10/22/18 07:18

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.066 to 10.082 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	34.6	24066	PASS
68	69	0.00	2	1.2	290	PASS
69	198	0.00	100	35.6	24732	PASS
70	69	0.00	2	0.4	91	PASS
127	198	40	60	46.7	32459	PASS
197	198	0.00	1	0.6	395	PASS
198	198	100	100	100.0	69460	PASS
199	198	5	9	6.9	4782	PASS
275	198	10	30	23.1	16073	PASS
365	198	1	100	3.2	2235	PASS
441	443	0.01	100	75.3	6378	PASS
442	198	40	100	63.1	43801	PASS
443	442	17	23	19.3	8467	PASS

Data File	Sample Number	Analysis Date:
10M71464.D	CAL BNA@50PPM	10/22/18 07:45
10M71465.D	SMB71491(MS)	10/22/18 08:30
10M71466.D	SMB71491	10/22/18 08:52
10M71467.D	AD07224-001	10/22/18 09:14
10M71468.D	AD07224-001(MS)	10/22/18 09:36
10M71469.D	AD07224-001(MSD)	10/22/18 09:59
10M71470.D	AD07224-002	10/22/18 10:21
10M71471.D	AD07224-003	10/22/18 10:43
10M71472.D	AD07224-004	10/22/18 11:05
10M71473.D	AD07190-009	10/22/18 11:27
10M71474.D	AD07190-011	10/22/18 11:50
10M71475.D	AD07189-001	10/22/18 12:12
10M71476.D	AD07143-001	10/22/18 12:34
10M71477.D	AD07143-002	10/22/18 12:56
10M71478.D	AD07143-003	10/22/18 13:18
10M71479.D	AD07143-004	10/22/18 13:41
10M71480.D	AD07157-002(T)	10/22/18 14:03
10M71481.D	AD07157-003(T)	10/22/18 14:25
10M71482.D	AD07157-004(T)	10/22/18 14:47
10M71483.D	AD07143-005	10/22/18 15:09
10M71484.D	WMB71496	10/22/18 15:31
10M71485.D	AD07022-012	10/22/18 15:53
10M71486.D	AD07118-003(R)	10/22/18 16:15
10M71487.D	AD07143-004	10/22/18 16:38

Form 5

Tune Name: CAL DFTPP

Data File: 5M105923.D

Instrument: GCMS 5

Analysis Date: 10/23/18 08:15

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.893 to 9.899 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	38.7	27993	PASS
68	69	0.00	2	0.6	151	PASS
69	198	0.00	100	37.6	27180	PASS
70	69	0.00	2	0.5	137	PASS
127	198	40	60	49.0	35472	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	72356	PASS
199	198	5	9	6.3	4594	PASS
275	198	10	30	22.2	16051	PASS
365	198	1	100	2.9	2126	PASS
441	443	0.01	100	80.1	6460	PASS
442	198	40	100	58.5	42328	PASS
443	442	17	23	19.0	8061	PASS

Data File	Sample Number	Analysis Date:
5M105924.D	CAL BNA@50PPM	10/23/18 08:44
5M105925.D	WMB71497(MS)	10/23/18 09:35
5M105926.D	WMB71497	10/23/18 09:58
5M105927.D	AD07161-001	10/23/18 10:21
5M105928.D	AD07161-001(MS)	10/23/18 10:45
5M105929.D	AD07161-001(MSD)	10/23/18 11:08
5M105930.D	AD07150-001	10/23/18 11:32
5M105931.D	AD07150-002	10/23/18 11:55
5M105932.D	AD07150-003	10/23/18 12:19
5M105933.D	AD07149-008	10/23/18 12:42
5M105934.D	WMB71497	10/23/18 13:29
5M105935.D	AD07142-003	10/23/18 13:53
5M105936.D	AD07142-004	10/23/18 14:17
5M105937.D	AD07249-006(T)	10/23/18 14:40
5M105938.D	AD07249-009(T)	10/23/18 15:03
5M105939.D	AD07249-010(T)	10/23/18 15:27
5M105940.D	AD07142-005	10/23/18 15:50
5M105941.D	AD07142-006	10/23/18 16:14
5M105942.D	AD07142-007	10/23/18 16:37
5M105943.D	AD07142-008	10/23/18 17:00

Form 5

Tune Name: CAL DFTPP

Data File: 7M95310.D

Instrument: GCMS 7

Analysis Date: 10/23/18 08:10

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.919 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	33.2	30462	PASS
68	69	0.00	2	0.1	39	PASS
69	198	0.00	100	40.1	36795	PASS
70	69	0.00	2	0.5	197	PASS
127	198	40	60	52.5	48205	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91793	PASS
199	198	5	9	6.7	6186	PASS
275	198	10	30	21.5	19761	PASS
365	198	1	100	2.1	1947	PASS
441	443	0.01	100	78.7	8067	PASS
442	198	40	100	57.9	53157	PASS
443	442	17	23	19.3	10257	PASS

Data File	Sample Number	Analysis Date:
7M95311.D	CAL BNA@50PPM	10/23/18 08:34
7M95312.D	WMB71479	10/23/18 11:31
7M95313.D	WMB71497	10/23/18 11:54

Form 5

Tune Name: CAL DFTPP

Data File: 7M95314.D

Instrument: GCMS 7

Analysis Date: 10/24/18 08:10

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.914 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	36.0	23012	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	27736	PASS
70	69	0.00	2	0.6	171	PASS
127	198	40	60	55.6	35512	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	63895	PASS
199	198	5	9	7.2	4597	PASS
275	198	10	30	19.9	12705	PASS
365	198	1	100	2.2	1395	PASS
441	443	0.01	100	72.3	4336	PASS
442	198	40	100	48.7	31109	PASS
443	442	17	23	19.3	6000	PASS

Data File	Sample Number	Analysis Date:
7M95315.D	CAL BNA@50PPM	10/24/18 08:33
7M95316.D	AD07142-009	10/24/18 09:09
7M95317.D	AD07161-003	10/24/18 09:32
7M95318.D	AD07161-005	10/24/18 09:55
7M95319.D	AD07161-007	10/24/18 10:18
7M95320.D	AD07161-008	10/24/18 10:41
7M95321.D	AD07165-002	10/24/18 11:04
7M95322.D	AD07165-003	10/24/18 11:27
7M95323.D	AD07165-004	10/24/18 11:50
7M95324.D	AD07165-005	10/24/18 12:13
7M95325.D	AD07165-006	10/24/18 12:36
7M95326.D	AD07165-007	10/24/18 12:59
7M95327.D	AD07165-008	10/24/18 13:22
7M95328.D	SMB71506	10/24/18 13:45
7M95329.D	AD07165-009	10/24/18 14:08
7M95330.D	07165-015	10/24/18 14:31
7M95331.D	AD07165-010	10/24/18 14:54
7M95332.D	AD07263-001	10/24/18 15:17
7M95333.D	AD07165-011	10/24/18 15:40
7M95334.D	AD07165-012	10/24/18 16:03
7M95335.D	AD07165-013	10/24/18 16:26
7M95336.D	AD07165-014	10/24/18 16:49
7M95337.D	AD07165-015	10/24/18 17:12
7M95338.D	AD07165-012	10/24/18 17:35

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M105966.D
Analysis Date: 10/25/18 08:50
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.893 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.7	37196	PASS
68	69	0.00	2	1.8	622	PASS
69	198	0.00	100	45.3	35304	PASS
70	69	0.00	2	0.5	181	PASS
127	198	40	60	54.8	42720	PASS
197	198	0.00	1	0.3	246	PASS
198	198	100	100	100.0	77940	PASS
199	198	5	9	7.2	5590	PASS
275	198	10	30	18.8	14668	PASS
365	198	1	100	2.3	1760	PASS
441	443	0.01	100	80.4	5009	PASS
442	198	40	100	40.8	31780	PASS
443	442	17	23	19.6	6232	PASS

Data File	Sample Number	Analysis Date:
5M105967.D	CAL BNA@50PPM	10/25/18 09:19
5M105968.D	WMB71518(MS)	10/25/18 10:04
5M105969.D	WMB71518	10/25/18 10:28
5M105970.D	AD07188-009	10/25/18 10:59
5M105971.D	AD07185-008	10/25/18 11:22
5M105972.D	AD07252-002(T)	10/25/18 11:45
5M105973.D	EF-1 V-289820(10/	10/25/18 12:08
5M105974.D	AD07252-002(T)(M	10/25/18 12:32
5M105975.D	AD07252-002(T)(M	10/25/18 12:55
5M105976.D	AD07161-001(R)	10/25/18 13:19
5M105977.D	AD07142-003(R)	10/25/18 13:42
5M105978.D	AD07142-004(R)	10/25/18 14:05
5M105979.D	AD07294-001	10/25/18 14:29
5M105980.D	WMB71532	10/25/18 14:53
5M105981.D	AD07204-001	10/25/18 15:16
5M105982.D	AD07205-001	10/25/18 15:39
5M105983.D	AD07180-001	10/25/18 16:03
5M105984.D	AD07180-002	10/25/18 16:26
5M105985.D	AD07186-009	10/25/18 16:50
5M105986.D	AD07207-009	10/25/18 17:13
5M105987.D	AD07212-001	10/25/18 17:37

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M105988.D
Analysis Date: 10/26/18 08:09
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.893 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	45.1	37712	PASS
68	69	0.00	2	1.8	629	PASS
69	198	0.00	100	42.9	35844	PASS
70	69	0.00	2	0.2	90	PASS
127	198	40	60	51.0	42648	PASS
197	198	0.00	1	0.3	244	PASS
198	198	100	100	100.0	83616	PASS
199	198	5	9	6.5	5415	PASS
275	198	10	30	20.8	17381	PASS
365	198	1	100	2.6	2148	PASS
441	443	0.01	100	74.7	5723	PASS
442	198	40	100	45.5	38024	PASS
443	442	17	23	20.1	7662	PASS

Data File	Sample Number	Analysis Date:
5M105989.D	CAL BNA@50PPM	10/26/18 08:35
5M105990.D	WMB71532(MS)	10/26/18 09:22
5M105991.D	AD07212-003	10/26/18 09:45
5M105992.D	AD07212-005	10/26/18 10:08
5M105993.D	AD07212-004	10/26/18 10:32
5M105994.D	AD07142-005(R)	10/26/18 10:55
5M105995.D	AD07142-006(R)	10/26/18 11:18
5M105996.D	AD07142-007(R)	10/26/18 11:41
5M105997.D	AD07142-008(R)	10/26/18 12:05
5M105998.D	AD07142-009(R)	10/26/18 12:28
5M105999.D	AD07294-001(MS)	10/26/18 12:51
5M106000.D	AD07294-001(MSD)	10/26/18 13:14
5M106001.D	WMB71537(MS)	10/26/18 13:37
5M106002.D	AD07212-006	10/26/18 14:00
5M106003.D	AD07204-001(R)	10/26/18 14:24
5M106004.D	AD07205-001(R)	10/26/18 14:47
5M106005.D	WMB71537	10/26/18 15:10
5M106006.D	EF- SPLP V-28996	10/26/18 15:36
5M106007.D	AD07031-001(T)	10/26/18 15:59
5M106008.D	AD07031-001(T)(M)	10/26/18 16:22
5M106009.D	AD07031-001(T)(M)	10/26/18 16:46
5M106010.D	AD07212-002	10/26/18 17:10
5M106011.D	AD07233-001	10/26/18 17:33
5M106012.D	AD07233-002	10/26/18 17:56
5M106013.D	AD07233-003	10/26/18 18:19
5M106014.D	AD07233-004	10/26/18 18:42

Form 5

Tune Name: CAL DFTPP

Data File: 7M95341.D

Instrument: GCMS 7

Analysis Date: 10/26/18 08:11

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.909 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	37.7	38844	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	45288	PASS
70	69	0.00	2	0.6	280	PASS
127	198	40	60	56.9	58568	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	102920	PASS
199	198	5	9	7.2	7400	PASS
275	198	10	30	20.2	20797	PASS
365	198	1	100	2.0	2053	PASS
441	443	0.01	100	75.9	7141	PASS
442	198	40	100	47.6	48960	PASS
443	442	17	23	19.2	9405	PASS

Data File	Sample Number	Analysis Date:
7M95342.D	CAL BNA@50PPM	10/26/18 08:36
7M95343.D	SMB71534(MS)	10/26/18 09:26
7M95344.D	SMB71534	10/26/18 09:48
7M95345.D	WMB71532	10/26/18 10:11
7M95346.D	AD07165-002(R)	10/26/18 10:35
7M95347.D	AD07165-003(R)	10/26/18 10:58
7M95348.D	AD07165-007(R)	10/26/18 11:20
7M95349.D	AD07165-008(R)	10/26/18 11:43
7M95350.D	AD07165-009(R)	10/26/18 12:06
7M95351.D	AD07165-010(R)	10/26/18 12:30
7M95352.D	AD07165-015(R)	10/26/18 12:53
7M95353.D	AD07161-003(R)	10/26/18 13:16
7M95354.D	AD07161-005(R)	10/26/18 13:38
7M95355.D	AD07161-007(R)	10/26/18 14:01
7M95356.D	AD07161-008(R)	10/26/18 14:25
7M95357.D	WMB71537	10/26/18 14:48
7M95358.D	AD07233-005	10/26/18 15:45
7M95359.D	AD07233-006	10/26/18 16:08
7M95360.D	AD07233-007	10/26/18 16:31

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M71237.D

Method: EPA 8270D

Analysis Date/Time: 10/08/18 11:51

Lab File ID: CAL BNA@50PPM

11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
45717	2.73	91441	5.90	347375	6.90	216810	8.33	377671	9.80	382304	12.86	369171	14.49
Eval File Area/RT:		22858-91434		45720-182882		173688-694750		108405-433620		188836-755342		191152-764608	
Eval File Area Limit:		22858-91434		45720-182882		173688-694750		108405-433620		188836-755342		191152-764608	
Eval File RT Limit:		2.23-3.23		5.4-6.4		6.4-7.4		7.83-8.83		9.3-10.3		12.36-13.36	
												13.99-14.99	

Data File Sample

10M71229.D	CAL BNA@10PPM	50609	2.74	99323	5.90	356054	6.90	223314	8.33	398598	9.80	410428	12.86	388983	14.49
10M71230.D	CAL BNA@2PPM	46994	2.73	93036	5.90	347884	6.90	222068	8.33	396093	9.80	408904	12.86	391574	14.49
10M71231.D	CAL BNA@196PPM	46558	2.73	95237	5.90	358254	6.90	237684	8.34	438766	9.81	339080	12.87	408006	14.50
10M71232.D	CAL BNA@160PPM	47686	2.73	94302	5.90	357131	6.90	230365	8.34	414288	9.81	352830	12.87	385890	14.50
10M71233.D	CAL BNA@120PPM	48116	2.73	94428	5.90	362591	6.90	229352	8.34	409954	9.81	364480	12.87	379631	14.50
10M71234.D	CAL BNA@80PPM	46969	2.73	93648	5.90	355190	6.90	221269	8.34	391542	9.80	381281	12.86	378763	14.50
10M71235.D	CAL BNA@20PPM	46371	2.74	91991	5.90	335563	6.90	208898	8.33	378035	9.80	375028	12.86	370382	14.49
10M71236.D	CAL BNA@5PPM	45678	2.73	87007	5.90	329675	6.90	208232	8.33	382719	9.80	376330	12.86	356360	14.49
10M71237.D	CAL BNA@50PPM	45717	2.73	91441	5.90	347375	6.90	216810	8.33	377671	9.80	382304	12.86	369171	14.49
10M71238.D	ICV BNA@50PPM	43158	2.73	88132	5.90	328852	6.90	211540	8.33	363515	9.80	363019	12.86	345102	14.50

Internal Standard Areas

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Flags:

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

A - Indicates the compound failed the internal standard area criteria

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M71237.D

Method: EPA 625.1

Analysis Date/Time: 10/08/18 11:51

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	45717	2.73	91441	5.90	347375	6.90	216810	8.33	377671	9.80	382304	12.86	369171	14.49
Eval File Area Limit:	22858-91434		45720-182882		173688-694750		108405-433620		188836-755342		191152-764608		184586-738342	
Eval File RT Limit:	2.23-3.23		5.4-6.4		6.4-7.4		7.83-8.83		9.3-10.3		12.36-13.36		13.99-14.99	

Data File	Sample																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M105695.D

Method: EPA 625.1

Analysis Date/Time: 10/08/18 12:12

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	61090	2.50	113641	5.74	421692	6.75	254335	8.16	393814	9.62	394665	12.67	300723	14.28
Eval File Area Limit:	30545-122180		56820-227282		210846-843384		127168-508670		196907-787628		197332-789330		150362-601446	
Eval File RT Limit:	2-3		5.24-6.24		6.25-7.25		7.66-8.66		9.12-10.12		12.17-13.17		13.78-14.78	

Data File Sample		11		12		13		14		15		16		17	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
5M105687.D	CAL BNA@10PPM	59151	2.50	109412	5.74	409237	6.75	230363	8.16	375941	9.62	354389	12.67	280783	14.28
5M105689.D	CAL BNA@196PPM	57836	2.50	107987	5.74	391665	6.75	223278	8.17	364137	9.62	375589	12.68	282895	14.28
5M105690.D	CAL BNA@160PPM	58983	2.49	111440	5.74	407314	6.75	230779	8.17	375774	9.62	383131	12.67	309368	14.28
5M105691.D	CAL BNA@120PPM	59301	2.51	111021	5.74	404663	6.75	233227	8.17	385060	9.62	391944	12.67	327733	14.28
5M105692.D	CAL BNA@80PPM	60107	2.50	111004	5.74	404566	6.75	226711	8.16	373703	9.62	385959	12.67	325878	14.28
5M105693.D	CAL BNA@20PPM	60709	2.51	113420	5.74	410542	6.75	235917	8.16	387384	9.62	383384	12.67	328284	14.29
5M105694.D	CAL BNA@5PPM	57656	2.50	108772	5.74	398826	6.75	234276	8.16	407895	9.62	351887	12.66	294290	14.27
5M105695.D	CAL BNA@50PPM	61090	2.50	113641	5.74	421692	6.75	254335	8.16	393814	9.62	394665	12.67	300723	14.28
5M105696.D	CAL BNA@2PPM	61353	2.50	112107	5.74	414944	6.75	238255	8.16	425886	9.62	369346	12.67	306476	14.28
5M105697.D	ICV BNA@50PPM	57034	2.50	107427	5.74	398315	6.75	227247	8.17	386222	9.62	403861	12.67	321995	14.28

11 =	1,4-Dioxane-d8(INJ)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			574 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M88309.D

Method: EPA 8270D

Analysis Date/Time: 10/08/18 13:26

Lab File ID: CAL BNA@50PPM

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
38833	2.54	76879	5.79	292633	6.80	183035	8.23	321225	9.69	360599	12.75	322704	14.37	
Eval File Area Limit:	19416-77666	38440-153758	146316-585266	91518-366070	160612-642450	180300-721198	161352-645408							
Eval File RT Limit:	2.04-3.04	5.29-6.29	6.3-7.3	7.73-8.73	9.19-10.19	12.25-13.25	13.87-14.87							

Data File Sample

9M88301.D	CAL BNA@10PPM	46819	2.55	88053	5.79	338146	6.81	203823	8.25	355448	9.70	386511	12.75	356911	14.41
9M88302.D	CAL BNA@2PPM	43359	2.54	83713	5.79	320020	6.80	197447	8.23	342219	9.69	378938	12.74	349977	14.38
9M88303.D	CAL BNA@196PPM	39900	2.54	79169	5.79	308563	6.81	192321	8.24	330720	9.70	382634	12.75	329075	14.38
9M88304.D	CAL BNA@160PPM	38723	2.54	77301	5.79	295287	6.81	182343	8.23	316509	9.69	365032	12.76	313850	14.38
9M88305.D	CAL BNA@120PPM	37155	2.55	74085	5.79	286486	6.81	175647	8.24	305309	9.69	341164	12.75	303710	14.37
9M88306.D	CAL BNA@80PPM	38165	2.55	76781	5.79	290205	6.81	177627	8.23	306432	9.69	343097	12.75	307663	14.37
9M88307.D	CAL BNA@20PPM	41655	2.55	79684	5.79	302917	6.81	182887	8.23	320085	9.69	361759	12.74	324385	14.37
9M88308.D	CAL BNA@.5PPM	38089	2.55	74902	5.79	287012	6.80	174925	8.23	307469	9.69	336446	12.74	301465	14.38
9M88309.D	CAL BNA@50PPM	38833	2.54	76879	5.79	292633	6.80	183035	8.23	321225	9.69	360599	12.75	322704	14.37
9M88310.D	ICV BNA@50PPM	37213	2.54	75228	5.79	286428	6.81	180451	8.24	309636	9.69	354787	12.75	315140	14.37

11 =	1,4-Dioxane-d8(NT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M95177.D

Method: EPA 625.1

Analysis Date/Time: 10/08/18 16:13

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	79420	2.50	134473	5.75	495463	6.76	286738	8.17	488913	9.61	483764	12.65	413657	14.27
Eval File Area Limit:	39710-158840		67236-268946		247732-990926		143369-573476		244456-977826		241882-967528		206828-827314	
Eval File RT Limit:	2-3		5.25-6.25		6.26-7.26		7.67-8.67		9.11-10.11		12.15-13.15		13.77-14.77	

Data File	Sample	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M95169.D	CAL BNA@10PPM	80619	2.50	137139	5.75	504127	6.77	290829	8.20	495869	9.64	480420	12.65
7M95170.D	CAL BNA@196PPM	76812	2.50	126580	5.75	465835	6.77	270926	8.19	466920	9.63	452377	12.66
7M95171.D	CAL BNA@160PPM	76070	2.51	123955	5.75	459360	6.78	266448	8.21	461445	9.64	448112	12.66
7M95172.D	CAL BNA@120PPM	82152	2.51	134996	5.75	501928	6.76	287749	8.18	498911	9.62	487388	12.65
7M95173.D	CAL BNA@80PPM	80331	2.51	133398	5.75	496038	6.77	282685	8.18	487063	9.63	479929	12.65
7M95174.D	CAL BNA@20PPM	80893	2.51	137180	5.75	506716	6.76	288424	8.18	491343	9.62	489782	12.65
7M95175.D	CAL BNA@2PPM	82999	2.50	140993	5.75	521955	6.76	299110	8.18	516763	9.62	500060	12.64
7M95176.D	CAL BNA@0.5PPM	80950	2.51	138488	5.75	512096	6.76	294601	8.17	507907	9.61	480570	12.64
7M95177.D	CAL BNA@50PPM	79420	2.50	134473	5.75	495463	6.76	286738	8.17	488913	9.61	483764	12.65
7M95178.D	ICV BNA@50PPM	78269	2.51	131445	5.75	488502	6.76	276337	8.17	478457	9.62	473904	12.65

11 =	1,4-Dioxane-d8 (INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M71437.D

Method: EPA 8270D

Analysis Date/Time: 10/19/18 09:35

Lab File ID: CAL BNA@50PPM

Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
39372	2.73		81447	5.89	309527	6.90	196345	8.33	338144	9.80	353562	12.86	329334	14.49
19686-78744			40724-162894		154764-619054		98172-392690		169072-676288		176781-707124		164667-658668	
Eval File Area Limit:														
Eval File RT Limit:	2.23-3.23		5.39-6.39		6.4-7.4		7.83-8.83		9.3-10.3		12.36-13.36		13.99-14.99	

Data File Sample

10M71438.D	WMB71471	42828	2.73	83072	5.89	294904	6.90	183226	8.33	323984	9.80	326554	12.86	302661	14.49
10M71439.D	WMB71471(MS)	43061	2.73	83409	5.89	302478	6.90	194312	8.33	335279	9.80	310192	12.86	313310	14.49
10M71440.D	SMB71470	41903	2.71	78961	5.89	299810	6.89	177244	8.33	329451	9.80	327720	12.86	304365	14.49
10M71441.D	AD07093-001(T)	40966	2.74	77883	5.89	279912	6.90	174163	8.33	298144	9.80	306620	12.86	288590	14.49
10M71442.D	AD07093-001(T)(MS)	42154	2.73	80272	5.89	293840	6.90	181195	8.33	325017	9.80	309448	12.86	306589	14.49
10M71443.D	AD07093-001(T)(MSD)	40101	2.75	80918	5.90	293194	6.90	179963	8.33	314090	9.80	298000	12.86	288391	14.50
10M71444.D	SMB71470	39815	2.71	83418	5.89	299627	6.89	179552	8.33	314696	9.80	329892	12.86	301663	14.49
10M71445.D	AD07121-001	35375	2.74	69399	5.89	248587	6.90	159483	8.33	277667	9.80	281581	12.86	254974	14.49
10M71446.D	WMB71471	40202	2.73	78955	5.89	276319	6.90	169537	8.33	294181	9.80	298529	12.86	277591	14.49
10M71447.D	AD07121-002	33291	2.73	65380	5.89	246229	6.90	148952	8.33	261993	9.80	253308	12.86	240072	14.49
10M71448.D	AD07121-003	40137	2.73	78207	5.89	277142	6.90	168639	8.33	298133	9.80	291426	12.86	282800	14.49
10M71449.D	AD07121-004	27805	2.73	55403	5.89	199555	6.89	117427	8.33	217515	9.80	216221	12.86	199949	14.49
10M71450.D	WMB71479	35856	2.73	67562	5.89	266918	6.89	154612	8.33	279806	9.80	276107	12.86	248307	14.49
10M71451.D	AD07121-006	31840	2.73	63044	5.89	235656	6.89	137629	8.33	254181	9.80	240204	12.86	227235	14.49
10M71452.D	AD07121-007	35213	2.73	69711	5.89	254634	6.90	152547	8.33	268023	9.80	283934	12.86	268166	14.49
10M71453.D	AD07121-008	28942	2.74	59100	5.89	215282	6.90	133803	8.33	227478	9.80	230211	12.86	209045	14.49
10M71454.D	AD07037-001(10X)(R)	44452	2.74	81863	5.89	300997	6.90	189981	8.33	336437	9.80	322534	12.86	294858	14.49
10M71455.D	AD07037-002(20X)(R)	38255	2.73	73342	5.89	268662	6.90	164649	8.33	292235	9.80	283025	12.86	263831	14.49
10M71456.D	SMB71480	39260	2.69	71553	5.89	265817	6.89	157237	8.33	290103	9.80	286817	12.86	259125	14.49
10M71457.D	SMB71481	38872	2.70	73295	5.89	266335	6.89	162478	8.33	294173	9.80	291991	12.86	277020	14.49
10M71458.D	SMB71480(MS)	36044	2.71	75473	5.89	276810	6.89	175960	8.33	311419	9.80	309669	12.86	286195	14.49
10M71459.D	AD07136-003	41251	2.70	79431	5.89	285711	6.89	178478	8.33	304096	9.80	319863	12.86	291423	14.49
10M71460.D	AD07136-003(MS)	42937	2.72	87372	5.89	311164	6.90	189222	8.33	347697	9.80	342555	12.86	313686	14.49
10M71461.D	AD07136-003(MSD)	39690	2.70	83743	5.89	310137	6.90	196273	8.33	345741	9.80	338499	12.86	312488	14.49
10M71462.D	AD07185-007	33444	2.72	67887	5.89	243548	6.89	147190	8.33	269399	9.80	271260	12.86	252215	14.49

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M105871.D

Method: EPA 625.1

Analysis Date/Time: 10/19/18 09:44

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	58769	2.52	104259	5.74	386643	6.75	221233	8.16	372057	9.62	373793	12.67	308966	14.28
Eval File Area Limit:	29384-117538		52130-208518		193322-773286		110616-442466		186028-744114		186896-747586		154483-617932	
Eval File RT Limit:	2.02-3.02		5.24-6.24		6.25-7.25		7.66-8.66		9.12-10.12		12.17-13.17		13.78-14.78	

Data File Sample		11		12		13		14		15		16		17	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
5M105872.D	WMB71471	62801	2.51	108305	5.74	387743	6.75	231707	8.16	381732	9.61	351287	12.66	277716	14.27
5M105877.D	AD07118-001	53505	2.51	99313	5.74	356006	6.75	202378	8.16	341916	9.62	315621	12.66	244091	14.27
5M105878.D	AD07118-003	44438	2.52	78955	5.74	297321	6.75	176851	8.16	291827	9.61	260032	12.66	202908	14.27
5M105879.D	AD07118-005	52067	2.52	95950	5.74	353356	6.75	201098	8.16	344266	9.62	305103	12.66	243639	14.28
5M105880.D	AD07118-007	46742	2.52	85075	5.74	308610	6.75	176127	8.16	297969	9.62	264163	12.66	213647	14.27
5M105881.D	WMB71479	53375	2.52	95199	5.74	348428	6.75	197359	8.16	329994	9.62	296073	12.66	236328	14.28
5M105885.D	AD07113-001(R)	51375	2.53	40744	5.75	348534	6.75	200555	8.16	338066	9.61	311823	12.66	257364	14.27
5M105886.D	AD07113-001(SX)(R)	57874	2.52	104018	5.74	384023	6.75	219859	8.16	325156	9.61	333709	12.66	276994	14.27
5M105894.D	AD07113-001(R)	54352	2.52	41095	5.75	362371	6.75	204003	8.16	344063	9.61	316251	12.66	259551	14.27

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8101509 0177

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M95305.D

Method: EPA 625.1

Analysis Date/Time: 10/19/18 09:41

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	80477	2.50	130844	5.74	485842	6.76	276201	8.17	477980	9.61	456743	12.64	394976	14.24
Eval File Area Limit:	40238-160954		65422-261688		242921-971684		138100-552402		238990-955960		228372-913486		197488-789952	
Eval File Rt Limit:	2-3		5-24-6-24		6-26-7-26		7-67-8-67		9-11-10-11		12-14-13-14		13-74-14-74	

Data File	Sample#	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M95306.D	WMB71479(MS)	85204	2.50	128861	5.74	456023	6.77	252821	8.20	436408	9.64	418283	12.65
7M95307.D	WMB71479	76749	2.51	125294	5.74	456198	6.75	254412	8.16	438656	9.60	395691	12.63
												329683	14.24

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
I3 =	Naphthalene-d8	I6 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M88660.D

Method: EPA 8270D

Analysis Date/Time: 10/19/18 16:02

Lab File ID: CAL BNA@50PPM

Eval File Area/RT	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area Limit:	21198	2.56	44404	5.79	172643	6.81	106798	8.24	184072	9.70	211692	12.76	191500	14.38
Eval File RT Limit:	10599-42396		22202-88808		86322-345286		53399-213596		92036-368144		105846-423384		95750-383000	
	2.06-3.06		5.29-6.29		6.31-7.31		7.74-8.74		9.2-10.2		12.26-13.26		13.88-14.88	

Data File	Sample	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
9M88661.D	AD07079-016	22750	2.54	44298	5.79	165698	6.80	100771	8.23	170168	9.69	185203	12.75	164294	14.38
9M88662.D	AD07079-017	24428	2.53	50193	5.79	187234	6.80	113470	8.23	194321	9.69	207411	12.75	180672	14.38
9M88663.D	AD07116-005	19724	2.54	40070	5.79	145491	6.80	90090	8.23	152522	9.69	164909	12.75	142596	14.38
9M88664.D	AD07116-003	26454	2.54	56595	5.79	211298	6.80	126955	8.23	211266	9.69	217868	12.75	186617	14.38
9M88665.D	SMB71480	25465	2.53	49794	5.79	190279	6.80	112904	8.23	191080	9.69	202679	12.75	175398	14.38
9M88666.D	SMB71481	25027	2.54	49076	5.79	183260	6.80	111955	8.23	190962	9.69	199137	12.75	175837	14.38
9M88667.D	AD07116-001	24248	2.54	48911	5.79	181809	6.80	110239	8.23	182285	9.69	188798	12.75	164342	14.38
9M88668.D	AD07116-002	23890	2.55	47628	5.79	177922	6.80	105800	8.23	177915	9.69	185588	12.75	165049	14.38
9M88669.D	AD07116-004	24636	2.54	48641	5.79	182430	6.80	108139	8.23	182869	9.70	187485	12.75	165711	14.38
9M88670.D	AD07079-013(3X)	26658	2.56	52987	5.79	197266	6.80	120043	8.23	198358	9.70	202707	12.75	180297	14.38
9M88671.D	AD07109-002	19288	2.54	40560	5.79	150607	6.80	89774	8.23	147586	9.70	153242	12.75	135982	14.38
9M88672.D	AD07079-004	23832	2.54	46595	5.79	172932	6.80	104567	8.23	173578	9.70	199814	12.76	181998	14.39
9M88673.D	AD07079-002(3X)	27813	2.56	55844	5.79	210377	6.80	124393	8.23	205532	9.70	242802	12.76	209692	14.39
9M88674.D	AD07079-003(3X)	26644	2.55	50770	5.79	194414	6.80	115234	8.23	194558	9.70	227176	12.76	190448	14.39
9M88675.D	07131-001	23921	2.55	58815	5.80	282918	6.82	178617	8.28	352219	9.75	248610	12.76	212370	14.38
9M88676.D	AD07136-001	31569	2.54	61274	5.79	227726	6.80	135987	8.23	224312	9.70	236189	12.76	217817	14.39
9M88677.D	AD07136-002	25463	2.54	52241	5.79	194381	6.81	114090	8.24	193105	9.70	204227	12.76	182546	14.38
9M88678.D	AD07136-004	27063	2.54	53914	5.79	195656	6.81	120055	8.23	199903	9.70	200394	12.76	175630	14.38
9M88679.D	AD07159-001	25075	2.54	50224	5.79	184700	6.80	109065	8.23	181130	9.70	196292	12.76	192592	14.39
9M88680.D	AD07161-002	24590	2.54	47005	5.79	172175	6.80	102214	8.23	171650	9.70	175677	12.76	151830	14.38
9M88681.D	AD07161-004	25633	2.54	54874	5.79	203338	6.81	120810	8.23	201432	9.70	209387	12.76	178080	14.38
9M88682.D	AD07161-006	28251	2.54	57294	5.79	212741	6.81	127475	8.24	211395	9.70	214859	12.76	180376	14.38
9M88683.D	AD07161-009	21960	2.54	45242	5.79	164715	6.81	99314	8.23	162455	9.70	169183	12.76	139012	14.38
9M88684.D	AD07177-001	24389	2.54	49763	5.79	183054	6.81	108444	8.24	179374	9.70	182706	12.76	148953	14.38
9M88685.D	AD07185-002	26697	2.55	52602	5.79	198136	6.81	117125	8.24	194950	9.70	196466	12.76	163129	14.38
9M88686.D	AD07185-004	24835	2.54	51934	5.79	190093	6.80	113221	8.24	189898	9.70	194271	12.76	161889	14.38
9M88687.D	AD07185-006	23356	2.54	47393	5.79	177748	6.81	105704	8.23	174618	9.70	175690	12.76	144404	14.38
9M88688.D	AD07185-001(3X)	27777	2.56	53882	5.79	201309	6.81	122092	8.24	199532	9.70	200077	12.76	164160	14.38
9M88689.D	AD07185-003(3X)	25651	2.56	55932	5.79	203781	6.81	121631	8.24	202027	9.70	203865	12.76	171347	14.38
9M88690.D	AD07185-006(3X)	28568	2.56	58371	5.79	218085	6.81	129827	8.24	214680	9.70	217572	12.76	177212	14.38
9M88691.D	AD07185-011(3X)	26338	2.56	52532	5.79	194819	6.81	114859	8.24	192741	9.70	192487	12.76	156162	14.38
9M88692.D	AD07152-001(10X)	27203	2.57	53131	5.79	196436	6.81	115576	8.24	192532	9.70	198453	12.76	165121	14.38

11 =	1,4-Dioxane-d8(NT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30ug/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M105896.D

Method: EPA 625.1

Analysis Date/Time: 10/22/18 07:52

Lab File ID: CAL_BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	65003	2.51	110898	5.74	411619	6.75	238931	8.16	397061	9.62	401600	12.67	327289	14.28
Eval File Area Limit:	32502-130006		55449-221796		205810-823238		119466-477862		198530-794122		200800-803200		163644-654578	
Eval File RI Limit:	2.01-3.01		5.24-6.24		6.25-7.25		7.66-8.66		9.12-10.12		12.17-13.17		13.78-14.78	

Sample	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
5M105897.D AD06939-001(T)	55340	2.53	94159	5.74	342580	6.75	201361	8.16	349049	9.61	324536	12.66	266462	14.27
5M105898.D AD06939-001(T)(MS)	47018	2.53	85659	5.74	314281	6.75	177913	8.16	304363	9.62	300611	12.67	238989	14.27
5M105899.D AD06939-001(T)(MSD)	54029	2.53	95427	5.74	350426	6.75	201098	8.16	335525	9.62	340534	12.67	281051	14.27
5M105905.D AD07137-001	50447	2.53	96060	5.74	360245	6.75	220703	8.16	375204	9.61	363492	12.66	309611	14.27
5M105906.D AD07137-003	48497	2.53	87458	5.74	328130	6.75	194871	8.16	327141	9.61	313048	12.66	261186	14.27
5M105907.D AD07137-005	48673	2.53	88289	5.74	333175	6.75	191004	8.16	317989	9.61	299350	12.66	246370	14.27
5M105911.D WMB71496(MS)	53644	2.53	95073	5.74	357106	6.75	205040	8.16	339251	9.62	340979	12.67	275093	14.28
5M105912.D AD07157-001(T)	54704	2.54	99050	5.74	362356	6.75	208147	8.16	348174	9.61	324001	12.66	278345	14.27
5M105913.D WMB71496	49980	2.53	88683	5.74	329308	6.75	189512	8.16	315681	9.61	284316	12.66	247939	14.27
5M105915.D AD07157-001(T)(MS)	58757	2.54	103720	5.74	377108	6.75	212341	8.16	359633	9.62	356032	12.67	306499	14.28
5M105916.D AD07157-001(T)(MSD)	54003	2.54	97716	5.74	358862	6.75	200373	8.16	346462	9.62	349478	12.67	287435	14.28

11 =	1,4-Dioxane-d8(I ^{NT})	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0101509 01800

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M71464.D

Analysis Date/Time: 10/22/18 07:45

Method: EPA 625.1

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT	56350	2.73	107070	5.89	369309	6.90	241193	8.33	417865	9.80	373431	12.86	395181	14.49
Eval File Area Limit	28175-112700		53535-214140		184654-738618		120596-482386		208932-835730		186716-746862		197590-790362	
Eval File Rt Limit	2.23-3.23		5.39-6.39		6.4-7.4		7.83-8.83		9.3-10.3		12.36-13.36		13.99-14.99	

Data File	Sample	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
10M71484.D	WMB71496	33945	2.73	65360	5.89	250678	6.89	146961	8.33	263382	9.80	269034	12.86
10M71486.D	AD07118-003(R)	38367	2.73	73622	5.89	267910	6.89	162276	8.33	295319	9.80	295092	12.86
												239128	14.49
												266400	14.49

11 =	1,4-Dioxane-d8(NT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0101509 0181

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M105924.D

Analysis Date/Time: 10/23/18 08:44

Method: EPA 625.1

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	59259	2.52	106413	5.74	398382	6.75	225614	8.16	384355	9.62	374643	12.67	311166	14.28
Eval File Area Limit:	29630-118518		53206-212826		199191-796764		112807-451228		192178-768710		187322-749286		155583-622332	
Eval File RT Limit:	2.02-3.02		5.24-6.24		6.25-7.25		7.66-8.66		9.12-10.12		12.17-13.17		13.78-14.78	

Data File	Sample														
5M105925.D	WMB71497(MS)	55324	2.50	96626	5.74	343299	6.75	201648	8.16	334137	9.62	338141	12.67	265110	14.28
5M105926.D	WMB71497	49014	2.50	88307	5.74	319914	6.75	196612	8.16	331403	9.61	305297	12.66	246575	14.27
5M105927.D	AD07161-001	52520	2.50	96344	5.74	351855	6.75	205521	8.16	354822	9.61	317341	12.66	262415	14.27
5M105928.D	AD07161-001(MS)	52526	2.50	94175	5.74	349064	6.75	201461	8.16	340989	9.62	335379	12.67	269230	14.28
5M105929.D	AD07161-001(MSD)	54034	2.50	99212	5.74	363582	6.75	215321	8.16	353822	9.62	352868	12.67	287142	14.28
5M105934.D	WMB71497	38942	2.50	72017	5.74	262490	6.75	156506	8.16	271473	9.61	235494	12.66	185181	14.27
5M105937.D	AD07249-006(TT)	51889	2.50	93824	5.74	356455	6.75	213593	8.16	356632	9.61	328023	12.66	267417	14.27

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration =5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M95311.D

Method: EPA 625.1

Analysis Date/Time: 10/23/18 08:34

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	79519	2.51	136612	5.75	496237	6.75	284638	8.17	500542	9.60	489701	12.64	426187	14.24
Eval File Area Limit:	39760-159038		68306-273224		248118-992474		142319-569276		250271-1001084		244850-979402		213094-852374	
Eval File RT Limit:	2.01-3.01		5.25-6.25		6.25-7.25		7.67-8.67		9.1-10.1		12.14-13.14		13.74-14.74	

Data File	Sample														
7M95312.D	WMB71479	80358	2.50	131913	5.74	485335	6.76	273527	8.19	463101	9.63	416401	12.64	340436	14.28
7M95313.D	WMB71497	65533	2.51	112394	5.74	417754	6.76	239452	8.17	414885	9.61	368977	12.64	303024	14.25

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M95315.D

Method: EPA 625.1

Analysis Date/Time: 10/24/18 08:33

Lab File ID: CAL_BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	78417	2.52	133949	5.75	493459	6.75	285348	8.16	495180	9.60	486476	12.64	421621	14.24
Eval File Area Limit:	39208-156834		66974-267898		246730-986918		142674-570696		247590-990360		243238-972952		210810-843242	
Eval File RT Limit:	2.02-3.02		5.25-6.25		6.25-7.25		7.66-8.66		9.1-10.1		12.14-13.14		13.74-14.74	

Data File	Sample														
7M95317.D	AD07161-003	62552	2.51	113168	5.74	427930	6.75	246296	8.16	432739	9.60	388957	12.63	324040	14.24
7M95318.D	AD07161-005	70367	2.51	121410	5.74	453598	6.75	257055	8.16	452810	9.60	417664	12.63	359918	14.24
7M95319.D	AD07161-007	70405	2.51	126377	5.75	486741	6.75	288028	8.16	492595	9.60	460839	12.63	393055	14.24
7M95320.D	AD07161-008	74911	2.52	132512	5.75	493868	6.75	280865	8.16	484573	9.60	445106	12.63	378627	14.24
7M95328.D	SMB71506	57314	2.51	97990	5.74	360014	6.76	194994	8.18	334073	9.61	293598	12.64	241056	14.24
7M95330.D	07165-015	0	0.00R	57997	5.74	332544	6.75	197761	8.16	351453	9.60	309422	12.63	252459	14.24

11 =	1,4-Dioxane-d8(NT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 µg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30µg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5µg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

A - Indicates the compound failed the internal standard area criteria

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Flags:

Internal Standard Areas

Method: EPA 625.1

Lab File ID: CAL BNA@50PPM

	Data File	Sample

5M105968.D	VMBE71518(MS)	56793	2.50	96693	5.74	350645	6.75	203886	8.16	333126	9.62	339276	12.67	269813	14.28
5M105969.D	VMBE71518	48114	2.51	87383	5.74	317573	6.75	184910	8.16	314659	9.61	282548	12.66	228386	14.27
5M105972.D	AD07252-002(T)	50722	2.53	91577	5.74	330226	6.75	185976	8.16	327996	9.61	296532	12.66	228345	14.27
5M105974.D	AD07252-002(T)(MS)	52133	2.53	91255	5.74	332638	6.75	186964	8.16	323556	9.62	320708	12.67	255035	14.28
5M105975.D	AD07252-002(T)(MSD	52659	2.53	93885	5.74	333688	6.75	196602	8.16	329988	9.62	325448	12.67	254994	14.28
5M105976.D	AD07161-001(R)	54483	2.50	99600	5.74	361602	6.75	211793	8.16	356255	9.61	333064	12.66	260633	14.27
5M105979.D	AD07294-001	48455	2.51	92427	5.74	337632	6.75	197166	8.16	335362	9.62	328060	12.66	264938	14.28
5M105980.D	VMBE71532	50708	2.51	95469	5.74	352993	6.75	208074	8.16	352395	9.61	326489	12.66	257269	14.27
5M105981.D	AD07204-001	55533	2.52	100584	5.74	370971	6.75	210316	8.16	351112	9.61	328929	12.66	273381	14.27

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.
Lower Limit = - 50% of internal standard area from daily cal or mid pt.

A - Indicates the compound failed the internal standard area criteria
R - Indicates the compound failed the internal standard retention time

Flags:

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

11 =	1,4-Dioxane-d8(NNT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 µg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30µg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration =5µg/L

FORM8**Internal Standard Areas**

Evaluation Std Data File: 5M105989.D

Method: EPA 625.1

Analysis Date/Time: 10/26/18 08:35

Lab File ID: CAL BNA@50PPM

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	58050	2.52	101726	5.74	371947	6.75	216928	8.16	357326	9.62	367827	12.67	305241	14.28
Eval File Area Limit:	29025-116100		50863-203452		185974-743894		108464-433856		178663-714652		183914-735654		152620-610482	
Eval File RT Limit:	2.02-3.02		5.24-6.24		6.25-7.25		7.66-8.66		9.12-10.12		12.17-13.17		13.78-14.78	

Data File	Sample														
5M105990.D	WMB71532(MS)	52087	2.52	87428	5.74	323718	6.75	186229	8.16	312919	9.62	312665	12.67	251671	14.28
5M105999.D	AD07294-001(MS)	48432	2.53	88458	5.74	326371	6.75	183440	8.16	310016	9.62	302461	12.66	241419	14.27
5M106000.D	AD07294-001(MSD)	52330	2.51	95345	5.74	353601	6.75	194831	8.16	337761	9.62	328507	12.67	271512	14.27
5M106001.D	WMB71537(MS)	55943	2.52	101296	5.74	368795	6.75	212734	8.16	357131	9.61	354457	12.67	283305	14.27
5M106003.D	AD07204-001(R)	53575	2.52	96329	5.74	347225	6.75	199658	8.16	341035	9.61	320084	12.66	260998	14.27
5M106005.D	WMB71537	51386	2.52	88584	5.74	343328	6.75	195521	8.16	329066	9.61	306680	12.66	253568	14.27
5M106007.D	AD07031-001(T)	46323	2.52	83203	5.74	309491	6.75	183714	8.16	300348	9.61	273502	12.66	214908	14.27
5M106008.D	AD07031-001(T)(MS)	47250	2.52	85812	5.74	308064	6.75	178884	8.16	297358	9.61	295270	12.66	228581	14.27
5M106009.D	AD07031-001(T)(MSD)	49268	2.52	88102	5.74	323470	6.75	189874	8.16	309296	9.61	305811	12.67	239673	14.27

11 =	1,4-Dioxane-d8(INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M95342.D

Method: EPA 625.1

Analysis Date/Time: 10/26/18 08:36

Lab File ID: CAL BNA@50PPM

11		12		13		14		15		16		17	
Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
79559	2.52	135075	5.75	495876	6.76	282515	8.17	500947	9.61	493917	12.64	429218	14.26
Eval File Area/RT:	39780-159118	67538-270150	247938-991752	141258-565030	250474-1001894	246958-987834	214609-858436						
Eval File RT Limit:	2.02-3.02	5.25-6.25	6.26-7.26	7.67-8.67	9.11-10.11	12.14-13.14	13.76-14.76						

Data File	Sample	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
7M95345.D	WMB71532	81933	2.50	142613	5.74	533613	6.76	311260	8.17	552359	9.61	507660	12.63
7M95353.D	AD07161-003(R)	59533	2.51	102400	5.74	378587	6.75	212623	8.16	369218	9.60	337633	12.63
7M95354.D	AD07161-005(R)	67471	2.52	113193	5.74	410544	6.75	227004	8.17	384063	9.60	365524	12.63
7M95355.D	AD07161-007(R)	76086	2.51	120082	5.74	434760	6.76	241640	8.17	416506	9.61	385366	12.63
7M95356.D	AD07161-008(R)	74695	2.50	130977	5.74	474974	6.76	272873	8.17	472791	9.61	429667	12.64
7M95357.D	WMB71537	74248	2.50	126420	5.74	463458	6.75	257943	8.16	450538	9.60	410775	12.63
												351085	14.25

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

11 =	1,4-Dioxane-d8 (INT)	14 =	Acenaphthene-d10	17 =	Perylene-d12	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	1,4-Dichlorobenzene-d4	15 =	Phenanthrene-d10			624/8260 Internal Standard concentration = 30mg/L
13 =	Naphthalene-d8	16 =	Chrysene-d12			524 Internal Standard concentration = 5mg/L

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Base Neutral/Acid Extractable Data
Sample Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-001

Client Id: LMW-2-102018 U

Data File: 5M105877.D

Analysis Date: 10/19/18 12:44

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 970ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3&4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

8101509 0189

SampleID : AD07118-001
 Data File: 5M105877.D
 Acq On : 10/19/18 12:44

Operator : AH/JB
 Sam Mult : 1 Vial# : 8
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/19/18 14:56
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

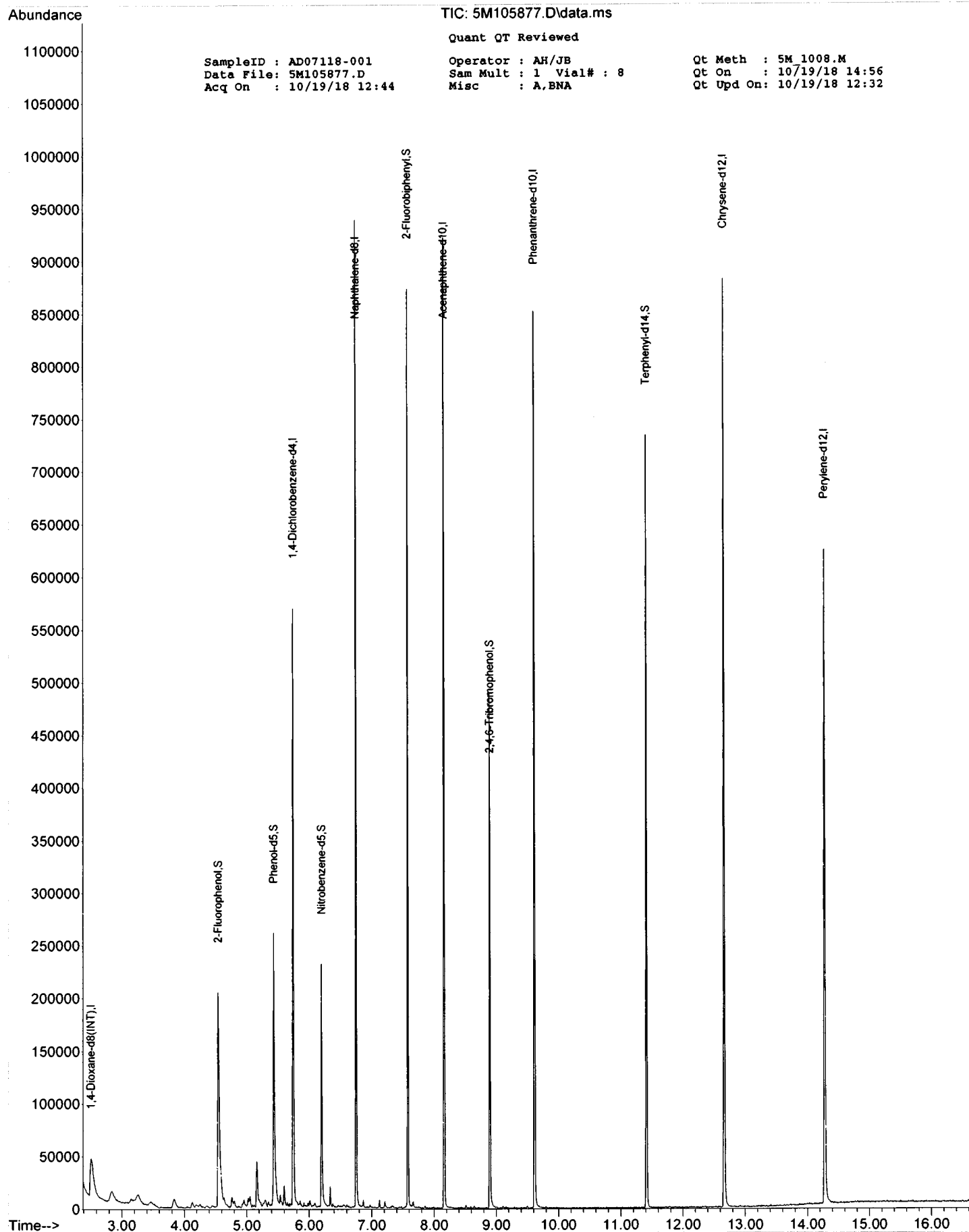
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	53505	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	99313	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	356006	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	202378	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	341916	40.00	ng	0.00
91) Chrysene-d12	12.661	240	315621	40.00	ng	0.00
103) Perylene-d12	14.274	264	244091	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	112734	40.59	ng	0.00
Spiked Amount 100.000			Recovery	=	40.59%	
16) Phenol-d5	5.433	99	115077	26.86	ng	0.00
Spiked Amount 100.000			Recovery	=	26.86%	
32) Nitrobenzene-d5	6.197	128	33510	31.90	ng	0.00
Spiked Amount 50.000			Recovery	=	63.80%	
55) 2-Fluorobiphenyl	7.580	172	225488	34.83	ng	0.00
Spiked Amount 50.000			Recovery	=	69.66%	
80) 2,4,6-Tribromophenol	8.900	330	42440	65.98	ng	0.00
Spiked Amount 100.000			Recovery	=	65.98%	
94) Terphenyl-d14	11.411	244	215600	42.71	ng	0.00
Spiked Amount 50.000			Recovery	=	85.42%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-003

Client Id: PC-1-10 2018 U

Data File: 5M105878.D

Analysis Date: 10/19/18 13:08

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

8101509 0192

SampleID : AD07118-003
 Data File: 5M105878.D
 Acq On : 10/19/18 13:08

Operator : AH/JB
 Sam Mult : 1 Vial# : 9
 Misc : A,BNA

Qt Meth : 5M_1000.M
 Qt On : 10/19/18 14:57
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.521	96	44438	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	78955	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	297321	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	176851	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	291827	40.00	ng	0.00
91) Chrysene-d12	12.661	240	260032	40.00	ng	0.00
103) Perylene-d12	14.274	264	202908	40.00	ng	0.00

System Monitoring Compounds

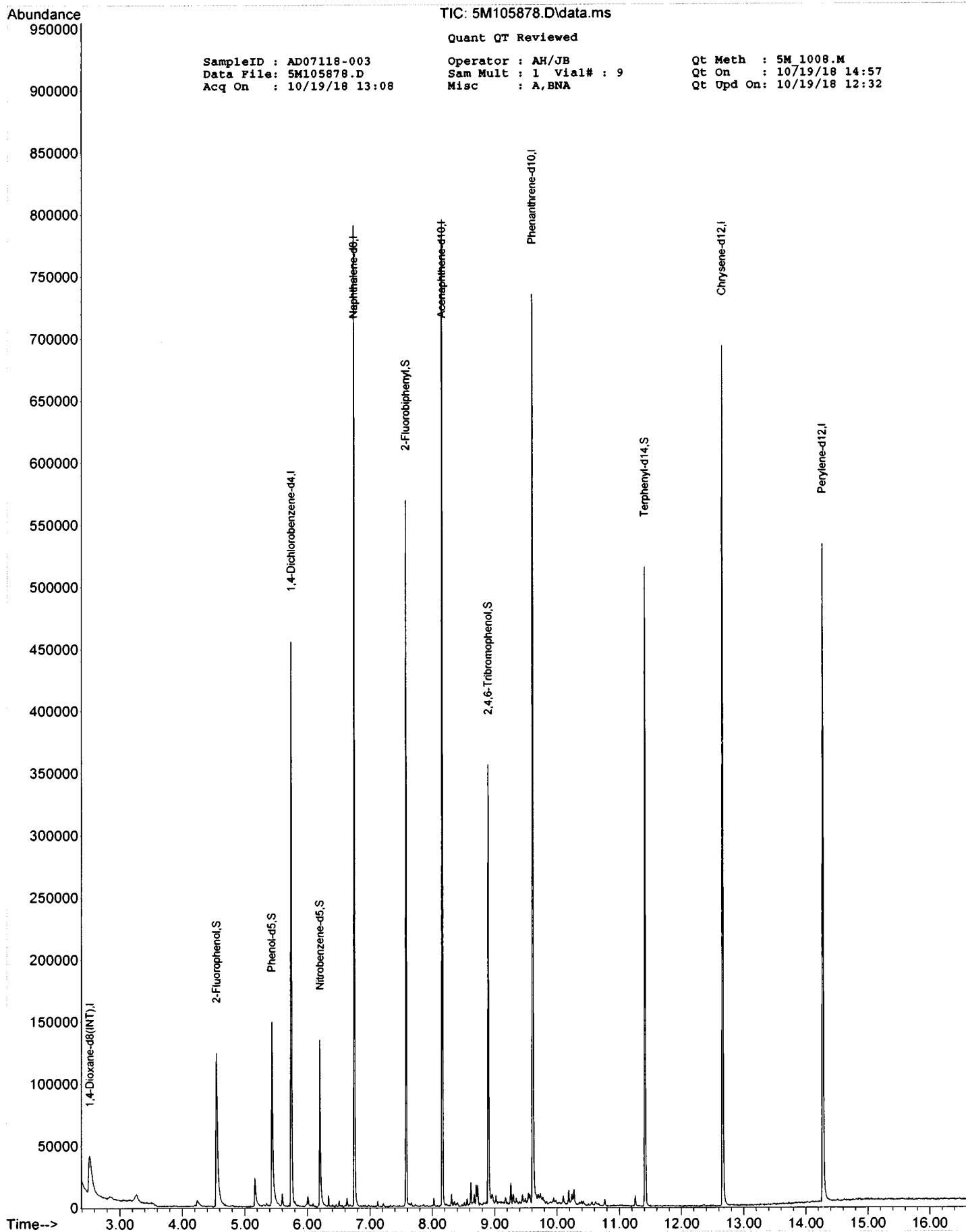
11) 2-Fluorophenol	4.546	112	70354	30.50	ng	0.00
Spiked Amount 100.000			Recovery	=	30.50%	
16) Phenol-d5	5.433	99	75461	21.21	ng	0.00
Spiked Amount 100.000			Recovery	=	21.21%	
32) Nitrobenzene-d5	6.197	128	20214	23.04	ng	0.00
Spiked Amount 50.000			Recovery	=	46.08%	
55) 2-Fluorobiphenyl	7.580	172	151903	26.85	ng	0.00
Spiked Amount 50.000			Recovery	=	53.70%	
80) 2,4,6-Tribromophenol	8.894	330	29758	54.98	ng	0.00
Spiked Amount 100.000			Recovery	=	54.98%	
94) Terphenyl-d14	11.411	244	149324	35.90	ng	0.00
Spiked Amount 50.000			Recovery	=	71.80%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-005

Client Id: GW-DUP1-102018 U

Data File: 5M105879.D

Analysis Date: 10/19/18 13:31

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : AD07118-005
 Data File: 5M105879.D
 Acq On : 10/19/18 13:31

Operator : AH/JB
 Sam Mult : 1 Vial# : 10
 Misc : A,BNA

Qt Meth : 5M_1000.M
 Qt On : 10/19/18 14:57
 Qt Upd On: 10/19/18 12:32

8101509 0195

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

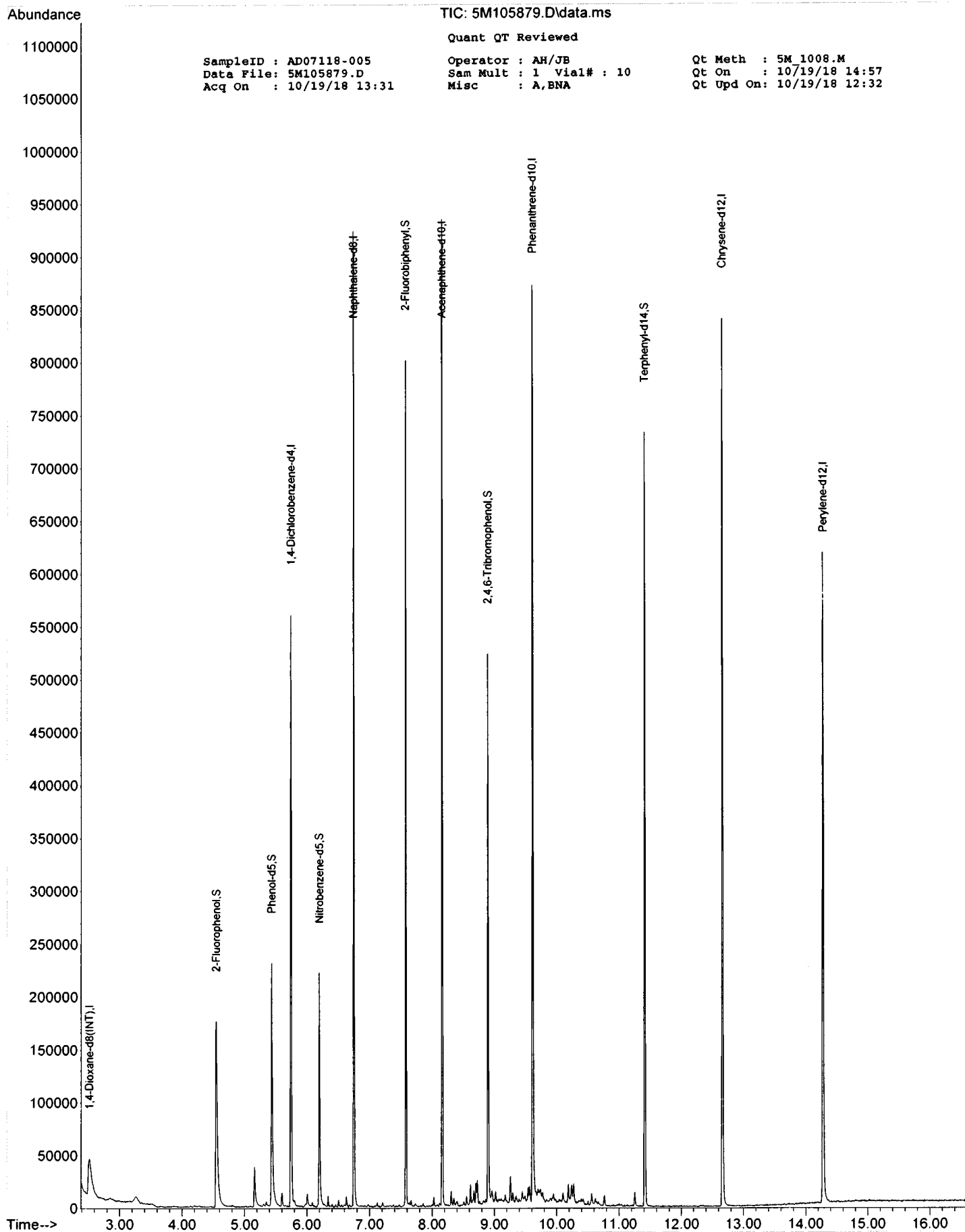
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.521	96	52067	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	95950	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	353356	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	201098	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	344266	40.00	ng	0.00
91) Chrysene-d12	12.661	240	305103	40.00	ng	0.00
103) Perylene-d12	14.279	264	243639	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	96857	35.83	ng	0.00
Spiked Amount 100.000			Recovery	=	35.83%	
16) Phenol-d5	5.433	99	102040	24.48	ng	0.00
Spiked Amount 100.000			Recovery	=	24.48%	
32) Nitrobenzene-d5	6.196	128	31724	30.42	ng	0.00
Spiked Amount 50.000			Recovery	=	60.84%	
55) 2-Fluorobiphenyl	7.580	172	216369	33.64	ng	0.00
Spiked Amount 50.000			Recovery	=	67.28%	
80) 2,4,6-Tribromophenol	8.894	330	43558	67.15	ng	0.00
Spiked Amount 100.000			Recovery	=	67.15%	
94) Terphenyl-d14	11.410	244	214552	43.96	ng	0.00
Spiked Amount 50.000			Recovery	=	87.92%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07118-007

Client Id: MW-11-102018 U

Data File: 5M105880.D

Analysis Date: 10/19/18 13:55

Date Rec/Extracted: 10/15/18-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	0.56
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0.56

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : AD07118-007
 Data File: 5M105880.D
 Acq On : 10/19/18 13:55

Operator : AH/JB
 Sam Mult : 1 Vial# : 11
 Misc : A,BNA

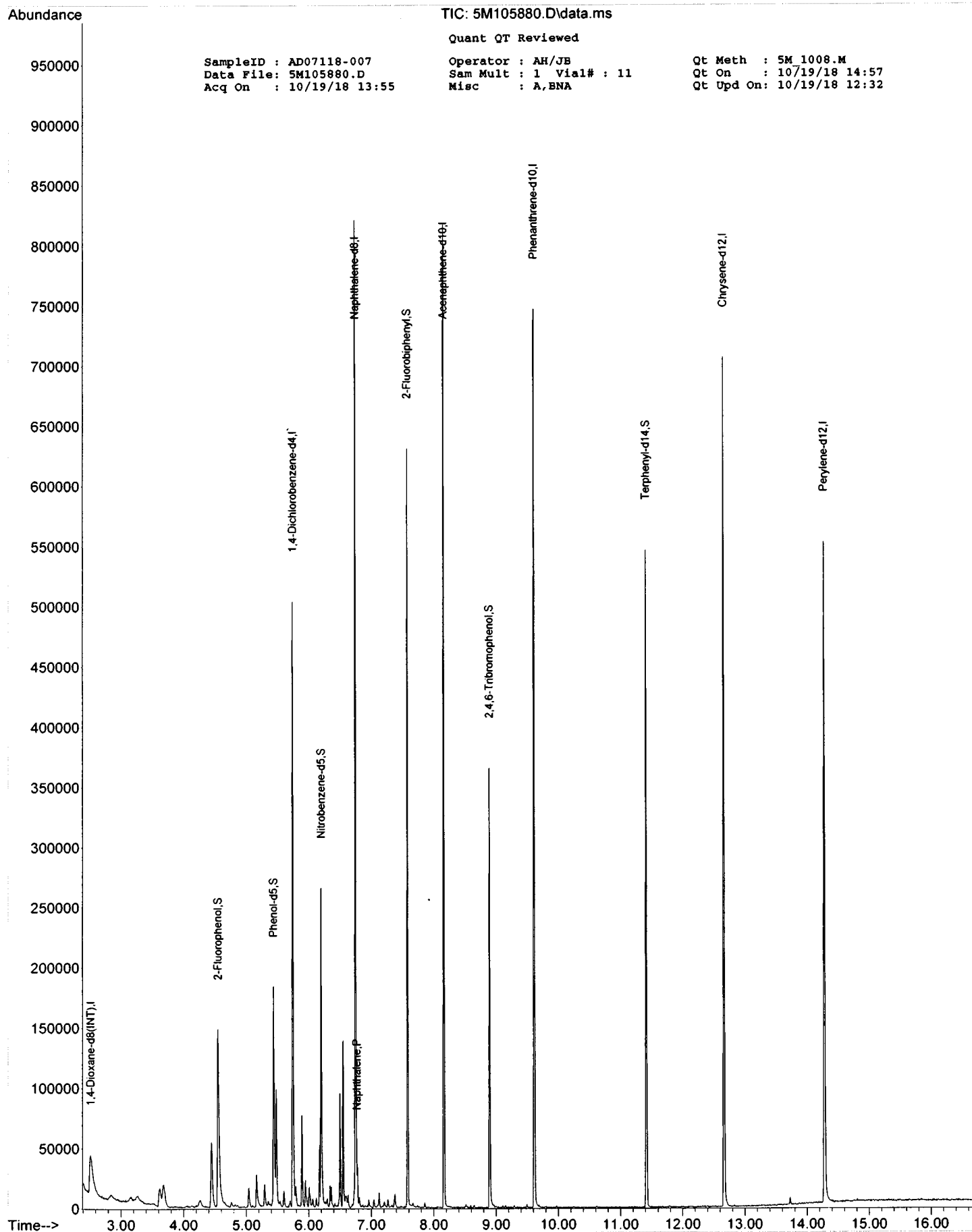
Qt Meth : 5M_1008.M
 Qt On : 10/19/18 14:57
 Qt Upd On: 10/19/18 12:32

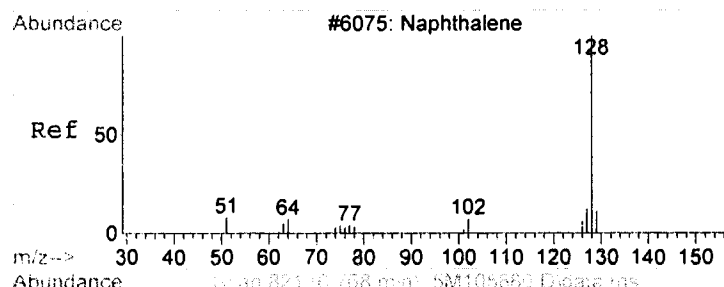
Data Path : G:\GcMsData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.516	96	46742	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	85075	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	308610	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	176127	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	297969	40.00	ng	0.00
91) Chrysene-d12	12.661	240	264163	40.00	ng	0.00
103) Perylene-d12	14.274	264	213647	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	79971	32.96	ng	0.00
Spiked Amount 100.000			Recovery =	32.96%		
16) Phenol-d5	5.433	99	82200	21.97	ng	0.00
Spiked Amount 100.000			Recovery =	21.97%		
32) Nitrobenzene-d5	6.197	128	26977	29.62	ng	0.00
Spiked Amount 50.000			Recovery =	59.24%		
55) 2-Fluorobiphenyl	7.580	172	168619	29.93	ng	0.00
Spiked Amount 50.000			Recovery =	59.86%		
80) 2,4,6-Tribromophenol	8.894	330	31575	56.99	ng	0.00
Spiked Amount 100.000			Recovery =	56.99%		
94) Terphenyl-d14	11.411	244	158235	37.45	ng	0.00
Spiked Amount 50.000			Recovery =	74.90%		
Target Compounds						
41) Naphthalene	6.768	128	9212m	1.1163	ng	Qvalue

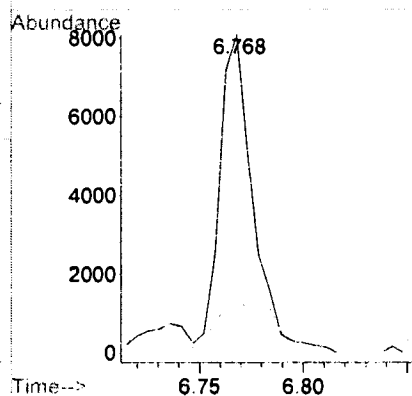
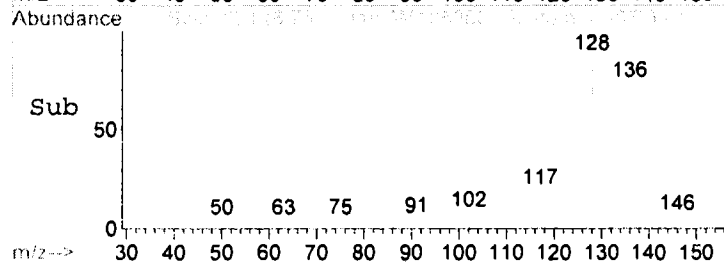
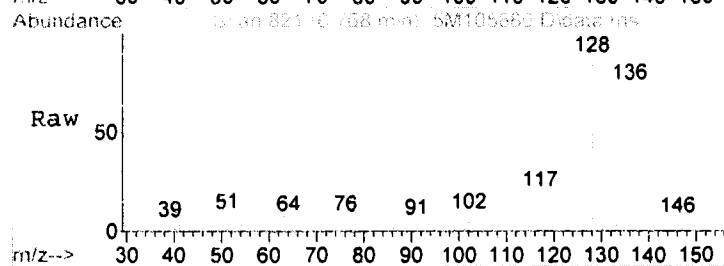
(#) = qualifier out of range (m) = manual integration (+) = signals summed





#41
Naphthalene
Concen: 1.12 ng m
RT: 6.768 min Scan# 821
Delta R.T. 0.001 min
Lab File: 5M105880.D
Acq: 19 Oct 2018 13:55

Tgt Ion	128	129	127
Ion Ratio	100	17.1	13.7
Resp	9212	0.0	0.0
Lower		50.9	52.4
Upper			



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-001

Client Id: LMW-4-102018 U

Data File: 5M105905.D

Analysis Date: 10/22/18 11:41

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

8101509 0202

SampleID : AD07137-001
 Data File: 5M105905.D
 Acq On : 10/22/18 11:41

Operator : AH/JB
 Sam Mult : 1 Vial# : 11
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/22/18 11:57
 Qt Upd On: 10/19/18 12:32

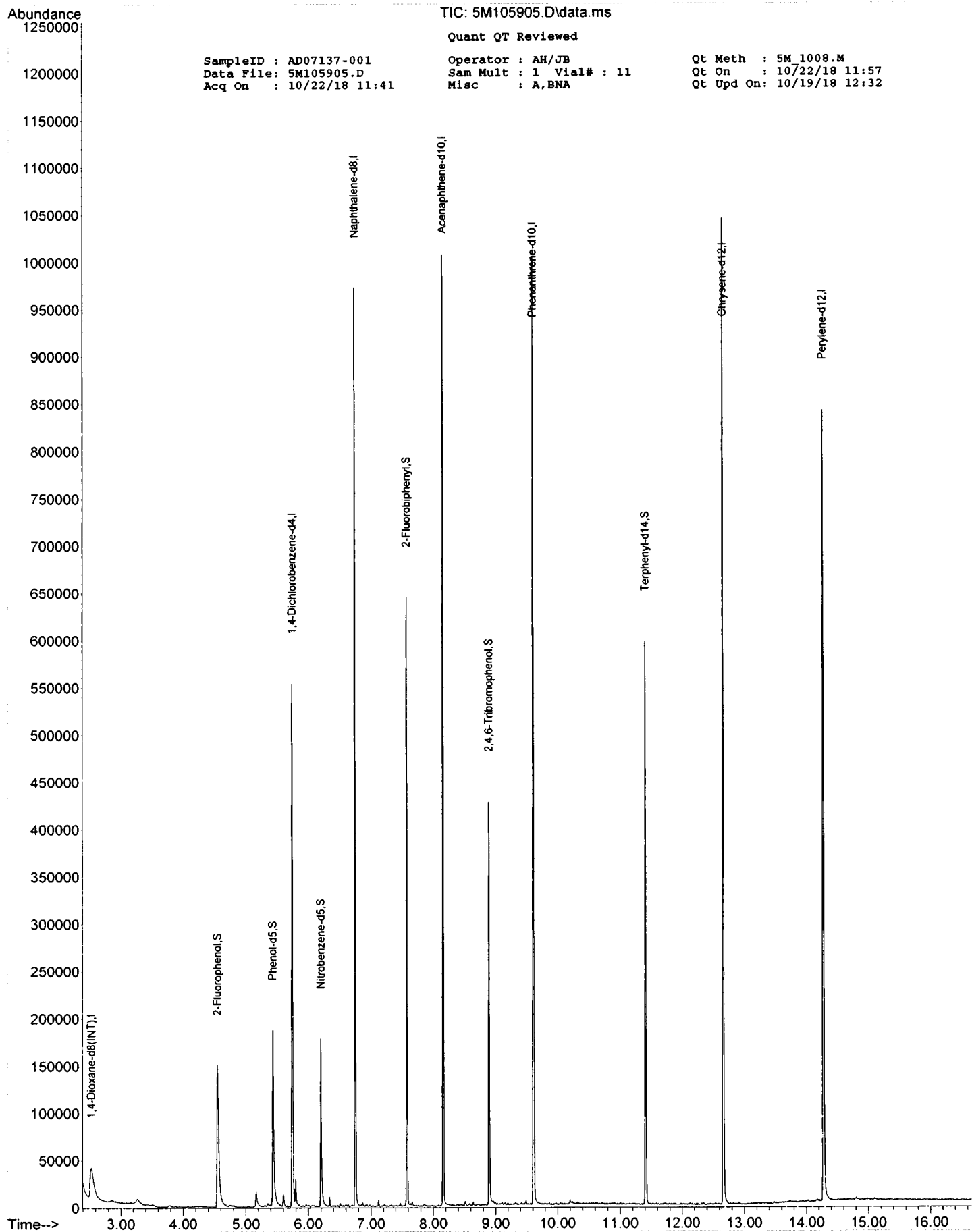
Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	50447	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	96060	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	360245	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	220703	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	375204	40.00	ng	0.00
91) Chrysene-d12	12.660	240	363492	40.00	ng	0.00
103) Perylene-d12	14.274	264	309611	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	85662	32.71	ng	0.00
Spiked Amount 100.000			Recovery =	32.71%		
16) Phenol-d5	5.432	99	87753	21.73	ng	0.00
Spiked Amount 100.000			Recovery =	21.73%		
32) Nitrobenzene-d5	6.196	128	25374	23.87	ng	0.00
Spiked Amount 50.000			Recovery =	47.74%		
55) 2-Fluorobiphenyl	7.580	172	180920	25.63	ng	0.00
Spiked Amount 50.000			Recovery =	51.26%		
80) 2,4,6-Tribromophenol	8.894	330	35739	51.59	ng	0.00
Spiked Amount 100.000			Recovery =	51.59%		
94) Terphenyl-d14	11.410	244	172162	29.61	ng	0.00
Spiked Amount 50.000			Recovery =	59.22%		
Target Compounds						
						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-003

Client Id: PC-2-102018 U

Data File: 5M105906.D

Analysis Date: 10/22/18 12:04

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD07137-003
 Data File: 5M105906.D
 Acq On : 10/22/18 12:04

Operator : AH/JB
 Sam Mult : 1 Vial# : 12
 Misc : A,BNA

Qt Meth : 5M_100
 Qt On : 10/22/18 12:30
 Qt Upd On: 10/19/18 12:32

8101509 0205

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

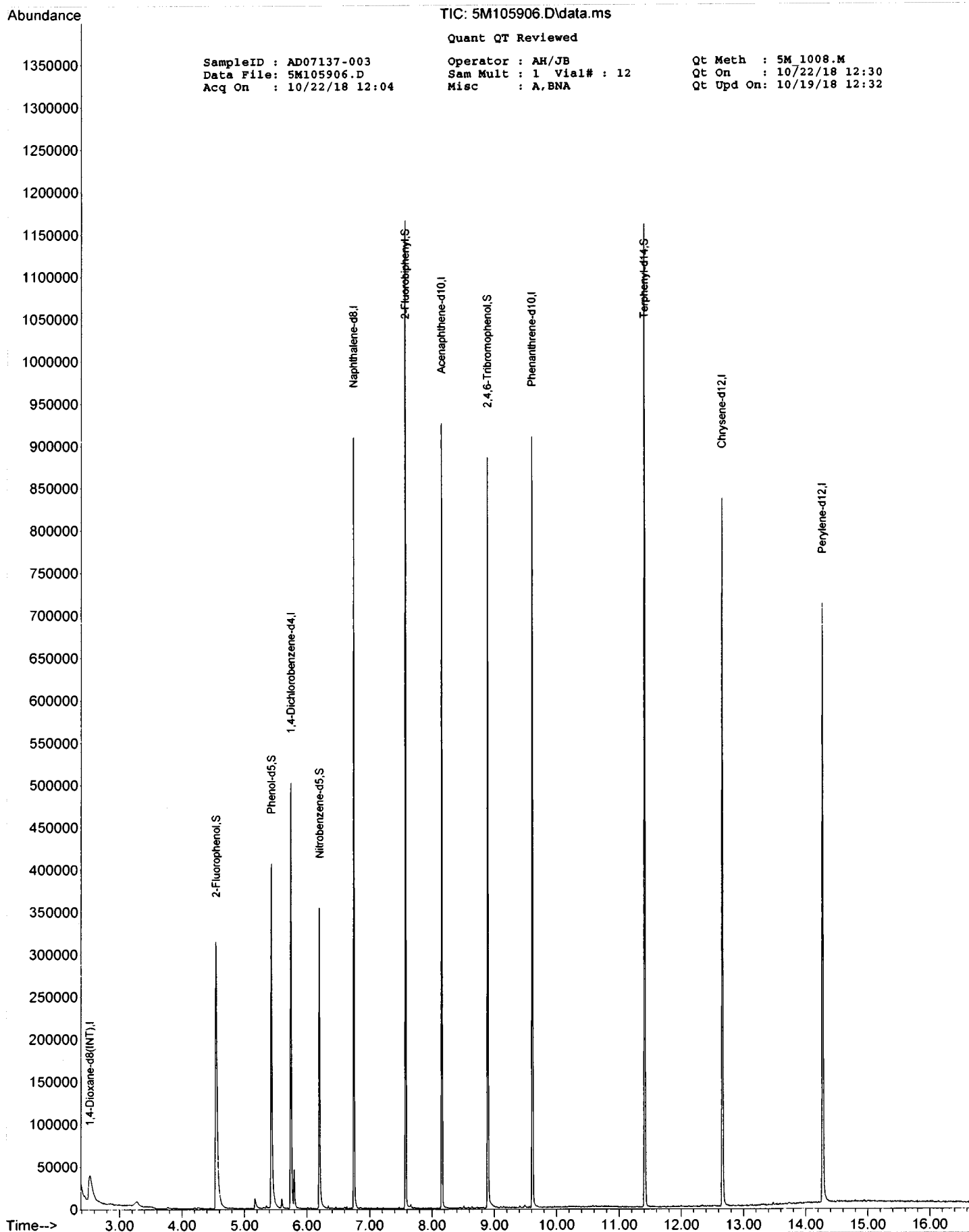
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	48497	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	87458	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	328130	40.00	ng	0.00
50) Acenaphthene-d10	8.157	164	194871	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	327141	40.00	ng	0.00
91) Chrysene-d12	12.661	240	313048	40.00	ng	0.00
103) Perylene-d12	14.274	264	261186	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	176824	70.23	ng	0.00
Spiked Amount 100.000			Recovery	=	70.23%	
16) Phenol-d5	5.433	99	183308	47.21	ng	0.00
Spiked Amount 100.000			Recovery	=	47.21%	
32) Nitrobenzene-d5	6.197	128	51263	52.94	ng	0.00
Spiked Amount 50.000			Recovery	=	105.88%	
55) 2-Fluorobiphenyl	7.580	172	340862	54.69	ng	0.00
Spiked Amount 50.000			Recovery	=	109.38%	
80) 2,4,6-Tribromophenol	8.894	330	74217	113.60	ng	0.00
Spiked Amount 100.000			Recovery	=	113.60%	
94) Terphenyl-d14	11.411	244	339298	67.76	ng	0.00
Spiked Amount 50.000			Recovery	=	135.52%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07137-005

Client Id: PC-3-102018 U

Data File: 5M105907.D

Analysis Date: 10/22/18 12:28

Date Rec/Extracted: 10/16/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD07137-005
 Data File: 5M105907.D
 Acq On : 10/22/18 12:28

Operator : AH/JB
 Sam Mult : 1 Vial# : 13
 Misc : A,BNA

Qt Meth : 5M_1000
 Qt On : 10/22/18 13:01
 Qt Upd On: 10/19/18 12:32

8101509 0208

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	48673	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	88289	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	333175	40.00	ng	0.00
50) Acenaphthene-d10	8.157	164	191004	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	317989	40.00	ng	0.00
91) Chrysene-d12	12.660	240	299350	40.00	ng	0.00
103) Perylene-d12	14.274	264	246370	40.00	ng	0.00

System Monitoring Compounds

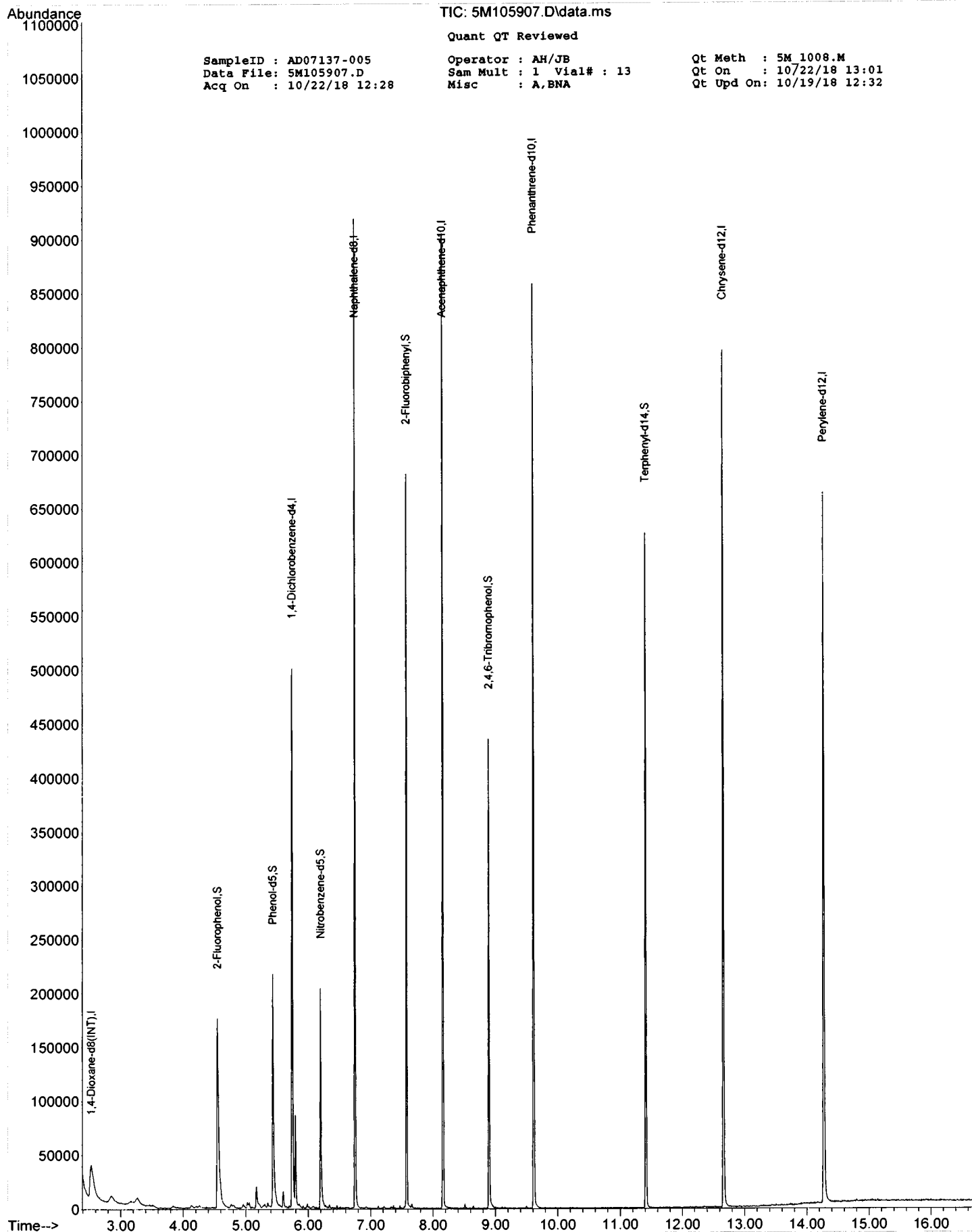
11) 2-Fluorophenol	4.546	112	98095	38.82	ng	0.00
Spiked Amount 100.000			Recovery	=	38.82%	
16) Phenol-d5	5.432	99	96847	24.85	ng	0.00
Spiked Amount 100.000			Recovery	=	24.85%	
32) Nitrobenzene-d5	6.196	128	29330	29.83	ng	0.00
Spiked Amount 50.000			Recovery	=	59.66%	
55) 2-Fluorobiphenyl	7.580	172	199729	32.69	ng	0.00
Spiked Amount 50.000			Recovery	=	65.38%	
80) 2,4,6-Tribromophenol	8.894	330	37597	63.08	ng	0.00
Spiked Amount 100.000			Recovery	=	63.08%	
94) Terphenyl-d14	11.410	244	185804	38.80	ng	0.00
Spiked Amount 50.000			Recovery	=	77.60%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-001(R)

Client Id: SW-1-102018

Data File: 5M105976.D

Analysis Date: 10/25/18 13:19

Date Rec/Extracted: 10/17/18-10/24/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 400ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	2.5	U	50-32-8	Benzo[a]pyrene	2.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	2.5	U	205-99-2	Benzo[b]fluoranthene	2.5	U
123-91-1	1,4-Dioxane	0.62	U	191-24-2	Benzo[g,h,i]perylene	2.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	2.5	U	207-08-9	Benzo[k]fluoranthene	2.5	U
95-95-4	2,4,5-Trichlorophenol	2.5	U	111-91-1	bis(2-Chloroethoxy)methane	2.5	U
88-06-2	2,4,6-Trichlorophenol	2.5	U	111-44-4	bis(2-Chloroethyl)ether	0.62	U
120-83-2	2,4-Dichlorophenol	0.62	U	108-60-1	bis(2-chloroisopropyl)ether	2.5	U
105-67-9	2,4-Dimethylphenol	0.62	U	117-81-7	bis(2-Ethylhexyl)phthalate	2.5	U
51-28-5	2,4-Dinitrophenol	12	U	85-68-7	Butylbenzylphthalate	2.5	U
121-14-2	2,4-Dinitrotoluene	2.5	U	105-60-2	Caprolactam	2.5	U
606-20-2	2,6-Dinitrotoluene	2.5	U	86-74-8	Carbazole	2.5	U
91-58-7	2-Chloronaphthalene	2.5	U	218-01-9	Chrysene	2.5	U
95-57-8	2-Chlorophenol	2.5	U	53-70-3	Dibenzo[a,h]anthracene	2.5	U
91-57-6	2-Methylnaphthalene	2.5	U	132-64-9	Dibenzofuran	0.62	U
95-48-7	2-Methylphenol	0.62	U	84-66-2	Diethylphthalate	2.5	U
88-74-4	2-Nitroaniline	2.5	U	131-11-3	Dimethylphthalate	2.5	U
88-75-5	2-Nitrophenol	2.5	U	84-74-2	Di-n-butylphthalate	0.62	U
106-44-5	3&4-Methylphenol	0.62	U	117-84-0	Di-n-octylphthalate	2.5	U
91-94-1	3,3'-Dichlorobenzidine	2.5	U	206-44-0	Fluoranthene	2.5	U
99-09-2	3-Nitroaniline	2.5	U	86-73-7	Fluorene	2.5	U
534-52-1	4,6-Dinitro-2-methylphenol	12	U	118-74-1	Hexachlorobenzene	2.5	U
101-55-3	4-Bromophenyl-phenylether	2.5	U	87-68-3	Hexachlorobutadiene	2.5	U
59-50-7	4-Chloro-3-methylphenol	2.5	U	77-47-4	Hexachlorocyclopentadiene	2.5	U
106-47-8	4-Chloroaniline	0.62	U	67-72-1	Hexachloroethane	2.5	U
7005-72-3	4-Chlorophenyl-phenylether	2.5	U	193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U
100-01-6	4-Nitroaniline	2.5	U	78-59-1	Isophorone	2.5	U
100-02-7	4-Nitrophenol	2.5	U	91-20-3	Naphthalene	0.62	U
83-32-9	Acenaphthene	2.5	U	98-95-3	Nitrobenzene	2.5	U
208-96-8	Acenaphthylene	2.5	U	621-64-7	N-Nitroso-di-n-propylamine	0.62	U
98-86-2	Acetophenone	2.5	U	86-30-6	n-Nitrosodiphenylamine	2.5	U
120-12-7	Anthracene	2.5	U	87-86-5	Pentachlorophenol	12	U
1912-24-9	Atrazine	2.5	U	85-01-8	Phenanthrene	2.5	U
100-52-7	Benzaldehyde	2.5	U	108-95-2	Phenol	2.5	U
56-55-3	Benzo[a]anthracene	2.5	U	129-00-0	Pyrene	2.5	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of a-Chlordane and γ-Chlordane.

SampleID : AD07161-001(R)
 Data File: 5M105976.D
 Acq On : 10/25/18 13:19

Operator : AH/JB
 Sam Mult : 1 Vial# : 11
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/25/18 13:47
 Qt Upd On: 10/25/18 12:46

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-25-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	54483	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	99600	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	361602	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	211793	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	356255	40.00	ng	0.00
91) Chrysene-d12	12.661	240	333064	40.00	ng	0.00
103) Perylene-d12	14.274	264	260633	40.00	ng	0.00

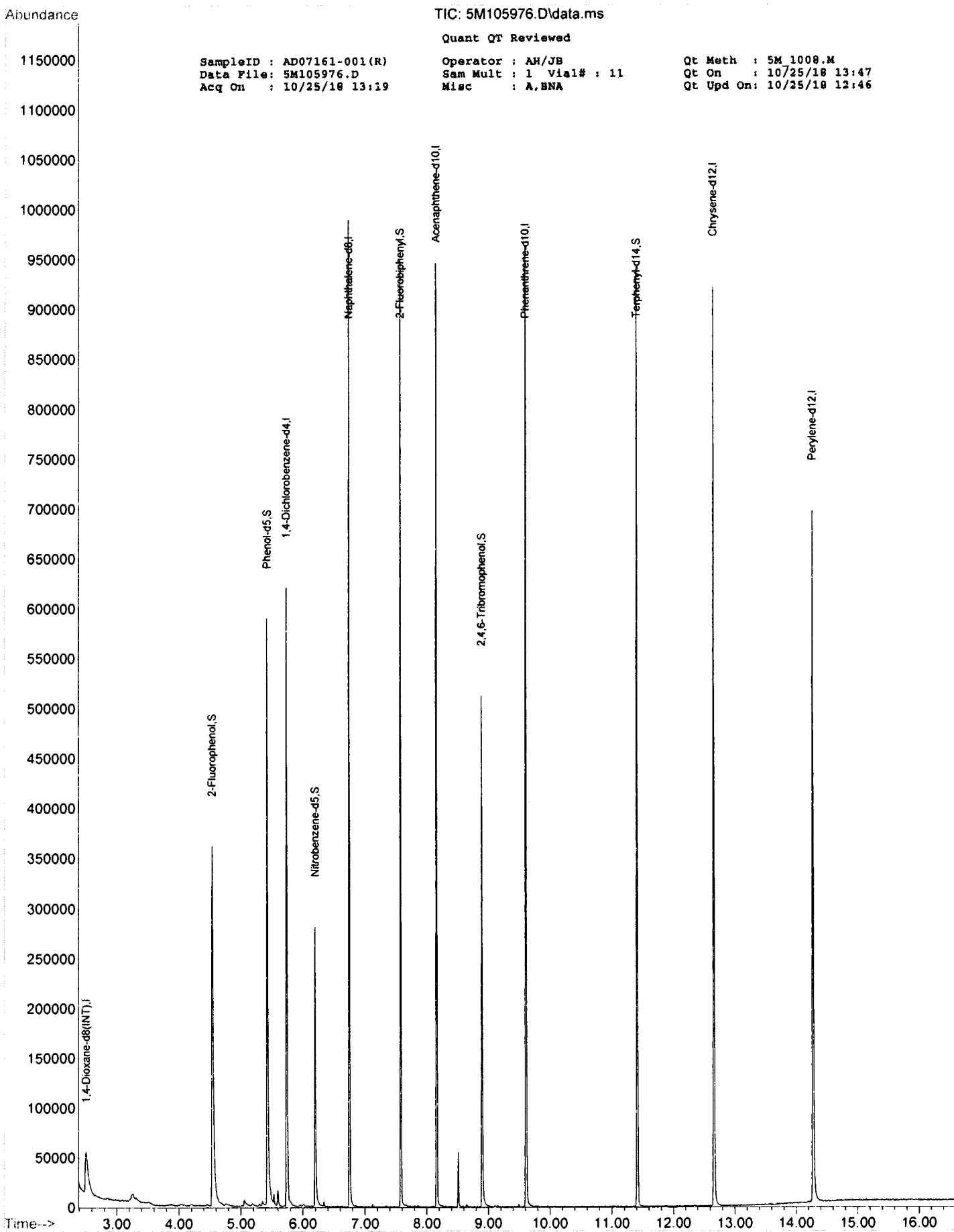
System Monitoring Compounds

11) 2-Fluorophenol	4.535	112	177570	62.78	ng	0.00
Spiked Amount 100.000			Recovery =	62.78%		
16) Phenol-d5	5.427	99	232217	53.24	ng	0.00
Spiked Amount 100.000			Recovery =	53.24%		
32) Nitrobenzene-d5	6.196	128	42603	39.92	ng	0.00
Spiked Amount 50.000			Recovery =	79.84%		
55) 2-Fluorobiphenyl	7.580	172	274504	40.52	ng	0.00
Spiked Amount 50.000			Recovery =	81.04%		
80) 2,4,6-Tribromophenol	8.894	330	43105	64.44	ng	0.00
Spiked Amount 100.000			Recovery =	64.44%		
94) Terphenyl-d14	11.410	244	276629	51.92	ng	0.00
Spiked Amount 50.000			Recovery =	103.84%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-002

Client Id: SD-1-102018

Data File: 9M88680.D

Analysis Date: 10/20/18 00:07

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 36

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.093	U	50-32-8	Benzo[a]pyrene	0.093	0.21
95-94-3	1,2,4,5-Tetrachlorobenzene	0.093	U	205-99-2	Benzo[b]fluoranthene	0.093	0.31
191-24-2	Benzo[g,h,i]perylene	0.093	0.14	58-90-2	2,3,4,6-Tetrachlorophenol	0.093	U
207-08-9	Benzo[k]fluoranthene	0.093	0.10	95-95-4	2,4,5-Trichlorophenol	0.093	U
111-91-1	bis(2-Chloroethoxy)methan	0.093	U	88-06-2	2,4,6-Trichlorophenol	0.093	U
111-44-4	bis(2-Chloroethyl)ether	0.023	U	120-83-2	2,4-Dichlorophenol	0.023	U
108-60-1	bis(2-chloroisopropyl)ether	0.093	U	105-67-9	2,4-Dimethylphenol	0.023	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.093	U	51-28-5	2,4-Dinitrophenol	0.46	U
85-68-7	Butylbenzylphthalate	0.093	U	121-14-2	2,4-Dinitrotoluene	0.093	U
105-60-2	Caprolactam	0.093	U	606-20-2	2,6-Dinitrotoluene	0.093	U
86-74-8	Carbazole	0.093	U	91-58-7	2-Chloronaphthalene	0.093	U
218-01-9	Chrysene	0.093	0.23	95-57-8	2-Chlorophenol	0.093	U
53-70-3	Dibenzo[a,h]anthracene	0.093	U	91-57-6	2-Methylnaphthalene	0.093	U
132-64-9	Dibenzofuran	0.023	U	95-48-7	2-Methylphenol	0.023	U
84-66-2	Diethylphthalate	0.093	U	88-74-4	2-Nitroaniline	0.093	U
131-11-3	Dimethylphthalate	0.093	U	88-75-5	2-Nitrophenol	0.093	U
84-74-2	Di-n-butylphthalate	0.023	U	106-44-5	3&4-Methylphenol	0.023	U
117-84-0	Di-n-octylphthalate	0.093	U	91-94-1	3,3'-Dichlorobenzidine	0.093	U
206-44-0	Fluoranthene	0.093	0.35	99-09-2	3-Nitroaniline	0.093	U
86-73-7	Fluorene	0.093	U	534-52-1	4,6-Dinitro-2-methylphenol	0.46	U
118-74-1	Hexachlorobenzene	0.093	U	101-55-3	4-Bromophenyl-phenylether	0.093	U
87-68-3	Hexachlorobutadiene	0.093	U	59-50-7	4-Chloro-3-methylphenol	0.093	U
77-47-4	Hexachlorocyclopentadiene	0.093	U	106-47-8	4-Chloroaniline	0.023	U
67-72-1	Hexachloroethane	0.093	U	7005-72-3	4-Chlorophenyl-phenylether	0.093	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.093	0.12	100-01-6	4-Nitroaniline	0.093	U
78-59-1	Isophorone	0.093	U	100-02-7	4-Nitrophenol	0.093	U
91-20-3	Naphthalene	0.023	U	83-32-9	Acenaphthene	0.093	U
98-95-3	Nitrobenzene	0.093	U	208-96-8	Acenaphthylene	0.093	U
621-64-7	N-Nitroso-di-n-propylamine	0.023	U	98-86-2	Acetophenone	0.093	U
86-30-6	n-Nitrosodiphenylamine	0.093	U	120-12-7	Anthracene	0.093	U
87-86-5	Pentachlorophenol	0.46	U	1912-24-9	Atrazine	0.093	U
85-01-8	Phenanthrene	0.093	0.16	100-52-7	Benzaldehyde	0.093	U
108-95-2	Phenol	0.093	U	56-55-3	Benzo[a]anthracene	0.093	0.16
129-00-0	Pyrene	0.093	0.35				

Worksheet #: 489030

Total Target Concentration 2.1

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

SampleID : AD07161-002
 Data File: 9M88680.D
 Acq On : 10/20/18 00:07

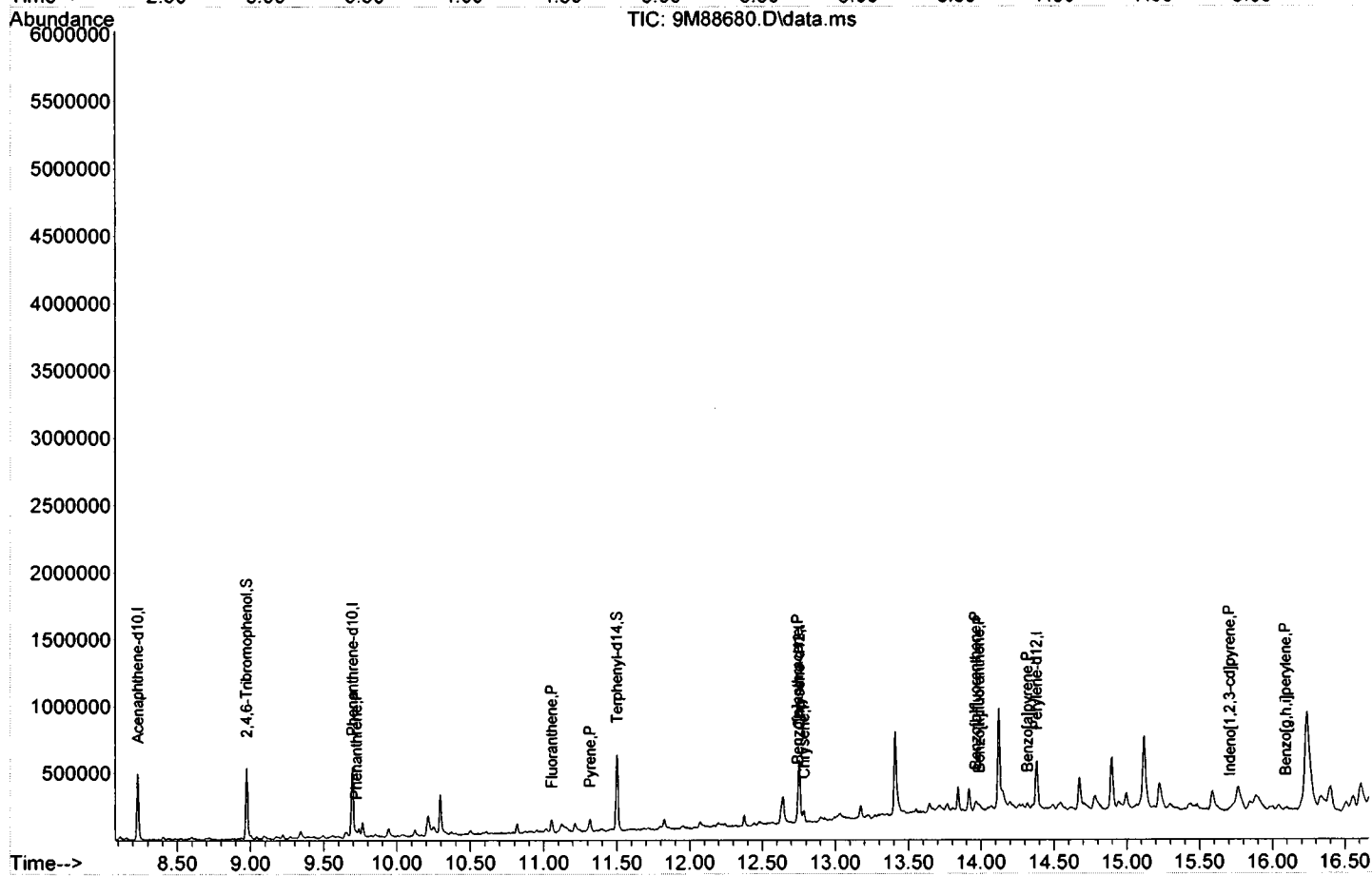
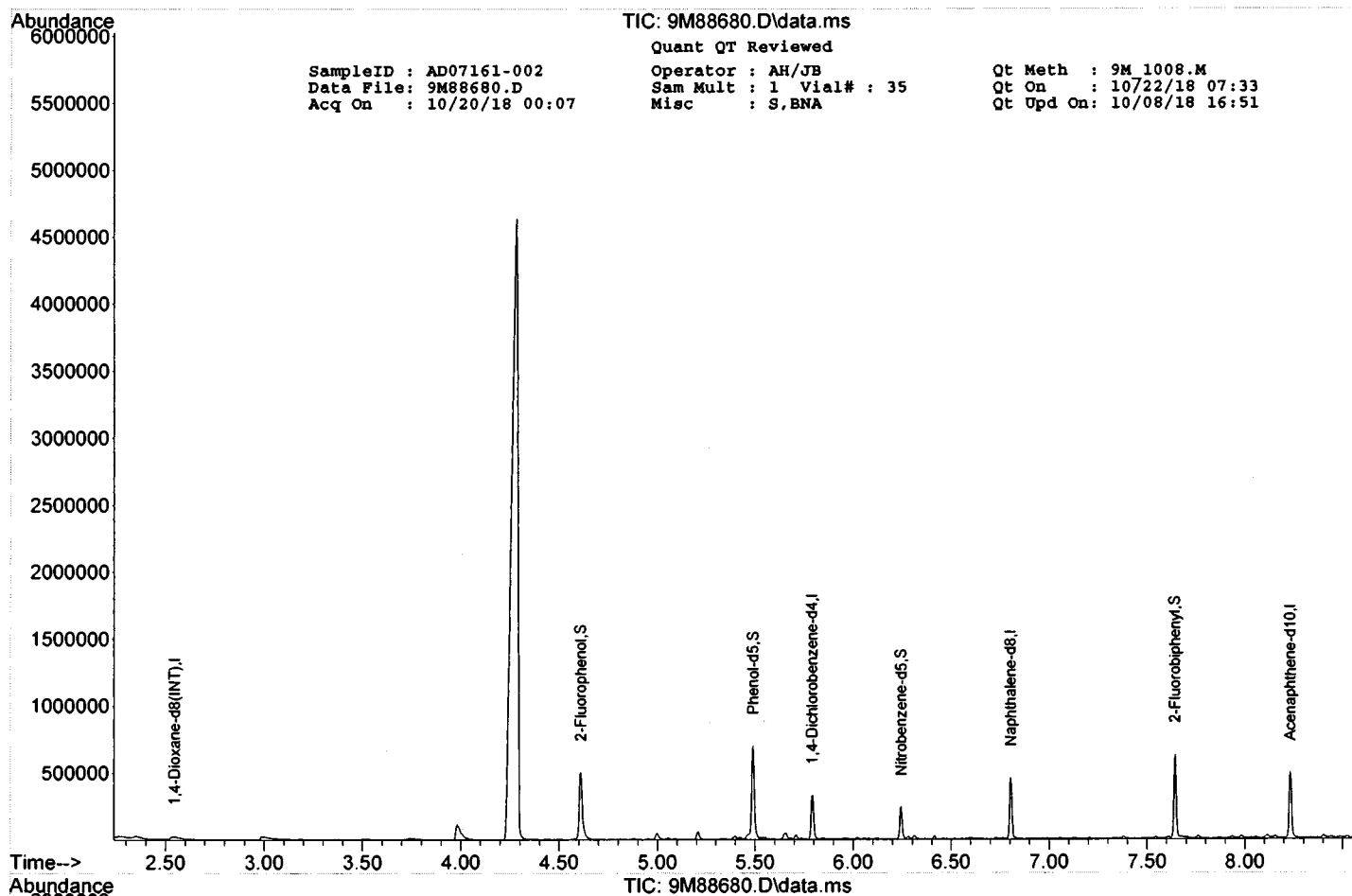
Operator : AH/JB
 Sam Mult : 1 Vial# : 35
 Misc : S,BNA

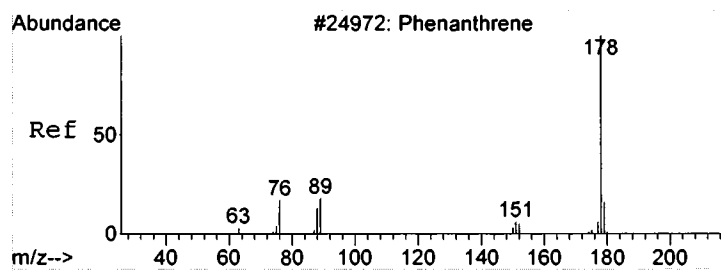
Qt Meth : 9M_1008.M
 Qt On : 10/22/18 07:33
 Qt Upd On: 10/08/18 16:51

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-1918\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.544	96	24590	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	47005	40.00	ng	0.00
31) Naphthalene-d8	6.803	136	172175	40.00	ng	0.00
50) Acenaphthene-d10	8.232	164	102274	40.00	ng	0.00
77) Phenanthrene-d10	9.696	188	171650	40.00	ng	0.00
91) Chrysene-d12	12.756	240	175677	40.00	ng	0.00
103) Perylene-d12	14.381	264	151830	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.609	112	140315	97.28	ng	0.02
Spiked Amount 100.000			Recovery =	97.28%		
16) Phenol-d5	5.490	99	205760	99.11	ng	0.01
Spiked Amount 100.000			Recovery =	99.11%		
32) Nitrobenzene-d5	6.243	128	26773	48.83	ng	0.00
Spiked Amount 50.000			Recovery =	97.66%		
55) 2-Fluorobiphenyl	7.644	172	168664	51.11	ng	0.00
Spiked Amount 50.000			Recovery =	102.22%		
80) 2,4,6-Tribromophenol	8.974	330	52217	110.16	ng	0.00
Spiked Amount 100.000			Recovery =	110.16%		
94) Terphenyl-d14	11.503	244	170363	57.27	ng	0.00
Spiked Amount 50.000			Recovery =	114.54%		
Target Compounds						
86) Phenanthrene	9.721	178	14831	3.3982	ng	96
90) Fluoranthene	11.054	202	40120	7.5010	ng	90
92) Pyrene	11.318	202	36837	7.5154	ng	87
100) Benzo[a]anthracene	12.744	228	16602m	3.4383	ng	
101) Chrysene	12.787	228	21497m	4.9562	ng	
105) Benzo[b]fluoranthene	13.966	252	29000m	6.7655	ng	
106) Benzo[k]fluoranthene	13.989	252	9739m	2.2342	ng	
107) Benzo[a]pyrene	14.319	252	19396	4.5963	ng	86
108) Indeno[1,2,3-cd]pyrene	15.708	276	11871	2.5789	ng	74
110) Benzo[g,h,i]perylene	16.092	276	11648	3.0583	ng	71

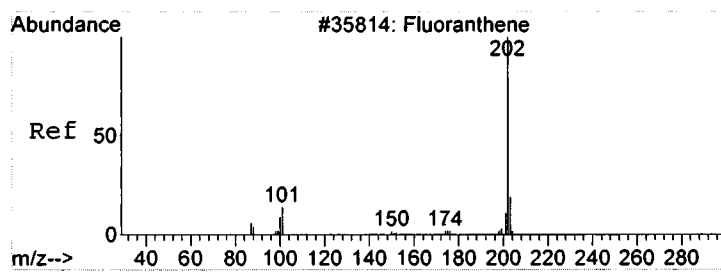
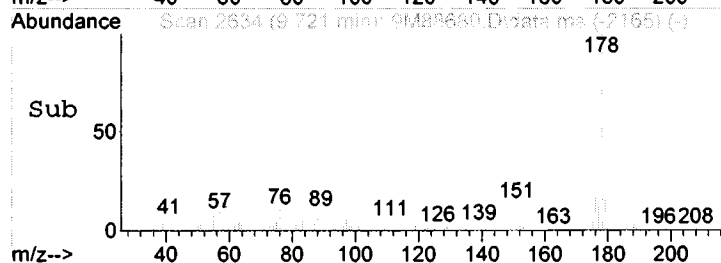
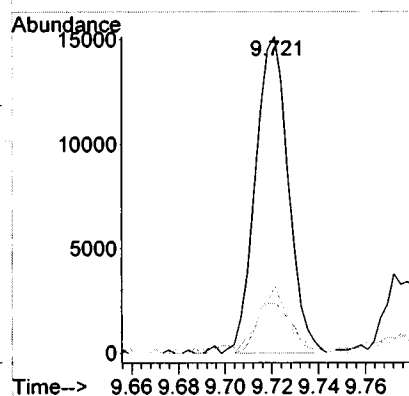
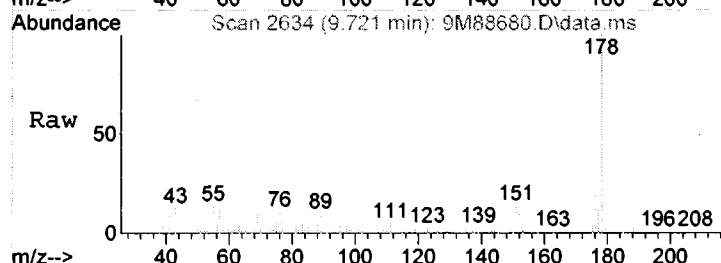
(#) = qualifier out of range (m) = manual integration (+) = signals summed





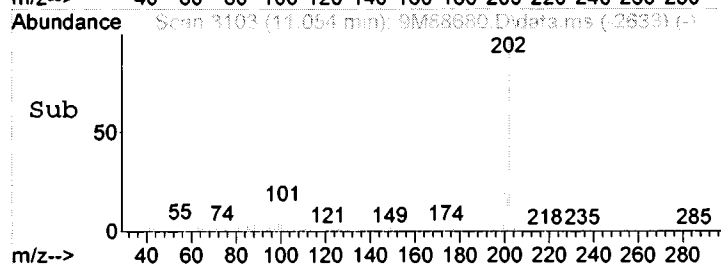
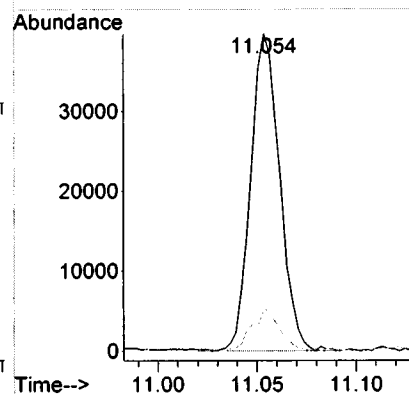
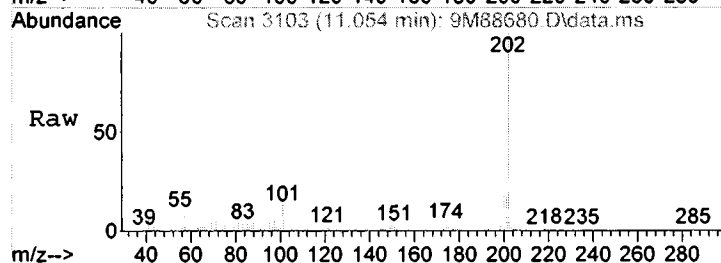
#86
Phenanthrene
Concen: 3.40 ng
RT: 9.721 min Scan# 2634
Delta R.T. 0.006 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

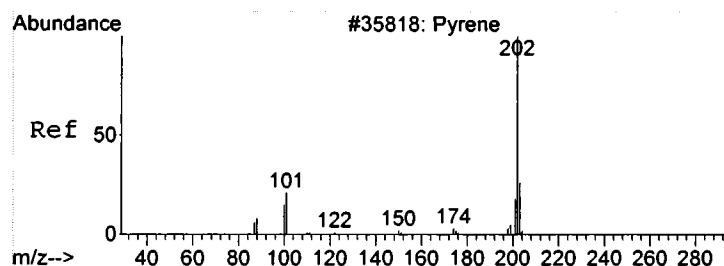
Tgt Ion:178	Resp:	14831
Ion Ratio	Lower	Upper
178	100	
179	14.0	0.0 55.5
176	21.2	0.0 59.3



#90
Fluoranthene
Concen: 7.50 ng
RT: 11.054 min Scan# 3103
Delta R.T. 0.006 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

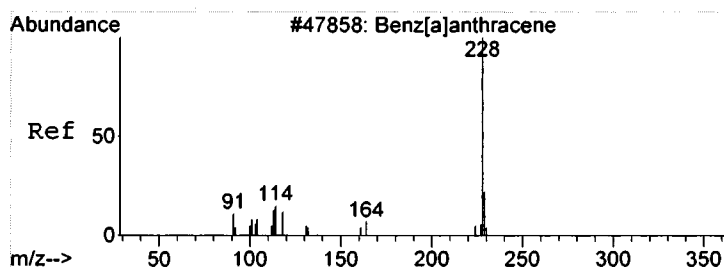
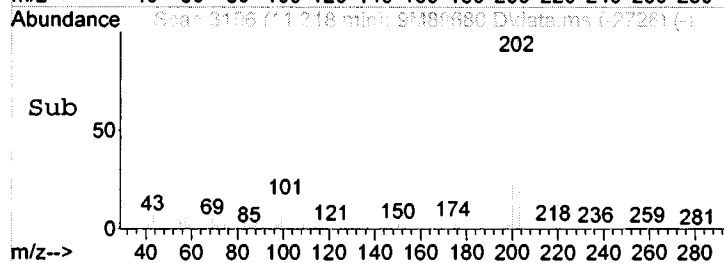
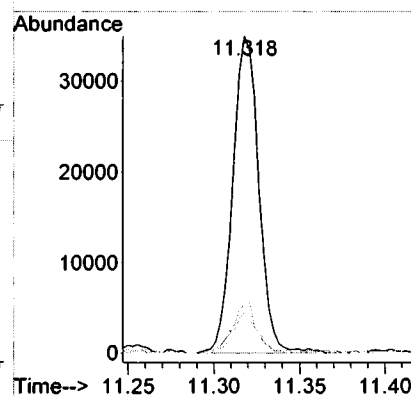
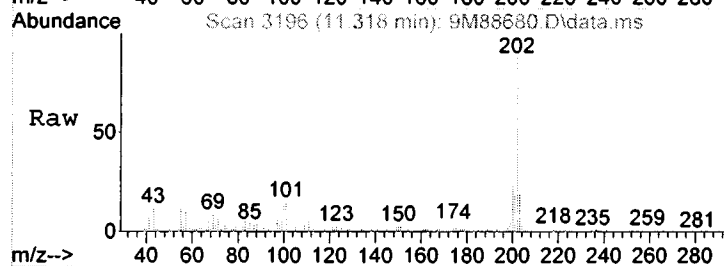
Tgt Ion:202	Resp:	40120
Ion Ratio	Lower	Upper
202	100	
101	13.3	0.0 57.6





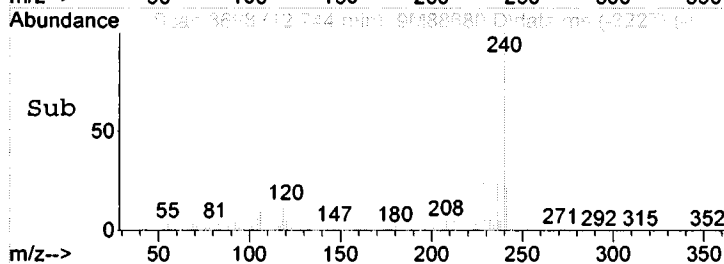
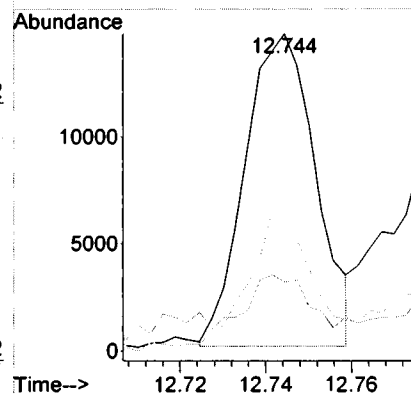
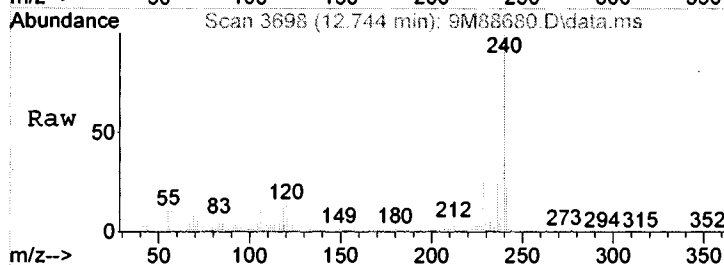
#92
Pyrene
Concen: 7.52 ng
RT: 11.318 min Scan# 3196
Delta R.T. 0.008 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

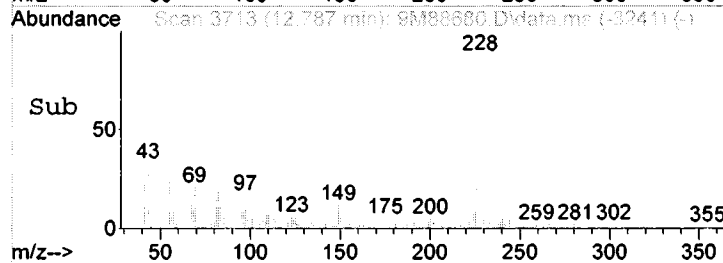
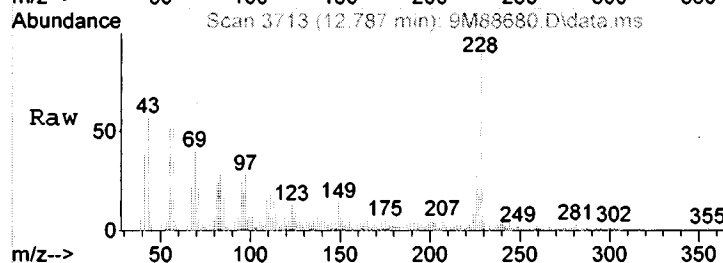
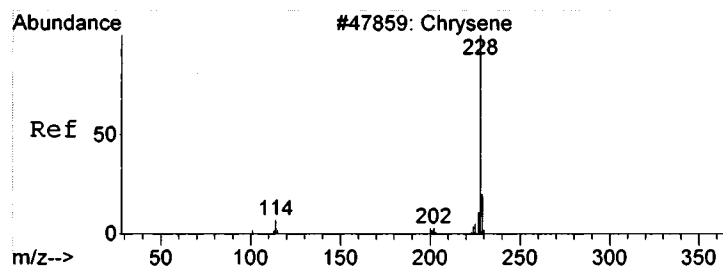
Tgt Ion	Ratio	Resp	Lower	Upper
202	100	36837		
101	15.2	0.0	62.2	
100	13.1	0.0	57.8	



#100
Benzo[a]anthracene
Concen: 3.44 ng m
RT: 12.744 min Scan# 3698
Delta R.T. 0.011 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

Tgt Ion	Ratio	Resp	Lower	Upper
228	100	16602		
229	21.7	0.0	59.5	
226	38.1	0.0	66.0	





#101

Chrysene

Concen: 4.96 ng m

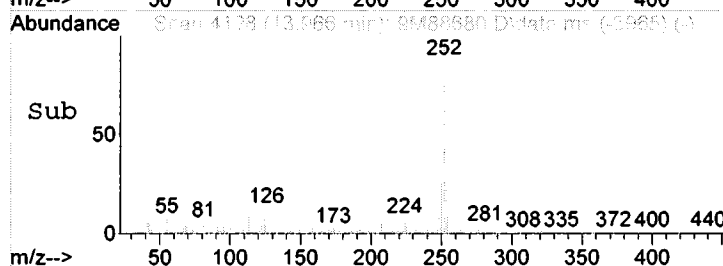
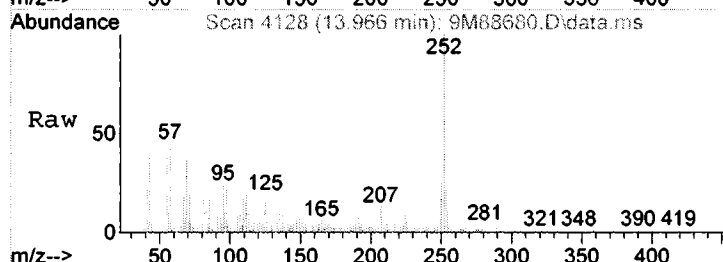
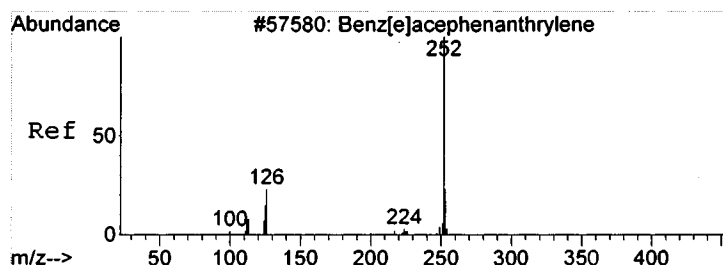
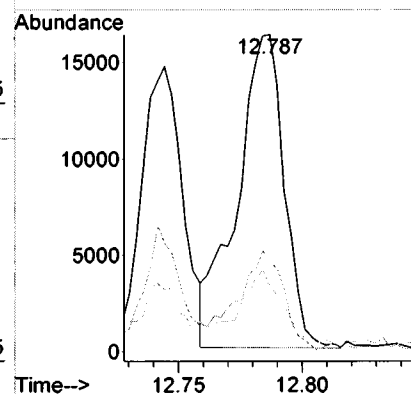
RT: 12.787 min Scan# 3713

Delta R.T. 0.012 min

Lab File: 9M88680.D

Acq: 20 Oct 2018 00:07

Tgt Ion: 228	Resp: 21497
Ion Ratio	Lower Upper
228 100	
226 28.3	9.5 49.5
229 20.3	0.0 60.2



#105

Benzo[b]fluoranthene

Concen: 6.77 ng m

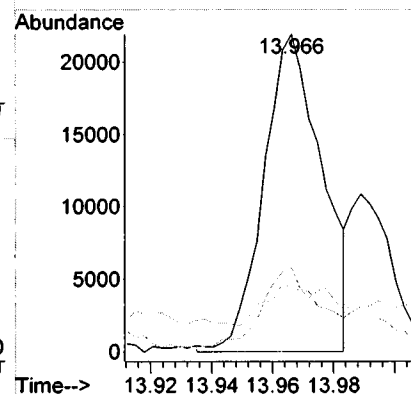
RT: 13.966 min Scan# 4128

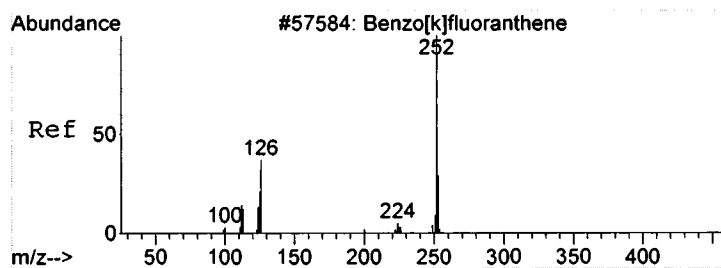
Delta R.T. 0.009 min

Lab File: 9M88680.D

Acq: 20 Oct 2018 00:07

Tgt Ion: 252	Resp: 29000
Ion Ratio	Lower Upper
252 100	
253 26.4	0.0 62.3
125 19.1	0.0 58.4





#106

Benzo[k]fluoranthene

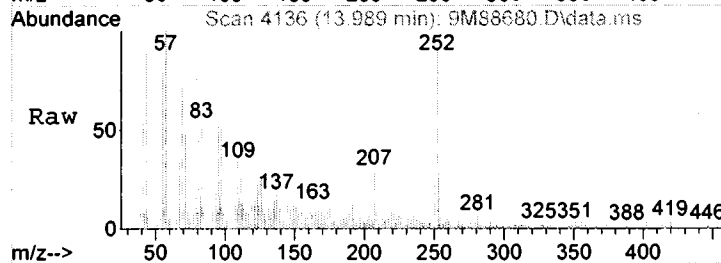
Concen: 2.23 ng m

RT: 13.989 min Scan# 4136

Delta R.T. 0.003 min

Lab File: 9M88680.D

Acq: 20 Oct 2018 00:07



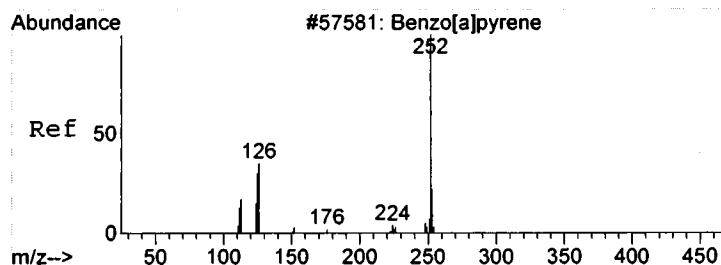
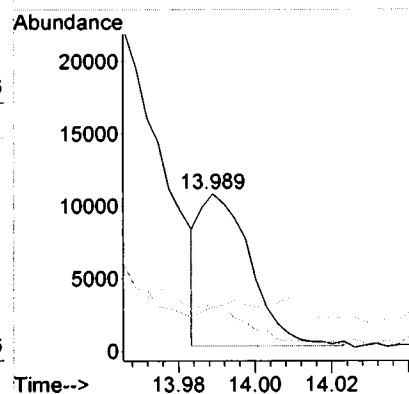
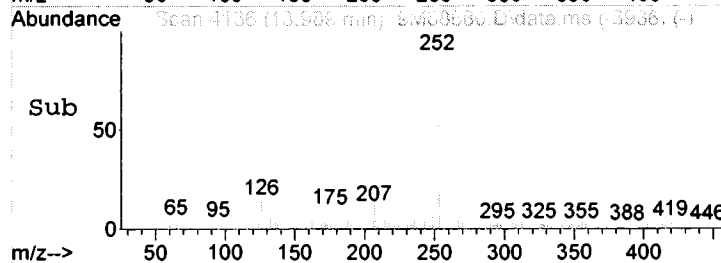
Tgt Ion: 252 Resp: 9739

Ion Ratio Lower Upper

252 100

253 28.3 0.0 52.2

125 29.4 0.0 48.9



#107

Benzo[a]pyrene

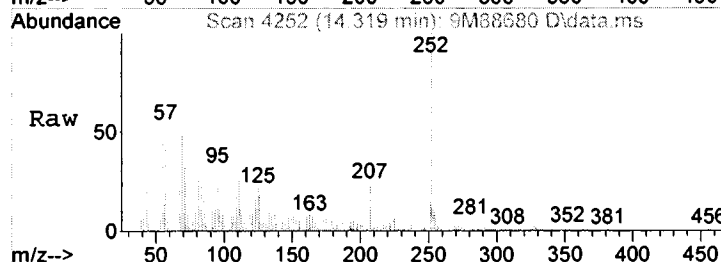
Concen: 4.60 ng

RT: 14.319 min Scan# 4252

Delta R.T. 0.007 min

Lab File: 9M88680.D

Acq: 20 Oct 2018 00:07



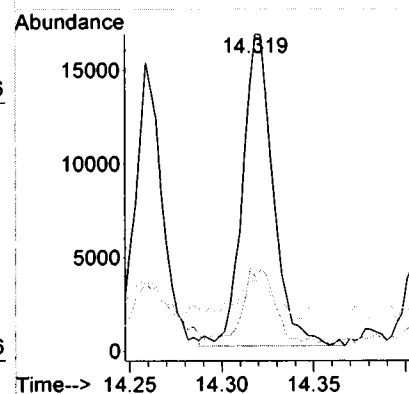
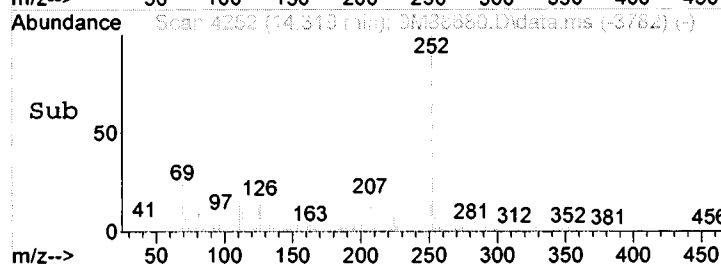
Tgt Ion: 252 Resp: 19396

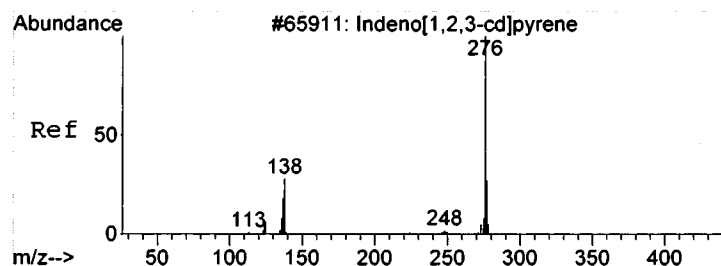
Ion Ratio Lower Upper

252 100

253 20.0 0.0 62.4

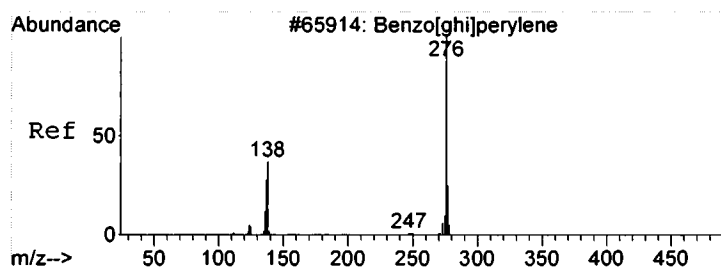
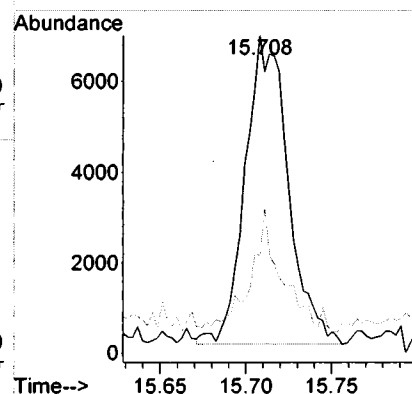
125 10.3 0.0 60.9





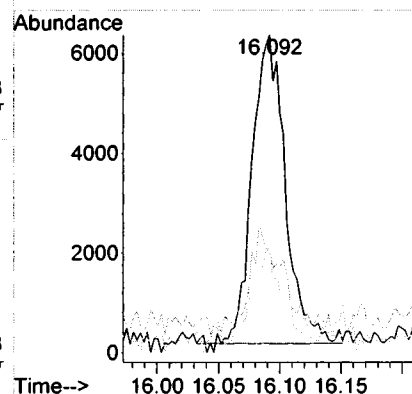
#108
Indeno[1,2,3-cd]pyrene
Concen: 2.58 ng
RT: 15.708 min Scan# 4741
Delta R.T. 0.020 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

Tgt Ion: 276 Resp: 11871
Ion Ratio Lower Upper
276 100
138 22.9 0.0 78.9



#110
Benzo[g,h,i]perylene
Concen: 3.06 ng
RT: 16.092 min Scan# 4876
Delta R.T. 0.031 min
Lab File: 9M88680.D
Acq: 20 Oct 2018 00:07

Tgt Ion: 276 Resp: 11648
Ion Ratio Lower Upper
276 100
138 20.4 0.0 100.0
277 27.3 0.0 60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-003(R)

Client Id: SW-2-102018

Data File: 7M95353.D

Analysis Date: 10/26/18 13:16

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 865ml

Final Vol: 0.25ml

Dilution: 1

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.58	U	50-32-8	Benzo[a]pyrene	0.58	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.58	U	205-99-2	Benzo[b]fluoranthene	0.58	U
123-91-1	1,4-Dioxane	0.14	U	191-24-2	Benzo[g,h,i]perylene	0.58	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.58	U	207-08-9	Benzo[k]fluoranthene	0.58	U
95-95-4	2,4,5-Trichlorophenol	0.58	U	111-91-1	bis(2-Chloroethoxy)methane	0.58	U
88-06-2	2,4,6-Trichlorophenol	0.58	U	111-44-4	bis(2-Chloroethyl)ether	0.14	U
120-83-2	2,4-Dichlorophenol	0.14	U	108-60-1	bis(2-chloroisopropyl)ether	0.58	U
105-67-9	2,4-Dimethylphenol	0.14	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.58	U
51-28-5	2,4-Dinitrophenol	2.9	U	85-68-7	Butylbenzylphthalate	0.58	U
121-14-2	2,4-Dinitrotoluene	0.58	U	105-60-2	Caprolactam	0.58	U
606-20-2	2,6-Dinitrotoluene	0.58	U	86-74-8	Carbazole	0.58	U
91-58-7	2-Chloronaphthalene	0.58	U	218-01-9	Chrysene	0.58	U
95-57-8	2-Chlorophenol	0.58	U	53-70-3	Dibenzo[a,h]anthracene	0.58	U
91-57-6	2-Methylnaphthalene	0.58	U	132-64-9	Dibenzofuran	0.14	U
95-48-7	2-Methylphenol	0.14	U	84-66-2	Diethylphthalate	0.58	U
88-74-4	2-Nitroaniline	0.58	U	131-11-3	Dimethylphthalate	0.58	U
88-75-5	2-Nitrophenol	0.58	U	84-74-2	Di-n-butylphthalate	0.14	U
106-44-5	3&4-Methylphenol	0.14	U	117-84-0	Di-n-octylphthalate	0.58	U
91-94-1	3,3'-Dichlorobenzidine	0.58	U	206-44-0	Fluoranthene	0.58	U
99-09-2	3-Nitroaniline	0.58	U	86-73-7	Fluorene	0.58	U
534-52-1	4,6-Dinitro-2-methylphenol	2.9	U	118-74-1	Hexachlorobenzene	0.58	U
101-55-3	4-Bromophenyl-phenylether	0.58	U	87-68-3	Hexachlorobutadiene	0.58	U
59-50-7	4-Chloro-3-methylphenol	0.58	U	77-47-4	Hexachlorocyclopentadiene	0.58	U
106-47-8	4-Chloroaniline	0.14	U	67-72-1	Hexachloroethane	0.58	U
7005-72-3	4-Chlorophenyl-phenylether	0.58	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.58	U
100-01-6	4-Nitroaniline	0.58	U	78-59-1	Isophorone	0.58	U
100-02-7	4-Nitrophenol	0.58	U	91-20-3	Naphthalene	0.14	U
83-32-9	Acenaphthene	0.58	U	98-95-3	Nitrobenzene	0.58	U
208-96-8	Acenaphthylene	0.58	U	621-64-7	N-Nitroso-di-n-propylamine	0.14	U
98-86-2	Acetophenone	0.58	U	86-30-6	n-Nitrosodiphenylamine	0.58	U
120-12-7	Anthracene	0.58	U	87-86-5	Pentachlorophenol	2.9	U
1912-24-9	Atrazine	0.58	U	85-01-8	Phenanthrene	0.58	U
100-52-7	Benzaldehyde	0.58	U	108-95-2	Phenol	0.58	U
56-55-3	Benzo[a]anthracene	0.58	U	129-00-0	Pyrene	0.58	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α-Chlordane and γ-Chlordane.

SampleID : AD07161-003(R)
Data File: 7M95353.D
Acq On : 10/26/18 13:16

Operator : AH/JB
Sam Mult : 1 Vial# : 13
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/26/18 15:18
Qt Upd On: 10/09/18 08:53

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

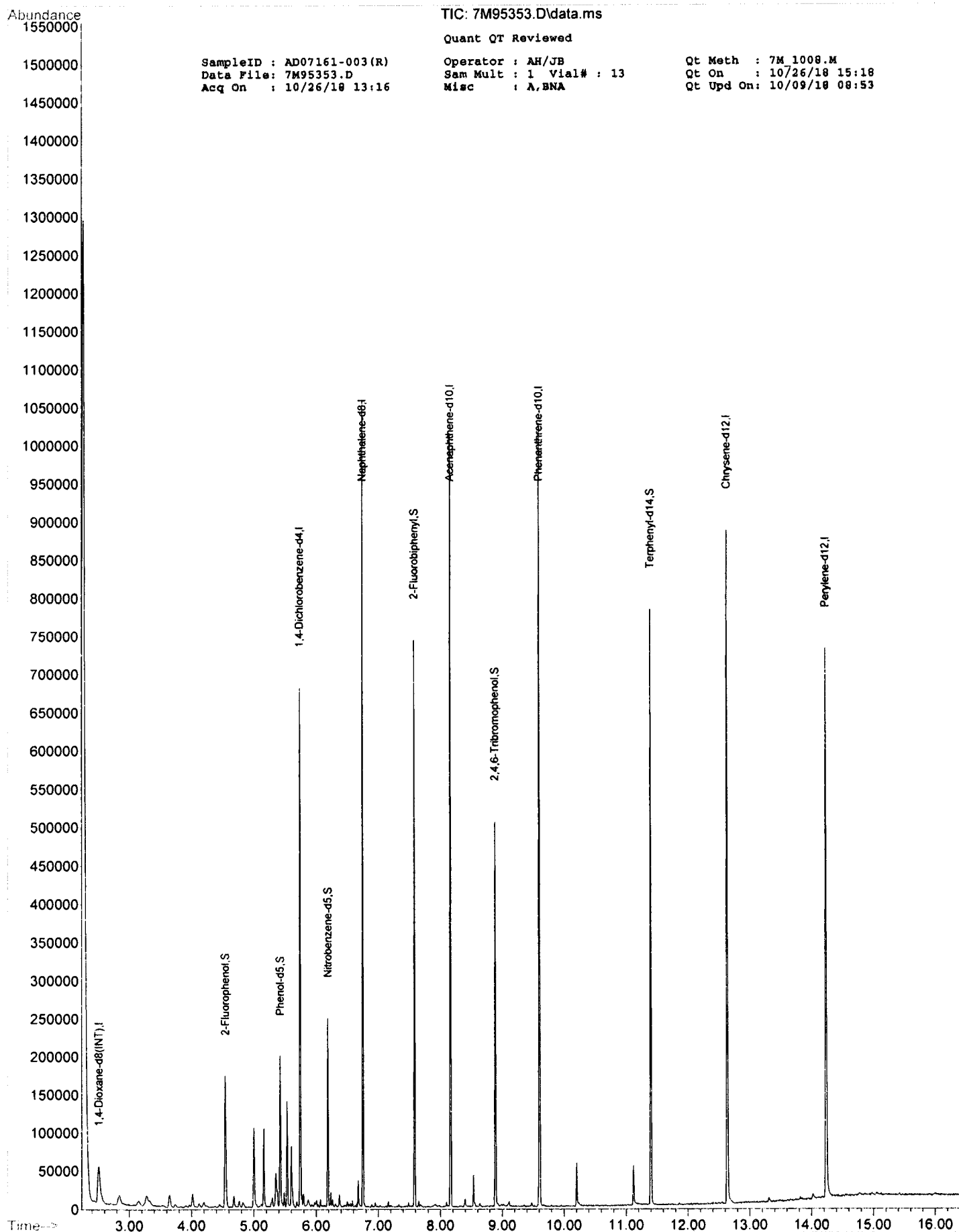
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	59533	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	102400	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	378587	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	212623	40.00	ng	-0.01
77) Phenanthrene-d10	9.604	188	369218	40.00	ng	-0.01
91) Chrysene-d12	12.633	240	337633	40.00	ng	-0.02
103) Perylene-d12	14.236	264	283040	40.00	ng	-0.04

System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	71242	22.31	ng	0.00
Spiked Amount 100.000			Recovery	=	22.31%	
16) Phenol-d5	5.421	99	66852	14.78	ng	-0.01
Spiked Amount 100.000			Recovery	=	14.78%	
32) Nitrobenzene-d5	6.191	128	36526	30.74	ng	0.00
Spiked Amount 50.000			Recovery	=	61.48%	
55) 2-Fluorobiphenyl	7.585	172	193993	28.74	ng	0.00
Spiked Amount 50.000			Recovery	=	57.48%	
80) 2,4,6-Tribromophenol	8.888	330	49846	56.77	ng	-0.01
Spiked Amount 100.000			Recovery	=	56.77%	
94) Terphenyl-d14	11.399	244	236376	40.80	ng	-0.01
Spiked Amount 50.000			Recovery	=	81.60%	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

12



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-004

Client Id: SD-2-102018

Data File: 9M88681.D

Analysis Date: 10/20/18 00:31

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 16

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.21	U	50-32-8	Benzo[a]pyrene	0.21	0.36
95-94-3	1,2,4,5-Tetrachlorobenzene	0.21	U	205-99-2	Benzo[b]fluoranthene	0.21	0.58
191-24-2	Benzo[g,h,i]perylene	0.21	0.30	58-90-2	2,3,4,6-Tetrachlorophenol	0.21	U
207-08-9	Benzo[k]fluoranthene	0.21	U	95-95-4	2,4,5-Trichlorophenol	0.21	U
111-91-1	bis(2-Chloroethoxy)methan	0.21	U	88-06-2	2,4,6-Trichlorophenol	0.21	U
111-44-4	bis(2-Chloroethyl)ether	0.052	U	120-83-2	2,4-Dichlorophenol	0.052	U
108-60-1	bis(2-chloroisopropyl)ether	0.21	U	105-67-9	2,4-Dimethylphenol	0.052	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.21	U	51-28-5	2,4-Dinitrophenol	1.0	U
85-68-7	Butylbenzylphthalate	0.21	U	121-14-2	2,4-Dinitrotoluene	0.21	U
105-60-2	Caprolactam	0.21	U	606-20-2	2,6-Dinitrotoluene	0.21	U
86-74-8	Carbazole	0.21	U	91-58-7	2-Chloronaphthalene	0.21	U
218-01-9	Chrysene	0.21	0.41	95-57-8	2-Chlorophenol	0.21	U
53-70-3	Dibenzo[a,h]anthracene	0.21	U	91-57-6	2-Methylnaphthalene	0.21	U
132-64-9	Dibenzofuran	0.052	U	95-48-7	2-Methylphenol	0.052	U
84-66-2	Diethylphthalate	0.21	U	88-74-4	2-Nitroaniline	0.21	U
131-11-3	Dimethylphthalate	0.21	U	88-75-5	2-Nitrophenol	0.21	U
84-74-2	Di-n-butylphthalate	0.052	U	106-44-5	3&4-Methylphenol	0.052	U
117-84-0	Di-n-octylphthalate	0.21	U	91-94-1	3,3'-Dichlorobenzidine	0.21	U
206-44-0	Fluoranthene	0.21	0.50	99-09-2	3-Nitroaniline	0.21	U
86-73-7	Fluorene	0.21	U	534-52-1	4,6-Dinitro-2-methylphenol	1.0	U
118-74-1	Hexachlorobenzene	0.21	U	101-55-3	4-Bromophenyl-phenylether	0.21	U
87-68-3	Hexachlorobutadiene	0.21	U	59-50-7	4-Chloro-3-methylphenol	0.21	U
77-47-4	Hexachlorocyclopentadiene	0.21	U	106-47-8	4-Chloroaniline	0.052	U
67-72-1	Hexachloroethane	0.21	U	7005-72-3	4-Chlorophenyl-phenylether	0.21	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.21	0.22	100-01-6	4-Nitroaniline	0.21	U
78-59-1	Isophorone	0.21	U	100-02-7	4-Nitrophenol	0.21	U
91-20-3	Naphthalene	0.052	U	83-32-9	Acenaphthene	0.21	U
98-95-3	Nitrobenzene	0.21	U	208-96-8	Acenaphthylene	0.21	U
621-64-7	N-Nitroso-di-n-propylamine	0.052	U	98-86-2	Acetophenone	0.21	U
86-30-6	n-Nitrosodiphenylamine	0.21	U	120-12-7	Anthracene	0.21	U
87-86-5	Pentachlorophenol	1.0	U	1912-24-9	Atrazine	0.21	U
85-01-8	Phenanthrene	0.21	U	100-52-7	Benzaldehyde	0.21	U
108-95-2	Phenol	0.21	U	56-55-3	Benzo[a]anthracene	0.21	0.29
129-00-0	Pyrene	0.21	0.56				

Worksheet #: 489030

Total Target Concentration 3.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

SampleID : AD07161-004
Data File: 9M88681.D
Acq On : 10/20/18 00:31

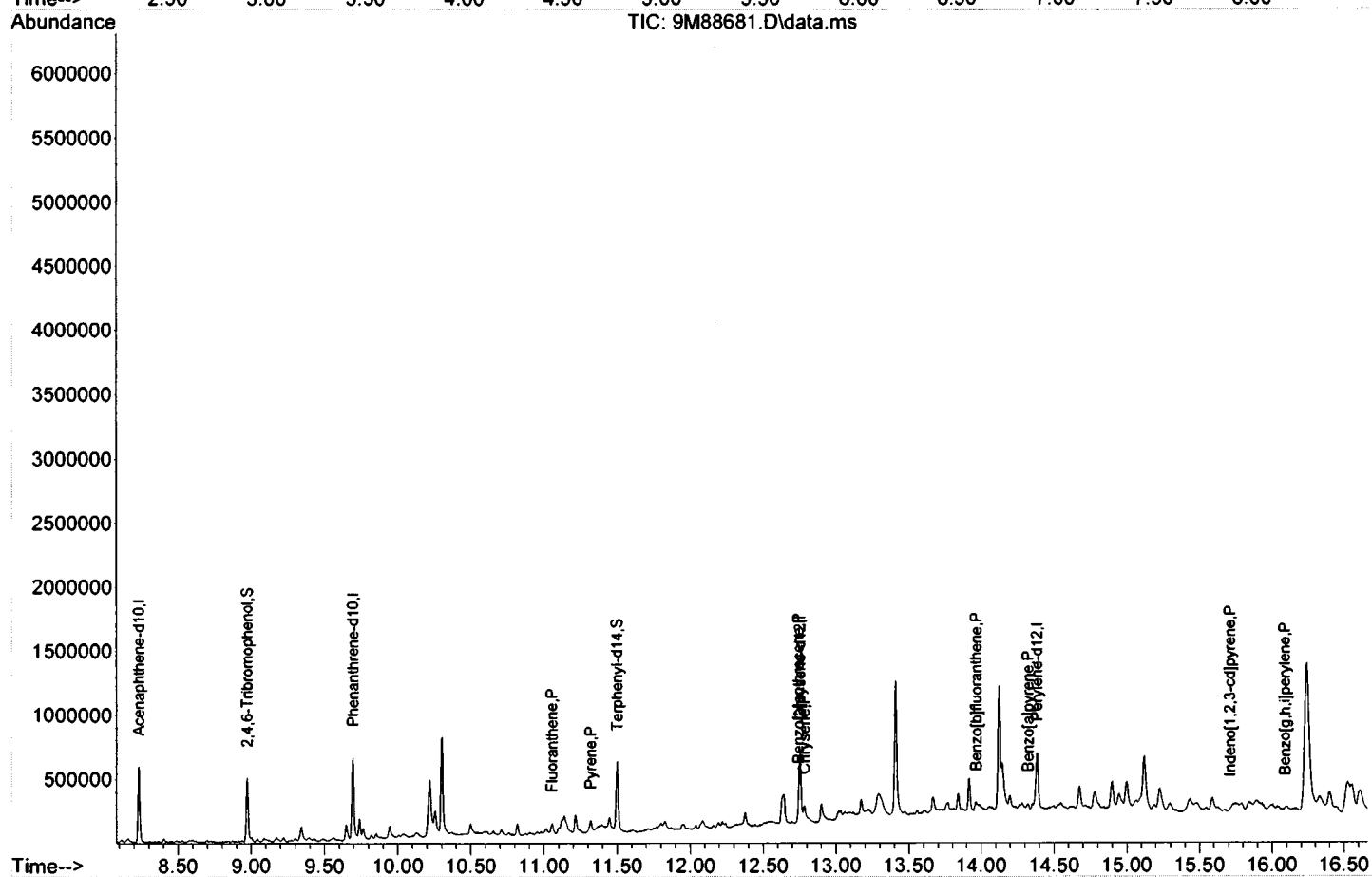
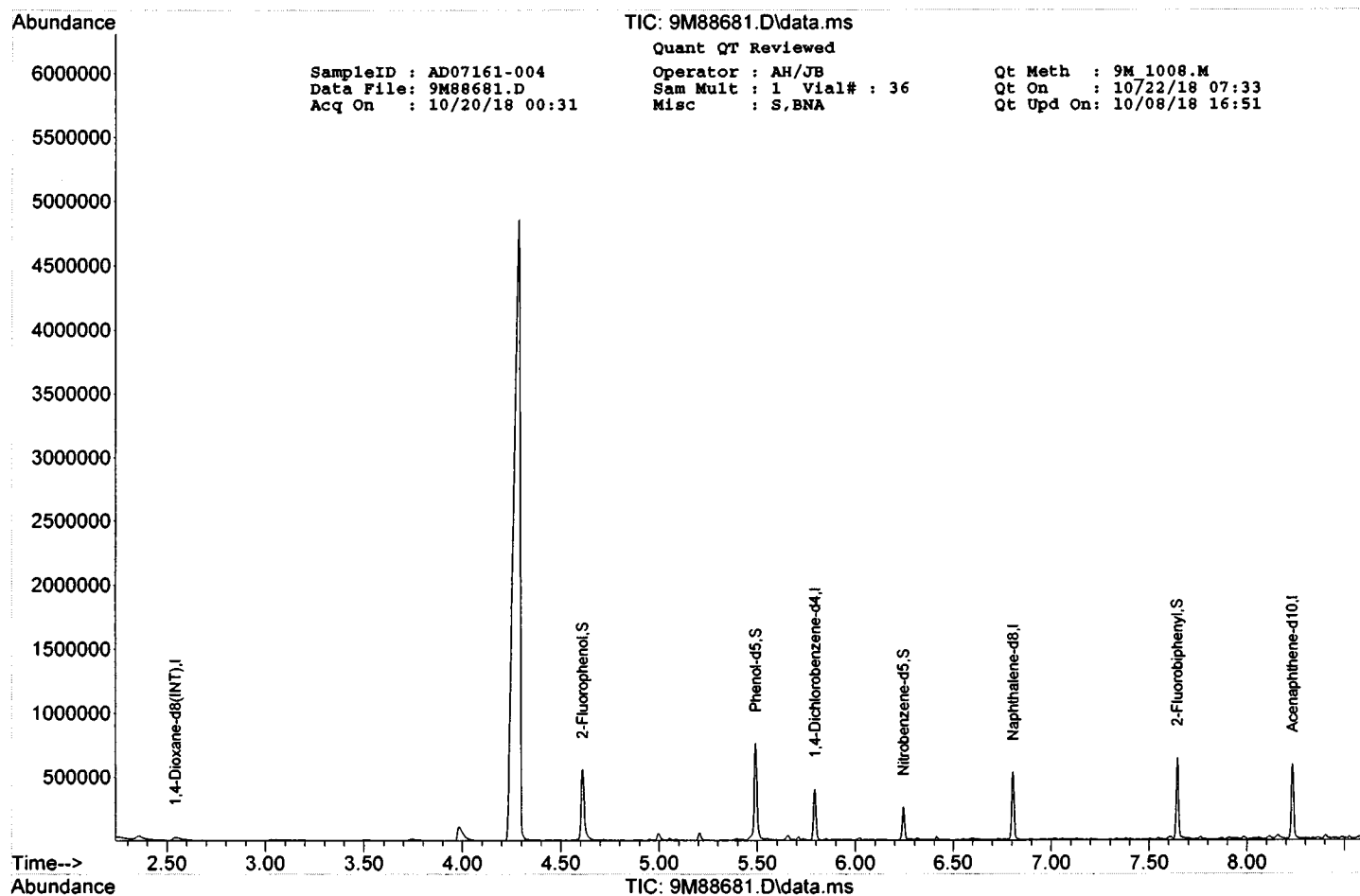
Operator : AH/JB
Sam Mult : 1 Vial# : 36
Misc : S,BNA

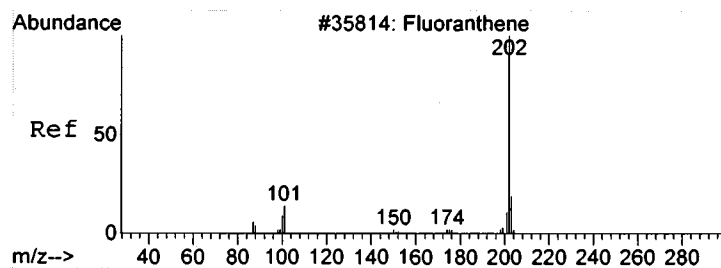
Qt Meth : 9M_1008.M
Qt On : 10/22/18 07:33
Qt Upd On: 10/08/18 16:51

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-1918\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.541	96	25633	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.794	152	54874	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	203338	40.00	ng	0.00
50) Acenaphthene-d10	8.232	164	120810	40.00	ng	0.00
77) Phenanthrene-d10	9.696	188	201432	40.00	ng	0.00
91) Chrysene-d12	12.756	240	209387	40.00	ng	0.00
103) Perylene-d12	14.384	264	178080	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.609	112	156106	103.82	ng	0.02
Spiked Amount	100.000		Recovery	=	103.82%	
16) Phenol-d5	5.490	99	226819	104.81	ng	0.01
Spiked Amount	100.000		Recovery	=	104.81%	
32) Nitrobenzene-d5	6.243	128	28006	43.25	ng	0.00
Spiked Amount	50.000		Recovery	=	86.50%	
55) 2-Fluorobiphenyl	7.644	172	168109	43.12	ng	0.00
Spiked Amount	50.000		Recovery	=	86.24%	
80) 2,4,6-Tribromophenol	8.974	330	48251	89.01	ng	0.00
Spiked Amount	100.000		Recovery	=	89.01%	
94) Terphenyl-d14	11.503	244	158930	44.82	ng	0.00
Spiked Amount	50.000		Recovery	=	89.64%	
Target Compounds						
90) Fluoranthene	11.054	202	30366	4.8379	ng	92
92) Pyrene	11.318	202	31517	5.3948	ng	84
100) Benzo[a]anthracene	12.744	228	15865	2.7567	ng	87
101) Chrysene	12.784	228	20173m	3.9065	ng	
105) Benzo[b]fluoranthene	13.969	252	28130m	5.5952	ng	
107) Benzo[a]pyrene	14.321	252	16957	3.4260	ng	93
108) Indeno[1,2,3-cd]pyrene	15.711	276	11447	2.1202	ng	94
110) Benzo[g,h,i]perylene	16.089	276	13021	2.9149	ng	65

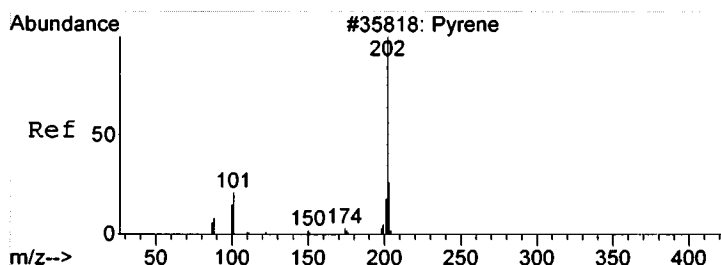
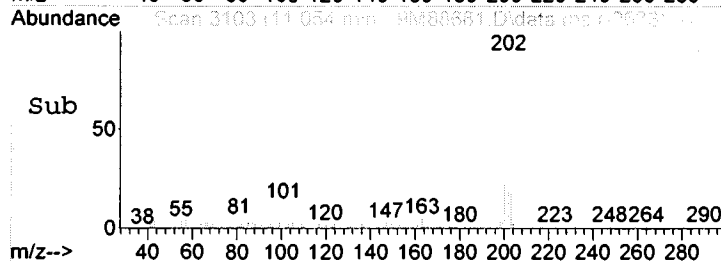
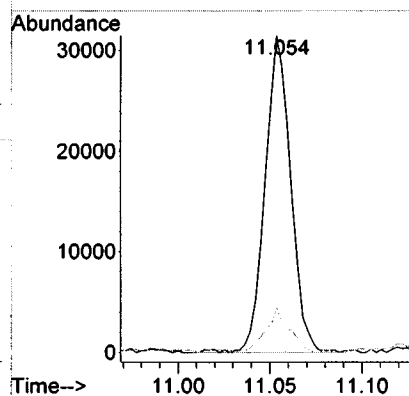
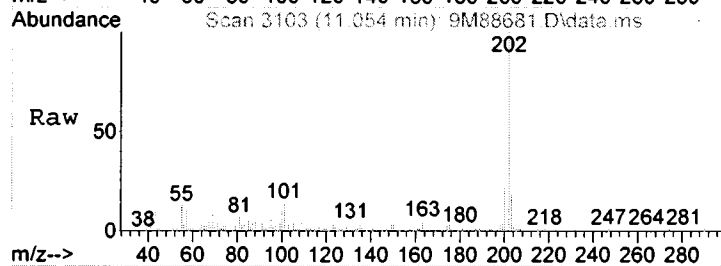
(#) = qualifier out of range (m) = manual integration (+) = signals summed





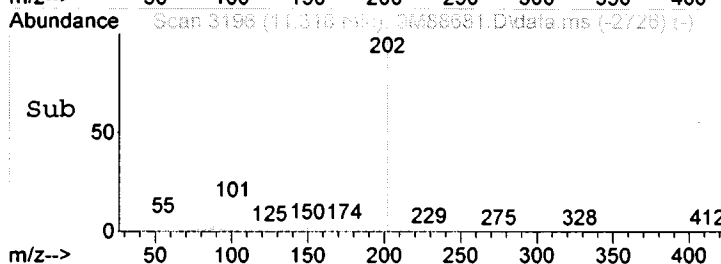
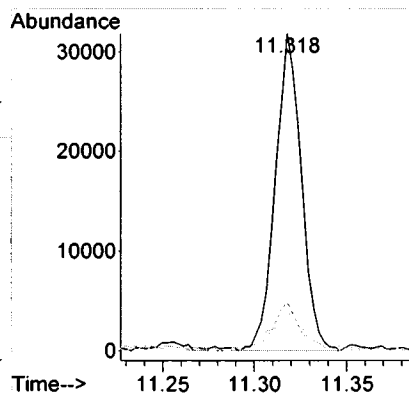
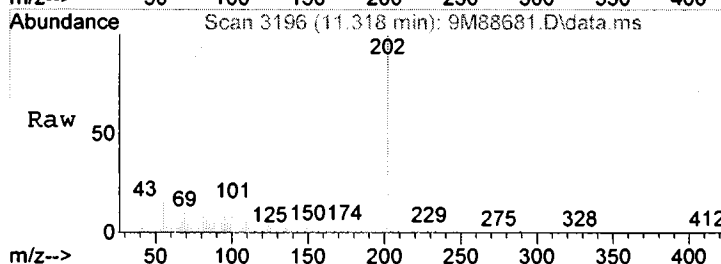
#90
Fluoranthene
Concen: 4.84 ng
RT: 11.054 min Scan# 3103
Delta R.T. 0.006 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

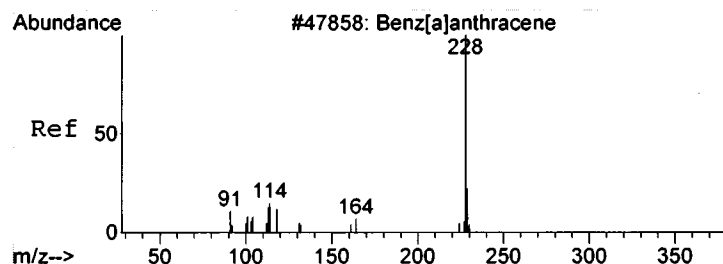
Tgt Ion:	202	Resp:	30366
Ion Ratio		Lower	Upper
202	100		
101	14.1	0.0	57.6



#92
Pyrene
Concen: 5.39 ng
RT: 11.318 min Scan# 3196
Delta R.T. 0.008 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

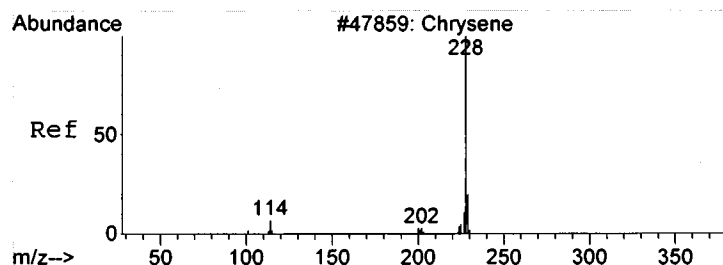
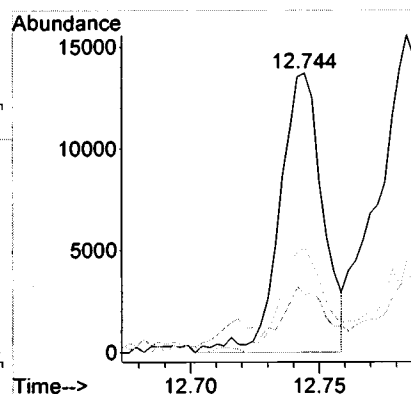
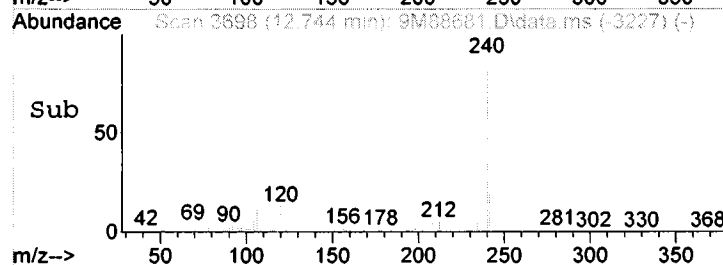
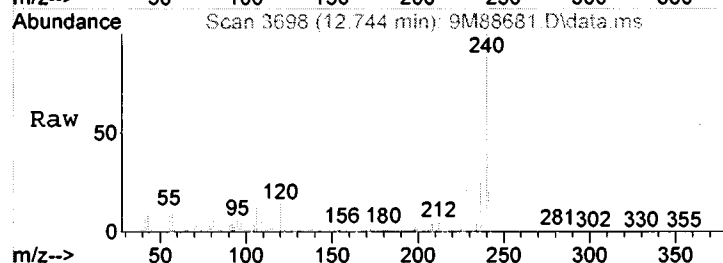
Tgt Ion:	202	Resp:	31517
Ion Ratio		Lower	Upper
202	100		
101	13.7	0.0	62.2
100	11.6	0.0	57.8





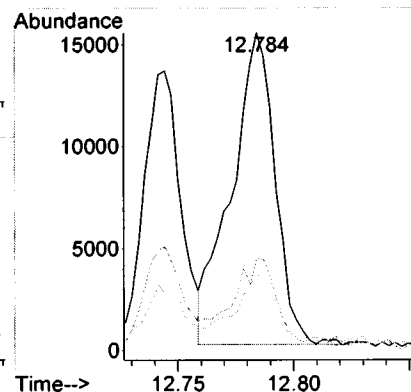
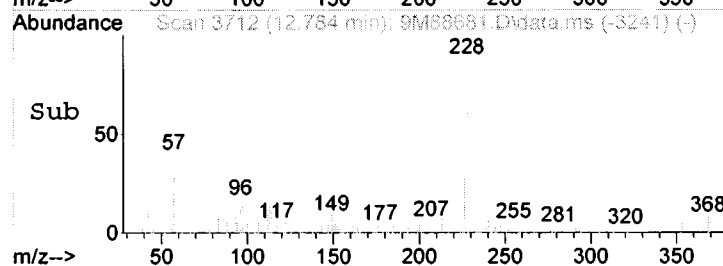
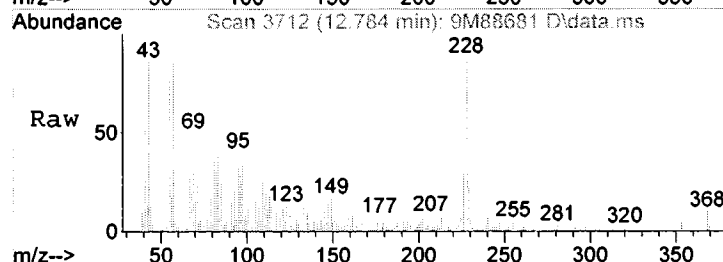
#100
Benzo[a]anthracene
Concen: 2.76 ng
RT: 12.744 min Scan# 3698
Delta R.T. 0.011 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

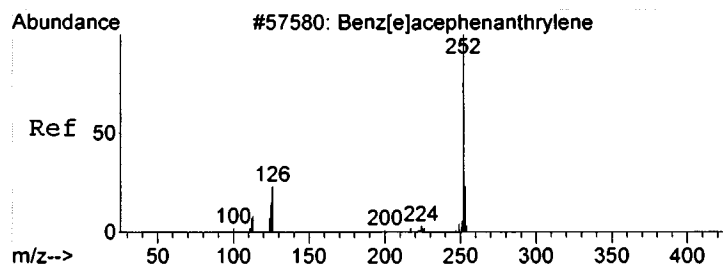
Tgt Ion:228 Resp: 15865
Ion Ratio Lower Upper
228 100
229 16.8 0.0 59.5
226 35.4 0.0 66.0



#101
Chrysene
Concen: 3.91 ng m
RT: 12.784 min Scan# 3712
Delta R.T. 0.009 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

Tgt Ion:228 Resp: 20173
Ion Ratio Lower Upper
228 100
226 29.1 9.5 49.5
229 23.4 0.0 60.2





#105

Benzo[b]fluoranthene

Concen: 5.60 ng m

RT: 13.969 min Scan# 4129

Delta R.T. 0.012 min

Lab File: 9M88681.D

Acq: 20 Oct 2018 00:31

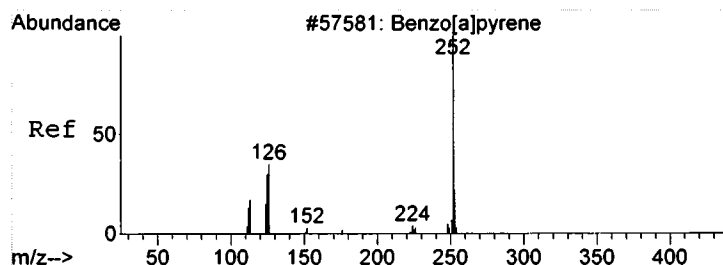
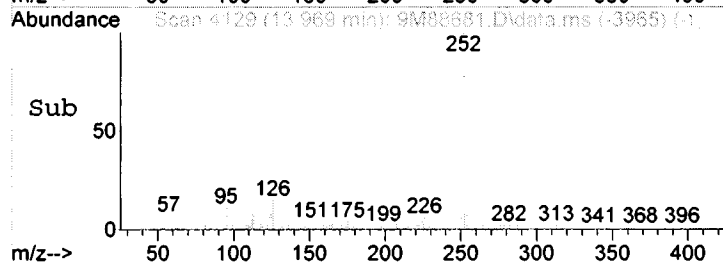
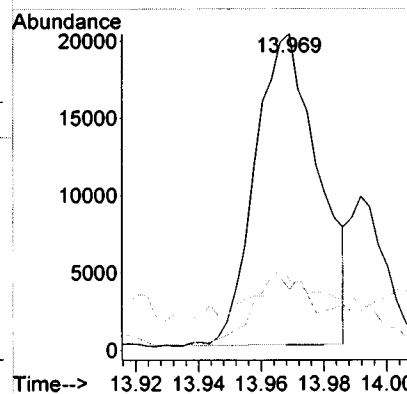
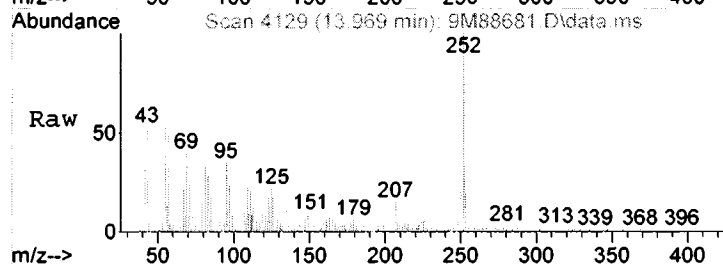
Tgt Ion: 252 Resp: 28130

Ion Ratio Lower Upper

252 100

253 19.2 0.0 62.3

125 21.9 0.0 58.4



#107

Benzo[a]pyrene

Concen: 3.43 ng

RT: 14.321 min Scan# 4253

Delta R.T. 0.009 min

Lab File: 9M88681.D

Acq: 20 Oct 2018 00:31

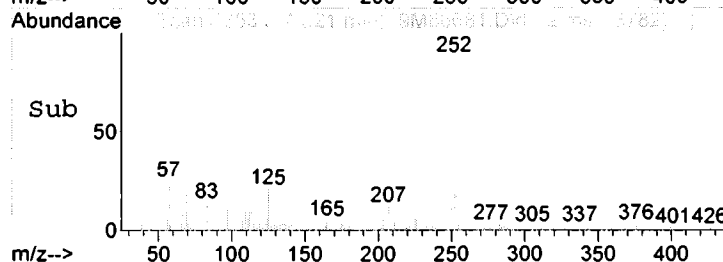
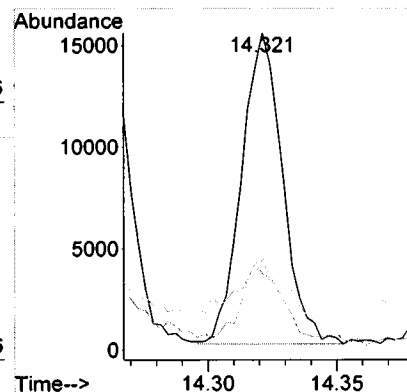
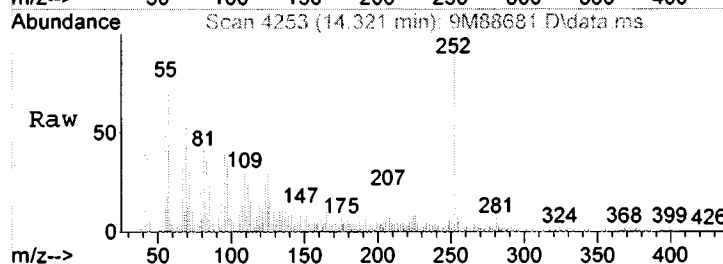
Tgt Ion: 252 Resp: 16957

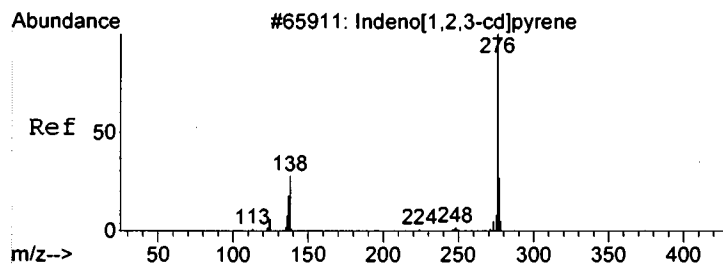
Ion Ratio Lower Upper

252 100

253 21.1 0.0 62.4

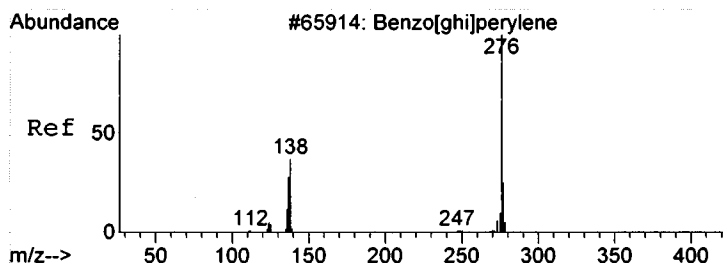
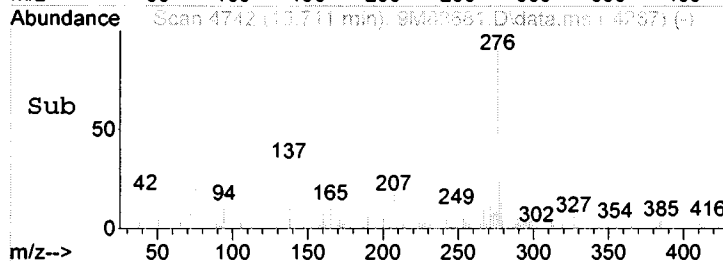
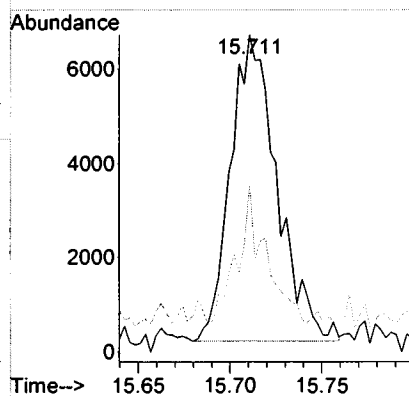
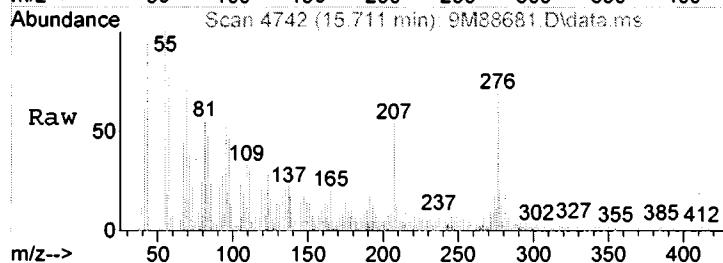
125 15.4 0.0 60.9





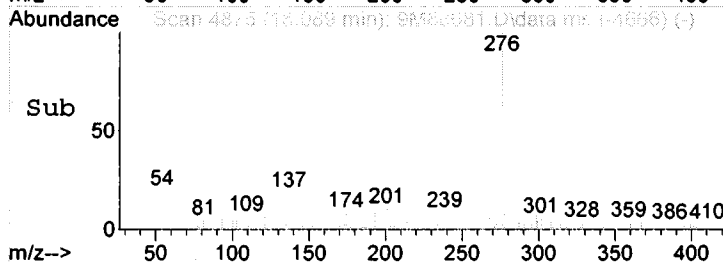
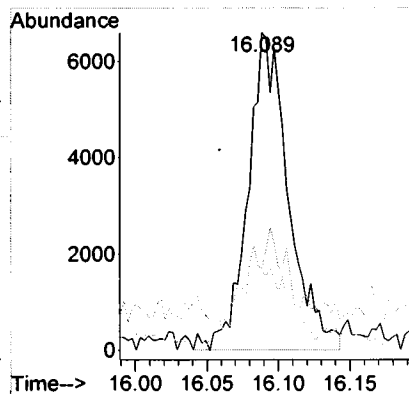
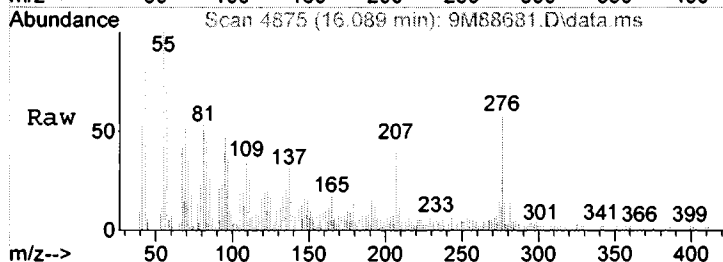
#108
Indeno[1,2,3-cd]pyrene
Concen: 2.12 ng
RT: 15.711 min Scan# 4742
Delta R.T. 0.023 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

Tgt Ion: 276 Resp: 11447
Ion Ratio Lower Upper
276 100
138 42.6 0.0 78.9



#110
Benzo[g,h,i]perylene
Concen: 2.91 ng
RT: 16.089 min Scan# 4875
Delta R.T. 0.028 min
Lab File: 9M88681.D
Acq: 20 Oct 2018 00:31

Tgt Ion: 276 Resp: 13021
Ion Ratio Lower Upper
276 100
138 22.9 0.0 100.0
277 14.9 0.0 60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-005(R)

Client Id: SW-3-102018

Data File: 7M95354.D

Analysis Date: 10/26/18 13:38

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 865ml

Final Vol: 0.25ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.58	U	50-32-8	Benzo[a]pyrene	0.58	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.58	U	205-99-2	Benzo[b]fluoranthene	0.58	U
123-91-1	1,4-Dioxane	0.14	U	191-24-2	Benzo[g,h,i]perylene	0.58	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.58	U	207-08-9	Benzo[k]fluoranthene	0.58	U
95-95-4	2,4,5-Trichlorophenol	0.58	U	111-91-1	bis(2-Chloroethoxy)methane	0.58	U
88-06-2	2,4,6-Trichlorophenol	0.58	U	111-44-4	bis(2-Chloroethyl)ether	0.14	U
120-83-2	2,4-Dichlorophenol	0.14	U	108-60-1	bis(2-chloroisopropyl)ether	0.58	U
105-67-9	2,4-Dimethylphenol	0.14	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.58	U
51-28-5	2,4-Dinitrophenol	2.9	U	85-68-7	Butylbenzylphthalate	0.58	U
121-14-2	2,4-Dinitrotoluene	0.58	U	105-60-2	Caprolactam	0.58	U
606-20-2	2,6-Dinitrotoluene	0.58	U	86-74-8	Carbazole	0.58	U
91-58-7	2-Chloronaphthalene	0.58	U	218-01-9	Chrysene	0.58	U
95-57-8	2-Chlorophenol	0.58	U	53-70-3	Dibenzo[a,h]anthracene	0.58	U
91-57-6	2-Methylnaphthalene	0.58	U	132-64-9	Dibenzofuran	0.14	U
95-48-7	2-Methylphenol	0.14	U	84-66-2	Diethylphthalate	0.58	U
88-74-4	2-Nitroaniline	0.58	U	131-11-3	Dimethylphthalate	0.58	U
88-75-5	2-Nitrophenol	0.58	U	84-74-2	Di-n-butylphthalate	0.14	U
106-44-5	3&4-Methylphenol	0.14	U	117-84-0	Di-n-octylphthalate	0.58	U
91-94-1	3,3'-Dichlorobenzidine	0.58	U	206-44-0	Fluoranthene	0.58	U
99-09-2	3-Nitroaniline	0.58	U	86-73-7	Fluorene	0.58	U
534-52-1	4,6-Dinitro-2-methylphenol	2.9	U	118-74-1	Hexachlorobenzene	0.58	U
101-55-3	4-Bromophenyl-phenylether	0.58	U	87-68-3	Hexachlorobutadiene	0.58	U
59-50-7	4-Chloro-3-methylphenol	0.58	U	77-47-4	Hexachlorocyclopentadiene	0.58	U
106-47-8	4-Chloroaniline	0.14	U	67-72-1	Hexachloroethane	0.58	U
7005-72-3	4-Chlorophenyl-phenylether	0.58	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.58	U
100-01-6	4-Nitroaniline	0.58	U	78-59-1	Isophorone	0.58	U
100-02-7	4-Nitrophenol	0.58	U	91-20-3	Naphthalene	0.14	U
83-32-9	Acenaphthene	0.58	U	98-95-3	Nitrobenzene	0.58	U
208-96-8	Acenaphthylene	0.58	U	621-64-7	N-Nitroso-di-n-propylamine	0.14	U
98-86-2	Acetophenone	0.58	U	86-30-6	n-Nitrosodiphenylamine	0.58	U
120-12-7	Anthracene	0.58	U	87-86-5	Pentachlorophenol	2.9	U
1912-24-9	Atrazine	0.58	U	85-01-8	Phenanthrene	0.58	U
100-52-7	Benzaldehyde	0.58	U	108-95-2	Phenol	0.58	U
56-55-3	Benzo[a]anthracene	0.58	U	129-00-0	Pyrene	0.58	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : AD07161-005(R)
 Data File: 7M95354.D
 Acq On : 10/26/18 13:38

Operator : AH/JB
 Sam Mult : 1 Vial# : 14
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/26/18 15:19
 Qt Upd On: 10/09/18 08:53

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.515	96	67471	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	113193	40.00	ng	0.00
31) Naphthalene-d8	6.751	136	410544	40.00	ng	0.00
50) Acenaphthene-d10	8.167	164	227004	40.00	ng	0.00
77) Phenanthrene-d10	9.604	188	384063	40.00	ng	-0.01
91) Chrysene-d12	12.633	240	365524	40.00	ng	-0.02
103) Perylene-d12	14.241	264	316657	40.00	ng	-0.03

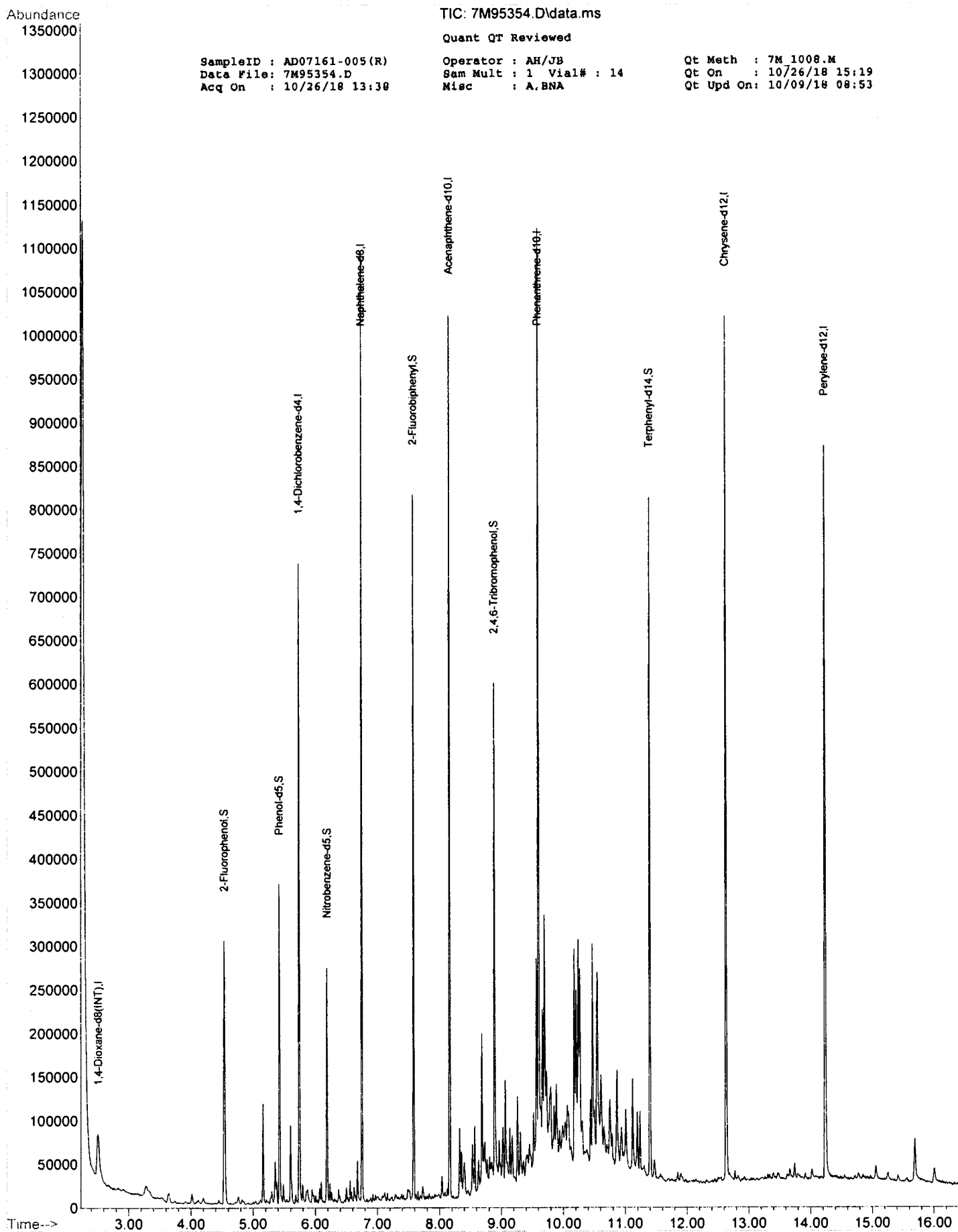
System Monitoring Compounds

11) 2-Fluorophenol	4.540	112	126409	34.93	ng	0.00
Spiked Amount 100.000			Recovery	=	34.93%	
16) Phenol-d5	5.421	99	132270	25.80	ng	-0.01
Spiked Amount 100.000			Recovery	=	25.80%	
32) Nitrobenzene-d5	6.191	128	36755	28.52	ng	0.00
Spiked Amount 50.000			Recovery	=	57.04%	
55) 2-Fluorobiphenyl	7.585	172	217826	30.22	ng	0.00
Spiked Amount 50.000			Recovery	=	60.44%	
80) 2,4,6-Tribromophenol	8.894	330	58500	63.63	ng	0.00
Spiked Amount 100.000			Recovery	=	63.63%	
94) Terphenyl-d14	11.399	244	241697	38.54	ng	-0.01
Spiked Amount 50.000			Recovery	=	77.08%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-006

Client Id: SD-3-102018

Data File: 9M88682.D

Analysis Date: 10/20/18 00:54

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 55

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.061	U	50-32-8	Benzo[a]pyrene	0.061	0.075
95-94-3	1,2,4,5-Tetrachlorobenzene	0.061	U	205-99-2	Benzo[b]fluoranthene	0.061	0.11
191-24-2	Benzo[g,h,i]perylene	0.061	U	58-90-2	2,3,4,6-Tetrachlorophenol	0.061	U
207-08-9	Benzo[k]fluoranthene	0.061	U	95-95-4	2,4,5-Trichlorophenol	0.061	U
111-91-1	bis(2-Chloroethoxy)methan	0.061	U	88-06-2	2,4,6-Trichlorophenol	0.061	U
111-44-4	bis(2-Chloroethyl)ether	0.015	U	120-83-2	2,4-Dichlorophenol	0.015	U
108-60-1	bis(2-chloroisopropyl)ether	0.061	U	105-67-9	2,4-Dimethylphenol	0.015	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.061	U	51-28-5	2,4-Dinitrophenol	0.30	U
85-68-7	Butylbenzylphthalate	0.061	U	121-14-2	2,4-Dinitrotoluene	0.061	U
105-60-2	Caprolactam	0.061	U	606-20-2	2,6-Dinitrotoluene	0.061	U
86-74-8	Carbazole	0.061	U	91-58-7	2-Chloronaphthalene	0.061	U
218-01-9	Chrysene	0.061	0.071	95-57-8	2-Chlorophenol	0.061	U
53-70-3	Dibenzo[a,h]anthracene	0.061	U	91-57-6	2-Methylnaphthalene	0.061	U
132-64-9	Dibenzofuran	0.015	U	95-48-7	2-Methylphenol	0.015	U
84-66-2	Diethylphthalate	0.061	U	88-74-4	2-Nitroaniline	0.061	U
131-11-3	Dimethylphthalate	0.061	U	88-75-5	2-Nitrophenol	0.061	U
84-74-2	Di-n-butylphthalate	0.015	U	106-44-5	3&4-Methylphenol	0.015	U
117-84-0	Di-n-octylphthalate	0.061	U	91-94-1	3,3'-Dichlorobenzidine	0.061	U
206-44-0	Fluoranthene	0.061	0.13	99-09-2	3-Nitroaniline	0.061	U
86-73-7	Fluorene	0.061	U	534-52-1	4,6-Dinitro-2-methylphenol	0.30	U
118-74-1	Hexachlorobenzene	0.061	U	101-55-3	4-Bromophenyl-phenylether	0.061	U
87-68-3	Hexachlorobutadiene	0.061	U	59-50-7	4-Chloro-3-methylphenol	0.061	U
77-47-4	Hexachlorocyclopentadiene	0.061	U	106-47-8	4-Chloroaniline	0.015	U
67-72-1	Hexachloroethane	0.061	U	7005-72-3	4-Chlorophenyl-phenylether	0.061	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.061	U	100-01-6	4-Nitroaniline	0.061	U
78-59-1	Isophorone	0.061	U	100-02-7	4-Nitrophenol	0.061	U
91-20-3	Naphthalene	0.015	U	83-32-9	Acenaphthene	0.061	U
98-95-3	Nitrobenzene	0.061	U	208-96-8	Acenaphthylene	0.061	U
621-64-7	N-Nitroso-di-n-propylamine	0.015	U	98-86-2	Acetophenone	0.061	U
86-30-6	n-Nitrosodiphenylamine	0.061	U	120-12-7	Anthracene	0.061	U
87-86-5	Pentachlorophenol	0.30	U	1912-24-9	Atrazine	0.061	U
85-01-8	Phenanthrene	0.061	U	100-52-7	Benzaldehyde	0.061	U
108-95-2	Phenol	0.061	U	56-55-3	Benzo[a]anthracene	0.061	0.075
129-00-0	Pyrene	0.061	0.13				

Worksheet #: 489030

Total Target Concentration 0.59

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

SampleID : AD07161-006
 Data File: 9M88682.D
 Acq On : 10/20/18 00:54

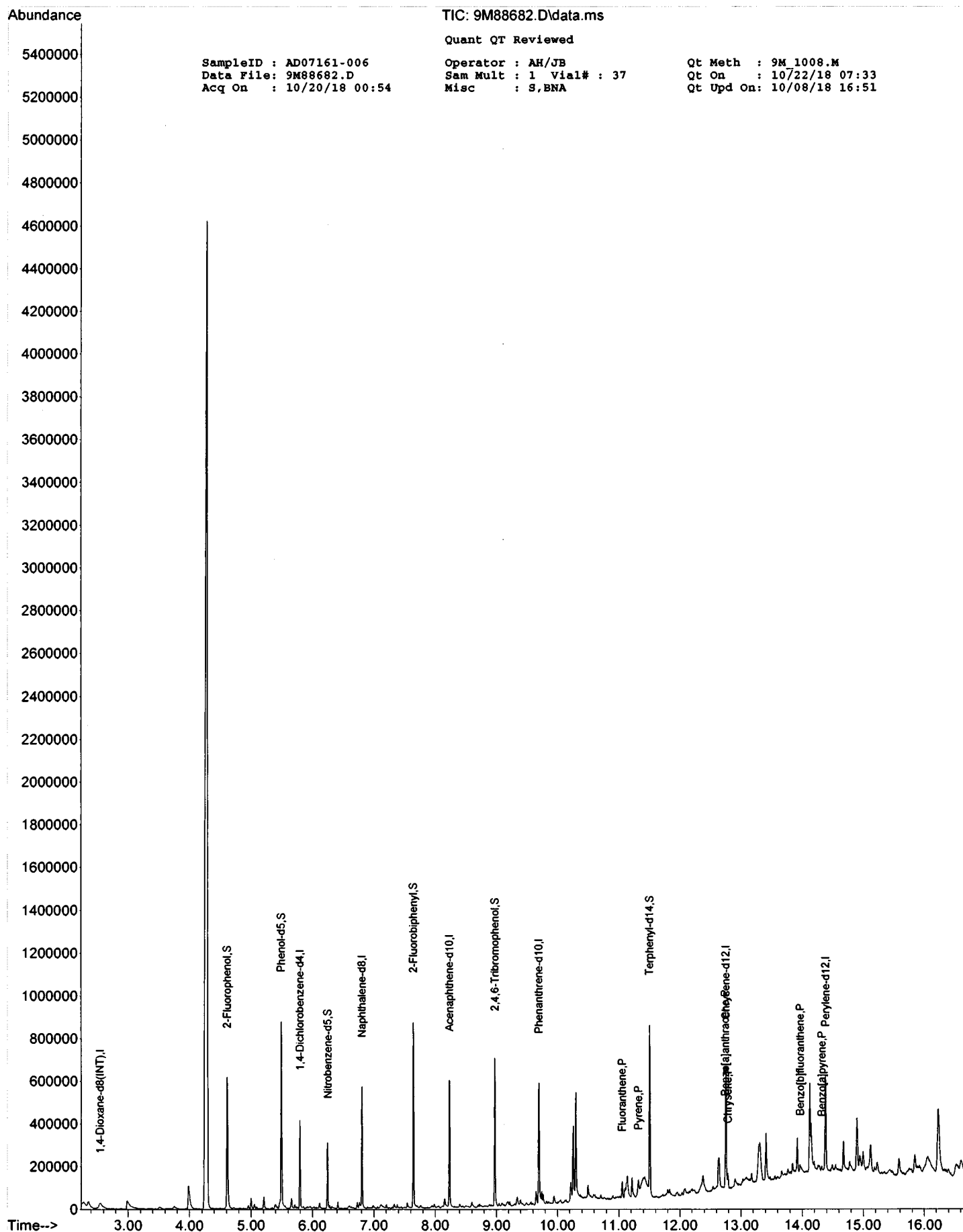
Operator : AH/JB
 Sam Mult : 1 Vial# : 37
 Misc : S,BNA

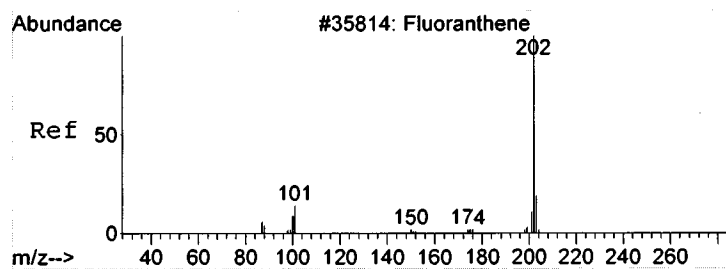
Qt Meth : 9M_1008.M
 Qt On : 10/22/18 07:33
 Qt Upd On: 10/08/18 16:51

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-1918\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.544	96	28251	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.794	152	57294	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	212741	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	127475	40.00	ng	0.00
77) Phenanthrene-d10	9.696	188	211395	40.00	ng	0.00
91) Chrysene-d12	12.756	240	214859	40.00	ng	0.00
103) Perylene-d12	14.384	264	180376	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.609	112	180795	109.10	ng	0.02
Spiked Amount 100.000			Recovery	=	109.10%	
16) Phenol-d5	5.490	99	265478	111.31	ng	0.01
Spiked Amount 100.000			Recovery	=	111.31%	
32) Nitrobenzene-d5	6.246	128	34643	51.13	ng	0.00
Spiked Amount 50.000			Recovery	=	102.26%	
55) 2-Fluorobiphenyl	7.644	172	229291	55.74	ng	0.00
Spiked Amount 50.000			Recovery	=	111.48%	
80) 2,4,6-Tribromophenol	8.977	330	69339	117.70	ng	0.00
Spiked Amount 100.000			Recovery	=	117.70%	
94) Terphenyl-d14	11.503	244	235259	64.66	ng	0.00
Spiked Amount 50.000			Recovery	=	129.32%	
Target Compounds						
90) Fluoranthene	11.054	202	28071	4.2615	ng	87
92) Pyrene	11.318	202	25132	4.1923	ng	80
100) Benzo[a]anthracene	12.744	228	14655	2.4816	ng	91
101) Chrysene	12.784	228	12338	2.3323	ng	98
105) Benzo[b]fluoranthene	13.966	252	18094m	3.5532	ng	
107) Benzo[a]pyrene	14.321	252	12425	2.4784	ng	89

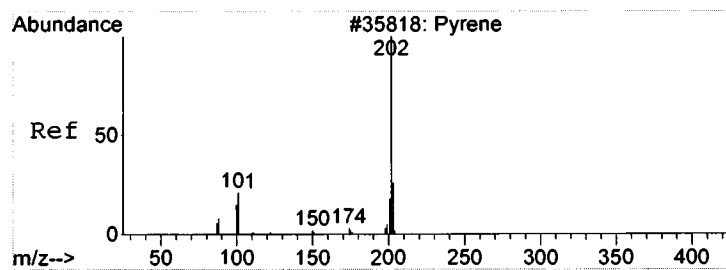
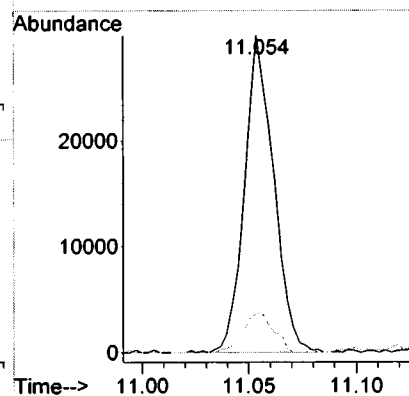
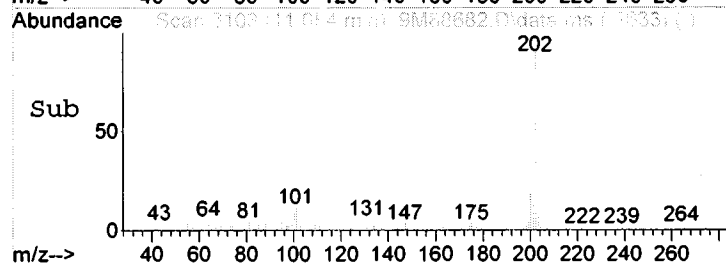
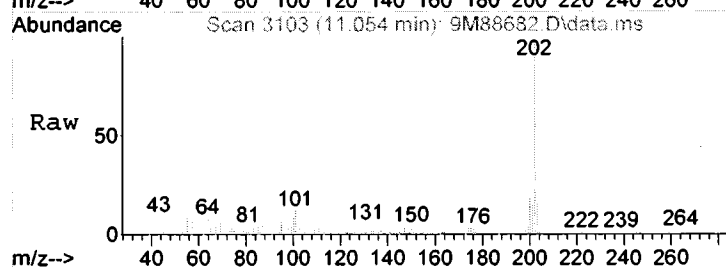
(#) = qualifier out of range (m) = manual integration (+) = signals summed





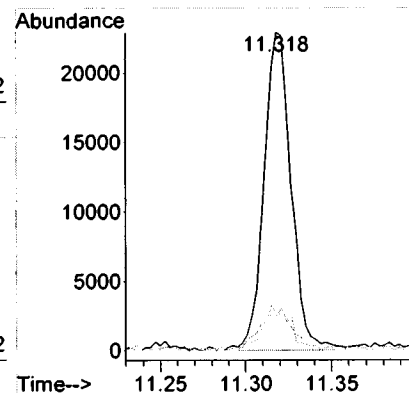
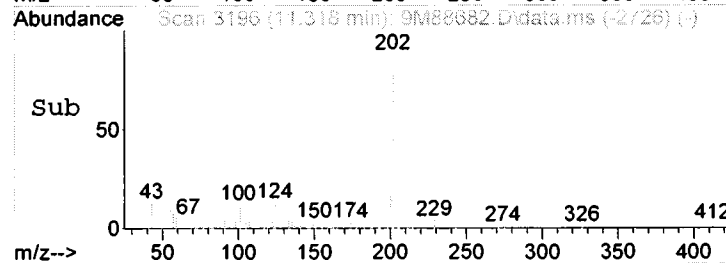
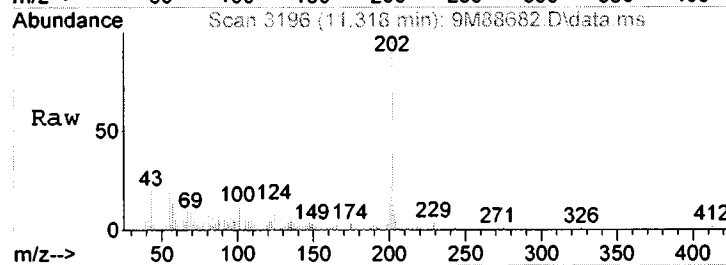
#90
Fluoranthene
Concen: 4.26 ng
RT: 11.054 min Scan# 3103
Delta R.T. 0.006 min
Lab File: 9M88682.D
Acq: 20 Oct 2018 00:54

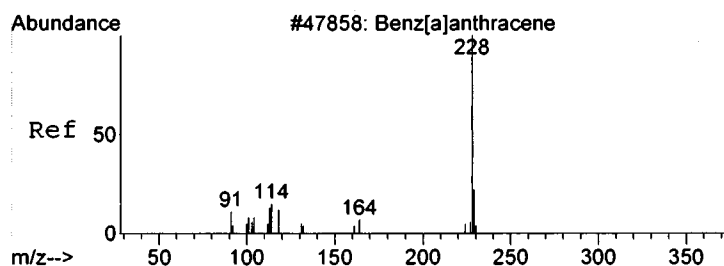
Tgt Ion: 202 Resp: 28071
Ion Ratio Lower Upper
202 100
101 11.7 0.0 57.6



#92
Pyrene
Concen: 4.19 ng
RT: 11.318 min Scan# 3196
Delta R.T. 0.008 min
Lab File: 9M88682.D
Acq: 20 Oct 2018 00:54

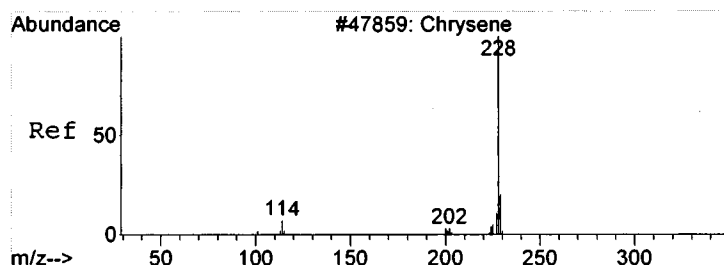
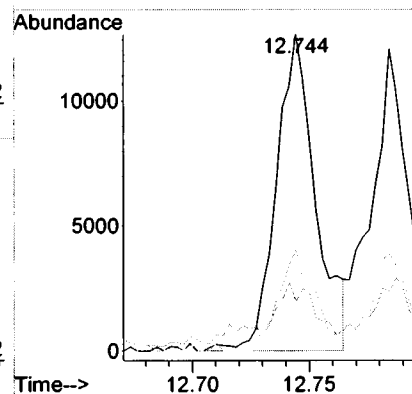
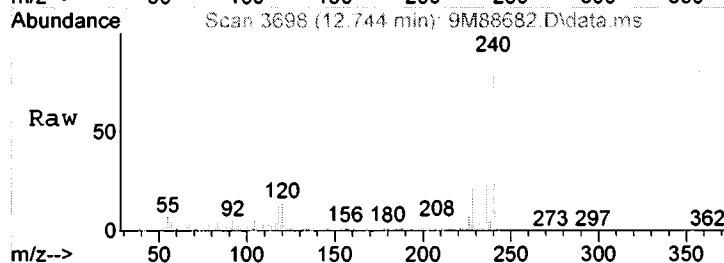
Tgt Ion: 202 Resp: 25132
Ion Ratio Lower Upper
202 100
101 10.7 0.0 62.2
100 11.2 0.0 57.8





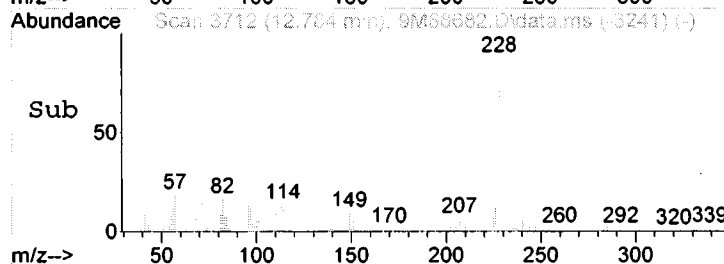
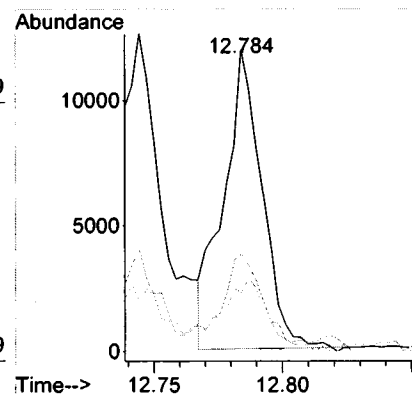
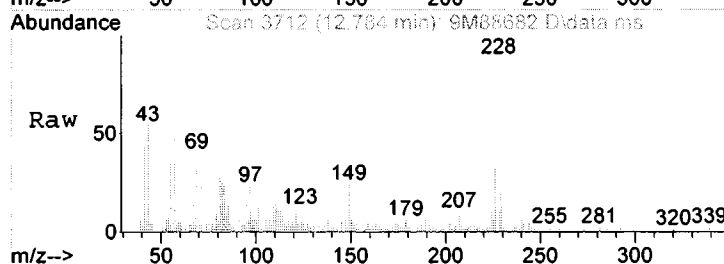
#100
Benzo[a]anthracene
Concen: 2.48 ng
RT: 12.744 min Scan# 3698
Delta R.T. 0.011 min
Lab File: 9M88682.D
Acq: 20 Oct 2018 00:54

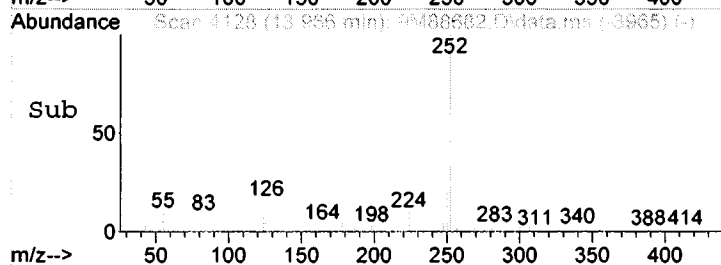
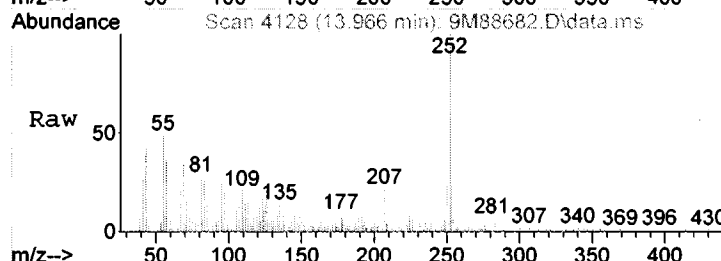
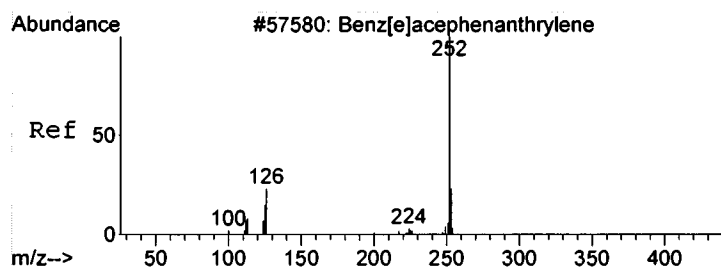
Tgt Ion	228	229	226
Ion Ratio	100	11.9	27.6
Resp	14655	0.0	0.0
Lower		59.5	66.0
Upper			



#101
Chrysene
Concen: 2.33 ng
RT: 12.784 min Scan# 3712
Delta R.T. 0.009 min
Lab File: 9M88682.D
Acq: 20 Oct 2018 00:54

Tgt Ion	228	226	229
Ion Ratio	100	29.8	18.0
Resp	12338	9.5	0.0
Lower		49.5	60.2
Upper			





#105

Benzo[b]fluoranthene

Concen: 3.55 ng m

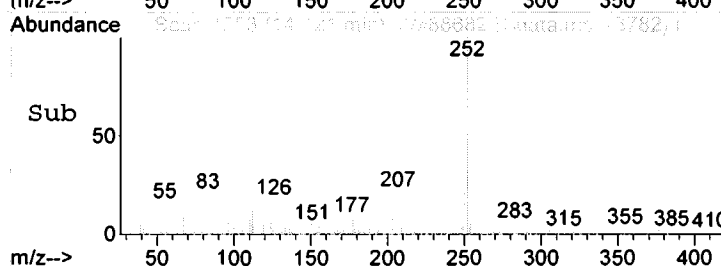
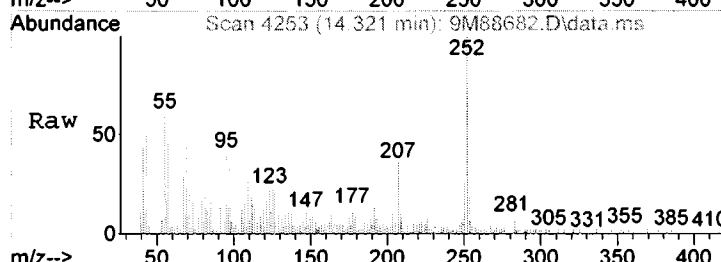
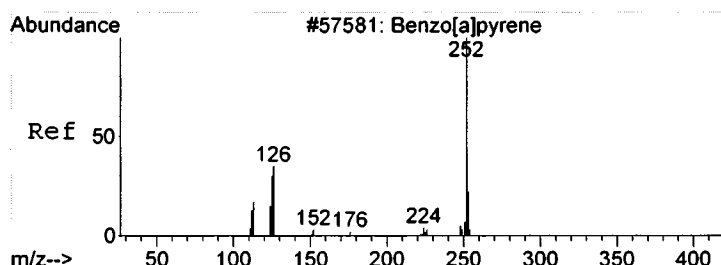
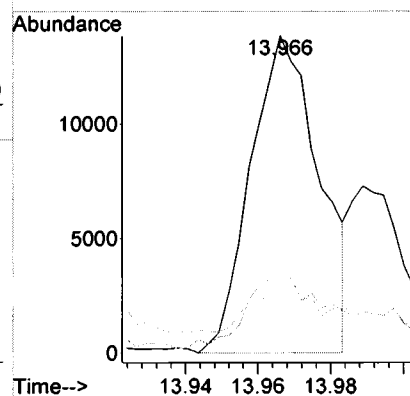
RT: 13.966 min Scan# 4128

Delta R.T. 0.009 min

Lab File: 9M88682.D

Acq: 20 Oct 2018 00:54

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	62.3
125	14.3	0.0	58.4



#107

Benzo[a]pyrene

Concen: 2.48 ng

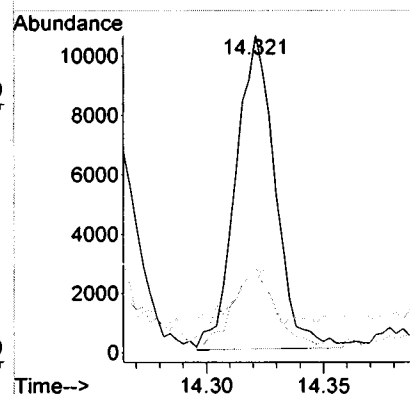
RT: 14.321 min Scan# 4253

Delta R.T. 0.009 min

Lab File: 9M88682.D

Acq: 20 Oct 2018 00:54

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.3	0.0	62.4
125	12.0	0.0	60.9



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-007(R)

Client Id: SW-DUP1-102018

Data File: 7M95355.D

Analysis Date: 10/26/18 14:01

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 970ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3&4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of a-Chlordane and γ-Chlordane.

SampleID : AD07161-007(R)
 Data File: 7M95355.D
 Acq On : 10/26/18 14:01

Operator : AH/JB
 Sam Mult : 1 Vial# : 15
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/26/18 15:19
 Qt Upd On: 10/09/18 08:53

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.510	96	76086	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	120082	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	434760	40.00	ng	0.00
50) Acenaphthene-d10	8.172	164	241640	40.00	ng	0.00
77) Phenanthrene-d10	9.609	188	416506	40.00	ng	0.00
91) Chrysene-d12	12.633	240	385366	40.00	ng	-0.02
103) Perylene-d12	14.241	264	330987	40.00	ng	-0.03

System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	163469	40.05	ng	0.00
Spiked Amount 100.000			Recovery	=	40.05%	
16) Phenol-d5	5.421	99	163295	28.24	ng	-0.01
Spiked Amount 100.000			Recovery	=	28.24%	
32) Nitrobenzene-d5	6.190	128	46511	34.08	ng	0.00
Spiked Amount 50.000			Recovery	=	68.16%	
55) 2-Fluorobiphenyl	7.590	172	278588	36.31	ng	0.00
Spiked Amount 50.000			Recovery	=	72.62%	
80) 2,4,6-Tribromophenol	8.899	330	73173	72.75	ng	0.00
Spiked Amount 100.000			Recovery	=	72.75%	
94) Terphenyl-d14	11.404	244	293906	44.45	ng	0.00
Spiked Amount 50.000			Recovery	=	88.90%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Veri

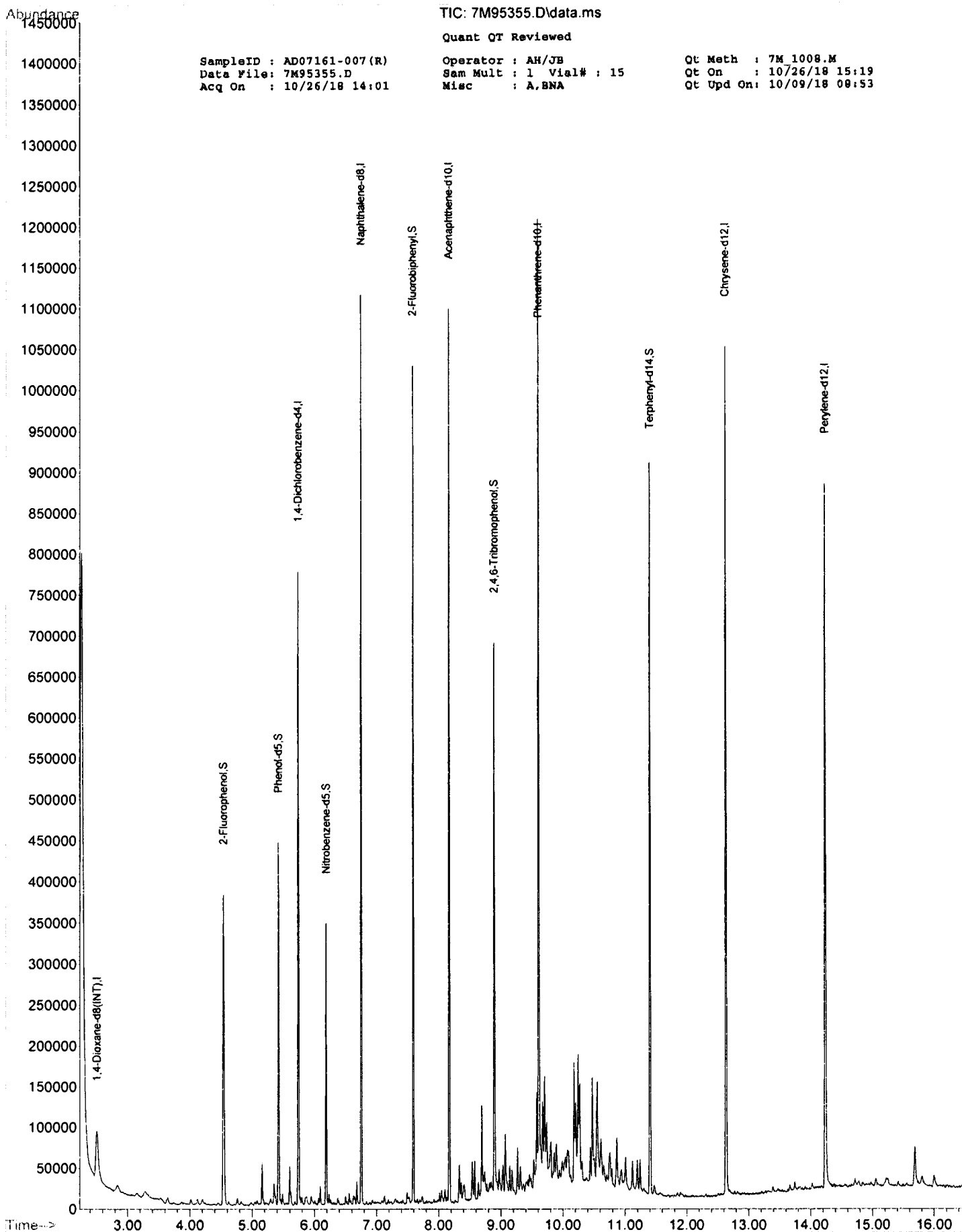
TIC: 7M95355.D\data.ms

Quant QT Reviewed

SampleID : AD07161-007(R)
Data File: 7M95355.D
Acq On : 10/26/18 14:01

Operator : AH/JB
Sam Mult : 1 Vial# : 15
Misc : A,BNA

Qt Meth : 7M 1008.M
Qt On : 10/26/18 15:19
Qt Upd On: 10/09/18 08:53



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-008(R)

Client Id: SW-4-102018

Data File: 7M95356.D

Analysis Date: 10/26/18 14:25

Date Rec/Extracted: 10/17/18-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 960ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.26	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.26	U
120-83-2	2,4-Dichlorophenol	0.26	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.26	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.2	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.26	U
95-48-7	2-Methylphenol	0.26	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.26	U
106-44-5	3&4-Methylphenol	0.26	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.2	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.26	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.26	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.26	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.2	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : AD07161-008(R)
Data File: 7M95356.D
Acq On : 10/26/18 14:25

Operator : AH/JB
Sam Mult : 1 Vial# : 16
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/26/18 15:19
Qt Upd On: 10/09/18 08:53

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

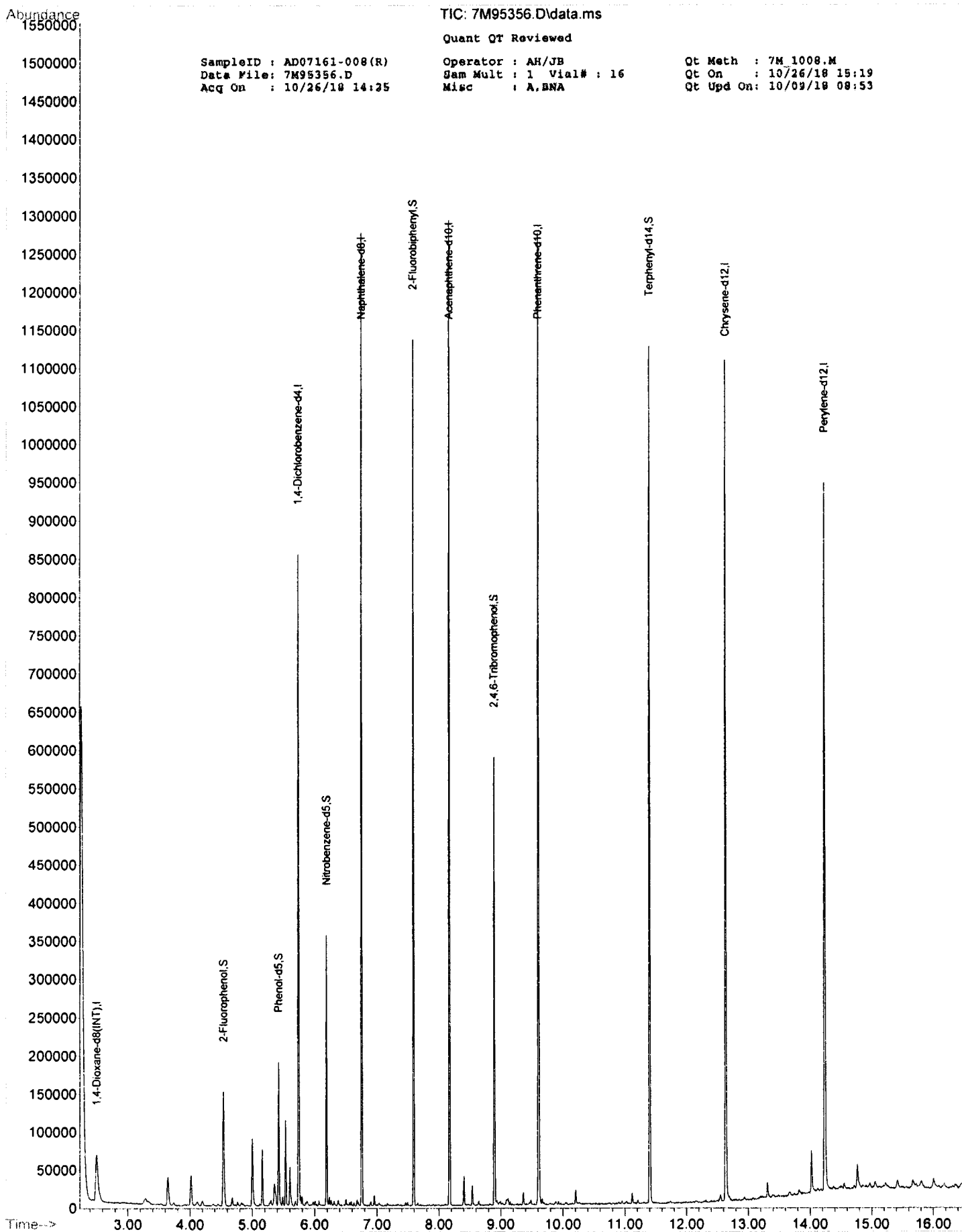
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.504	96	74695	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	130977	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	474974	40.00	ng	0.00
50) Acenaphthene-d10	8.172	164	272873	40.00	ng	0.00
77) Phenanthrene-d10	9.609	188	472791	40.00	ng	0.00
91) Chrysene-d12	12.638	240	429667	40.00	ng	-0.01
103) Perylene-d12	14.241	264	366645	40.00	ng	-0.03

System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	60967	15.22	ng	0.00
Spiked Amount 100.000			Recovery	=	15.22%	
16) Phenol-d5	5.421	99	67442	11.88	ng	-0.01
Spiked Amount 100.000			Recovery	=	11.88%	
32) Nitrobenzene-d5	6.190	128	50673	33.99	ng	0.00
Spiked Amount 50.000			Recovery	=	67.98%	
55) 2-Fluorobiphenyl	7.590	172	317627	36.66	ng	0.00
Spiked Amount 50.000			Recovery	=	73.32%	
80) 2,4,6-Tribromophenol	8.899	330	63910	56.84	ng	0.00
Spiked Amount 100.000			Recovery	=	56.84%	
94) Terphenyl-d14	11.404	244	368001	49.92	ng	0.00
Spiked Amount 50.000			Recovery	=	99.84%	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

2



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD07161-009

Client Id: SD-4-102018

Data File: 9M88683.D

Analysis Date: 10/20/18 01:17

Date Rec/Extracted: 10/17/18-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 30

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.11	U	50-32-8	Benzo[a]pyrene	0.11	0.17
95-94-3	1,2,4,5-Tetrachlorobenzene	0.11	U	205-99-2	Benzo[b]fluoranthene	0.11	0.26
191-24-2	Benzo[g,h,i]perylene	0.11	0.14	58-90-2	2,3,4,6-Tetrachlorophenol	0.11	U
207-08-9	Benzo[k]fluoranthene	0.11	U	95-95-4	2,4,5-Trichlorophenol	0.11	U
111-91-1	bis(2-Chloroethoxy)methan	0.11	U	88-06-2	2,4,6-Trichlorophenol	0.11	U
111-44-4	bis(2-Chloroethyl)ether	0.028	U	120-83-2	2,4-Dichlorophenol	0.028	U
108-60-1	bis(2-chloroisopropyl)ether	0.11	U	105-67-9	2,4-Dimethylphenol	0.028	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.11	U	51-28-5	2,4-Dinitrophenol	0.56	U
85-68-7	Butylbenzylphthalate	0.11	U	121-14-2	2,4-Dinitrotoluene	0.11	U
105-60-2	Caprolactam	0.11	U	606-20-2	2,6-Dinitrotoluene	0.11	U
86-74-8	Carbazole	0.11	U	91-58-7	2-Chloronaphthalene	0.11	U
218-01-9	Chrysene	0.11	0.18	95-57-8	2-Chlorophenol	0.11	U
53-70-3	Dibenzo[a,h]anthracene	0.11	U	91-57-6	2-Methylnaphthalene	0.11	U
132-64-9	Dibenzofuran	0.028	U	95-48-7	2-Methylphenol	0.028	U
84-66-2	Diethylphthalate	0.11	U	88-74-4	2-Nitroaniline	0.11	U
131-11-3	Dimethylphthalate	0.11	U	88-75-5	2-Nitrophenol	0.11	U
84-74-2	Di-n-butylphthalate	0.028	U	106-44-5	3&4-Methylphenol	0.028	U
117-84-0	Di-n-octylphthalate	0.11	U	91-94-1	3,3'-Dichlorobenzidine	0.11	U
206-44-0	Fluoranthene	0.11	0.27	99-09-2	3-Nitroaniline	0.11	U
86-73-7	Fluorene	0.11	U	534-52-1	4,6-Dinitro-2-methylphenol	0.56	U
118-74-1	Hexachlorobenzene	0.11	U	101-55-3	4-Bromophenyl-phenylether	0.11	U
87-68-3	Hexachlorobutadiene	0.11	U	59-50-7	4-Chloro-3-methylphenol	0.11	U
77-47-4	Hexachlorocyclopentadiene	0.11	U	106-47-8	4-Chloroaniline	0.028	U
67-72-1	Hexachloroethane	0.11	U	7005-72-3	4-Chlorophenyl-phenylether	0.11	U
193-39-5	Indeno[1,2,3-cd]pyrene	0.11	U	100-01-6	4-Nitroaniline	0.11	U
78-59-1	Isophorone	0.11	U	100-02-7	4-Nitrophenol	0.11	U
91-20-3	Naphthalene	0.028	U	83-32-9	Acenaphthene	0.11	U
98-95-3	Nitrobenzene	0.11	U	208-96-8	Acenaphthylene	0.11	U
621-64-7	N-Nitroso-di-n-propylamine	0.028	U	98-86-2	Acetophenone	0.11	U
86-30-6	n-Nitrosodiphenylamine	0.11	U	120-12-7	Anthracene	0.11	U
87-86-5	Pentachlorophenol	0.56	U	1912-24-9	Atrazine	0.11	U
85-01-8	Phenanthrene	0.11	0.12	100-52-7	Benzaldehyde	0.11	0.60
108-95-2	Phenol	0.11	U	56-55-3	Benzo[a]anthracene	0.11	0.14
129-00-0	Pyrene	0.11	0.27				

Worksheet #: 489030

Total Target Concentration 2.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

SampleID : AD07161-009
 Data File: 9M88683.D
 Acq On : 10/20/18 01:17

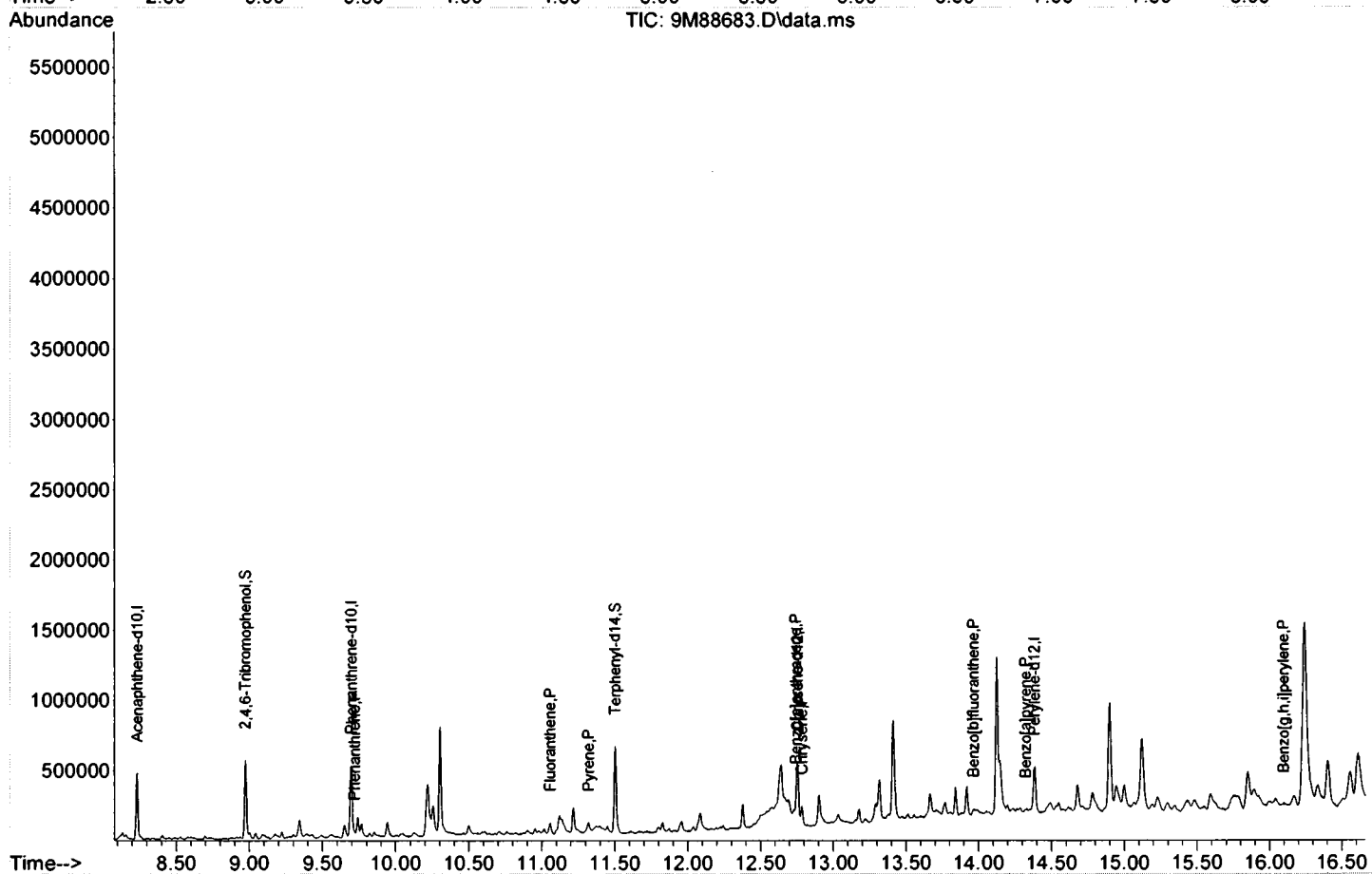
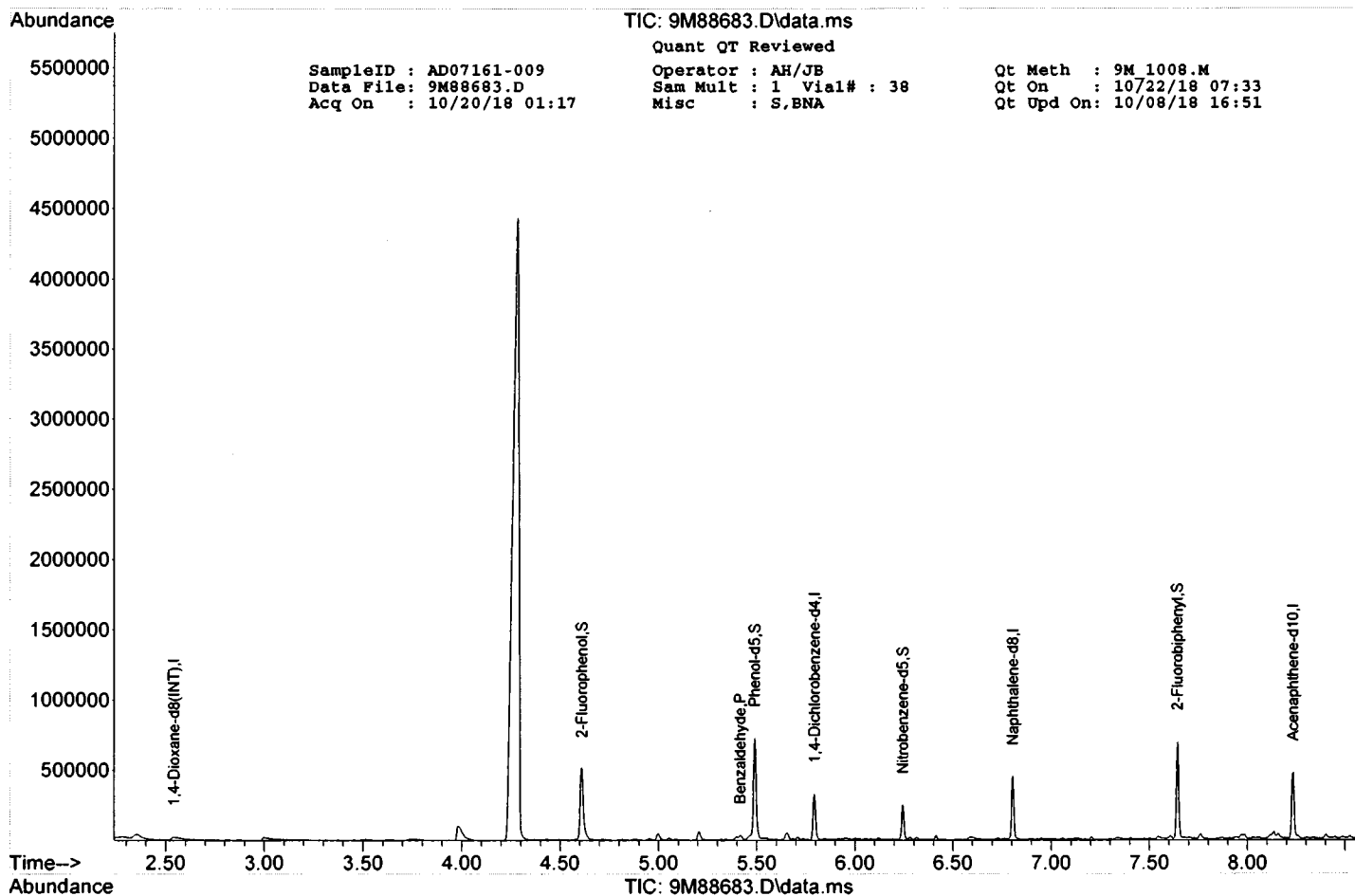
Operator : AH/JB
 Sam Mult : 1 Vial# : 38
 Misc : S,BNA

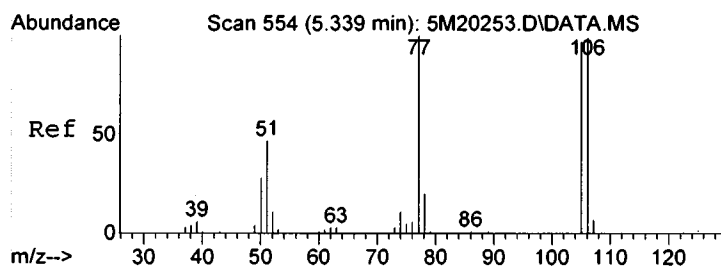
Qt Meth : 9M_1008.M
 Qt On : 10/22/18 07:33
 Qt Upd On: 10/08/18 16:51

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-1918\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.541	96	21960	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.794	152	45242	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	164715	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	99314	40.00	ng	0.00
77) Phenanthrene-d10	9.695	188	162455	40.00	ng	0.00
91) Chrysene-d12	12.756	240	169183	40.00	ng	0.00
103) Perylene-d12	14.384	264	139012	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.612	112	142465	110.60	ng	0.02
Spiked Amount 100.000			Recovery =	110.60%		
16) Phenol-d5	5.490	99	212349	114.54	ng	0.01
Spiked Amount 100.000			Recovery =	114.54%		
32) Nitrobenzene-d5	6.243	128	28292	53.93	ng	0.00
Spiked Amount 50.000			Recovery =	107.86%		
55) 2-Fluorobiphenyl	7.644	172	178023	55.55	ng	0.00
Spiked Amount 50.000			Recovery =	111.10%		
80) 2,4,6-Tribromophenol	8.974	330	53683	118.47	ng	0.00
Spiked Amount 100.000			Recovery =	118.47%		
94) Terphenyl-d14	11.503	244	182260	63.62	ng	0.00
Spiked Amount 50.000			Recovery =	127.24%		
Target Compounds						
12) Benzaldehyde	5.416	77	7758	10.7850	ng	78
86) Phenanthrene	9.718	178	8722	2.1142	ng	97
90) Fluoranthene	11.057	202	24631	4.8657	ng	89
92) Pyrene	11.321	202	23095	4.8926	ng	86
100) Benzo[a]anthracene	12.744	228	11639m	2.5030	ng	
101) Chrysene	12.784	228	13445m	3.2246	ng	
105) Benzo[b]fluoranthene	13.966	252	18320m	4.6680	ng	
107) Benzo[a]pyrene	14.321	252	11976m	3.0997	ng	
110) Benzo[g,h,i]perylene	16.097	276	8719	2.5004	ng	60

(#) = qualifier out of range (m) = manual integration (+) = signals summed





#12

Benzaldehyde

Concen: 10.78 ng

RT: 5.416 min Scan# 1119

Delta R.T. 0.006 min

Lab File: 9M88683.D

Acq: 20 Oct 2018 1:17

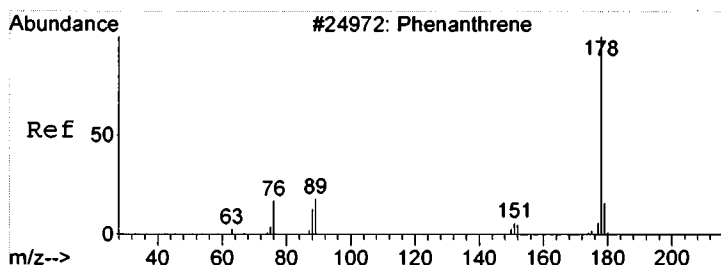
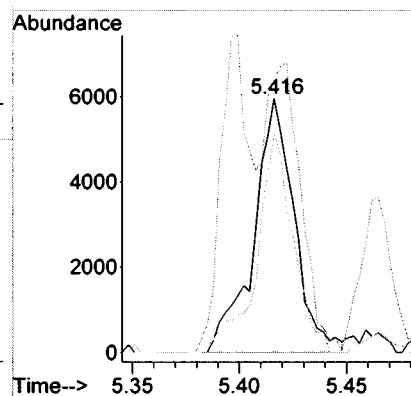
Tgt Ion: 77 Resp: 7758

Ion Ratio Lower Upper

77 100

105 107.4 0.0 276.0

106 85.9 0.0 278.4



#86

Phenanthrene

Concen: 2.11 ng

RT: 9.718 min Scan# 2633

Delta R.T. 0.003 min

Lab File: 9M88683.D

Acq: 20 Oct 2018 1:17

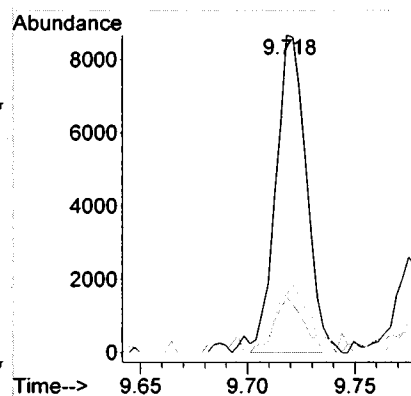
Tgt Ion: 178 Resp: 8722

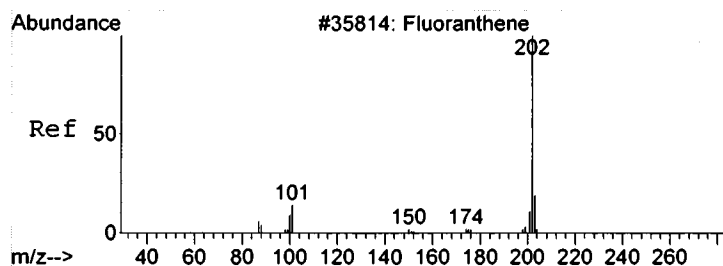
Ion Ratio Lower Upper

178 100

179 17.4 0.0 55.5

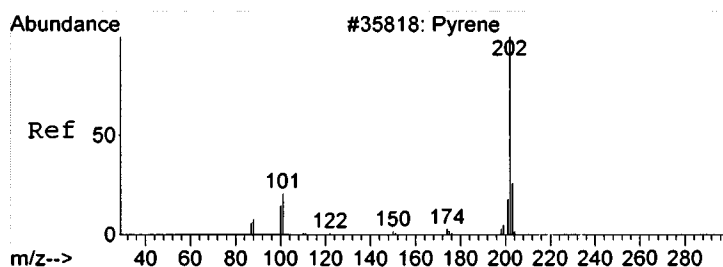
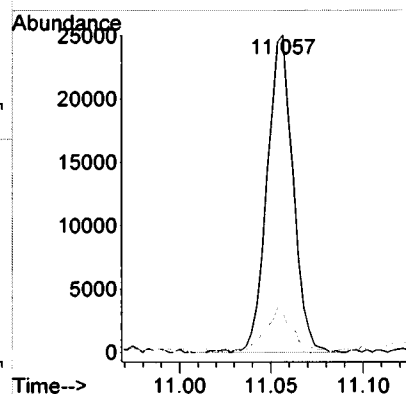
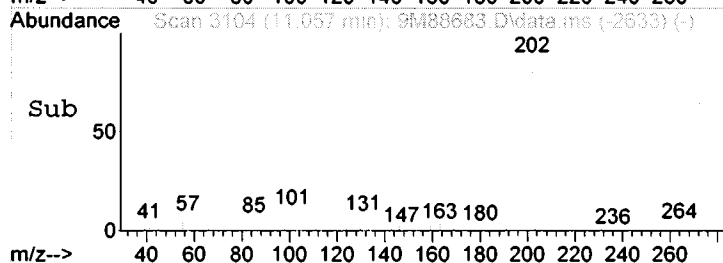
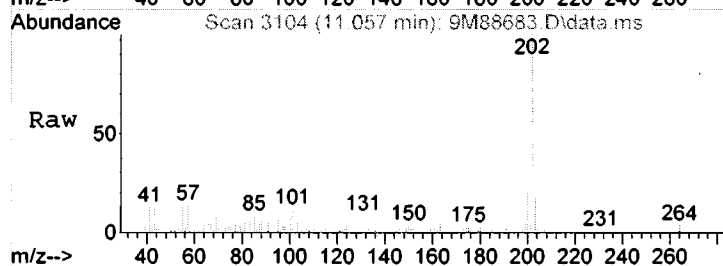
176 18.5 0.0 59.3





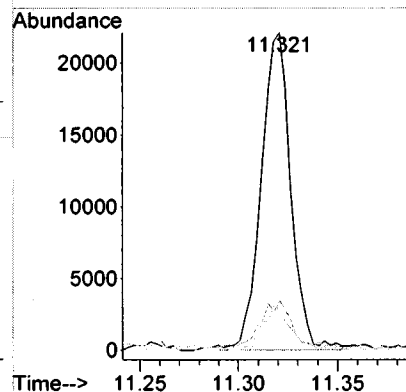
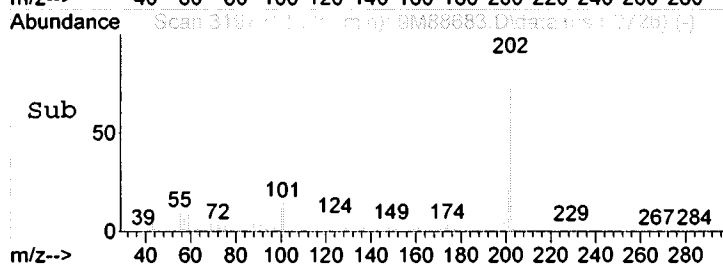
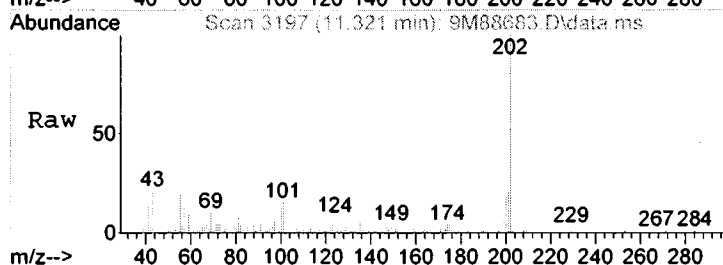
#90
Fluoranthene
Concen: 4.87 ng
RT: 11.057 min Scan# 3104
Delta R.T. 0.009 min
Lab File: 9M88683.D
Acq: 20 Oct 2018 1:17

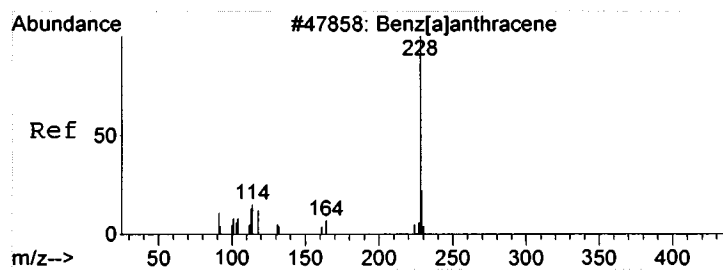
Tgt Ion: 202 Resp: 24631
Ion Ratio Lower Upper
202 100
101 12.6 0.0 57.6



#92
Pyrene
Concen: 4.89 ng
RT: 11.321 min Scan# 3197
Delta R.T. 0.011 min
Lab File: 9M88683.D
Acq: 20 Oct 2018 1:17

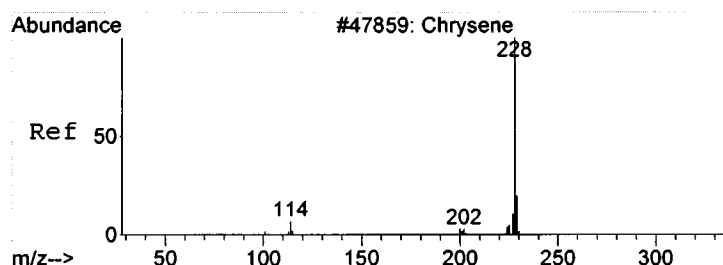
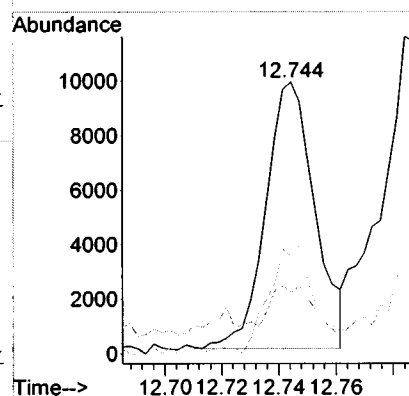
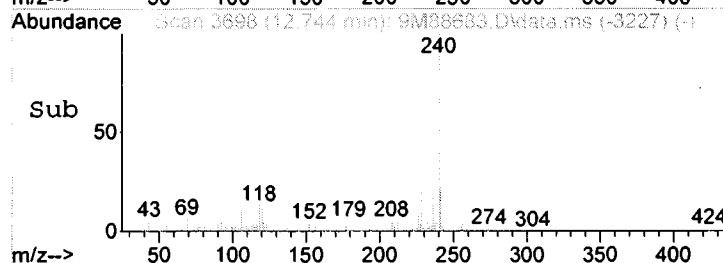
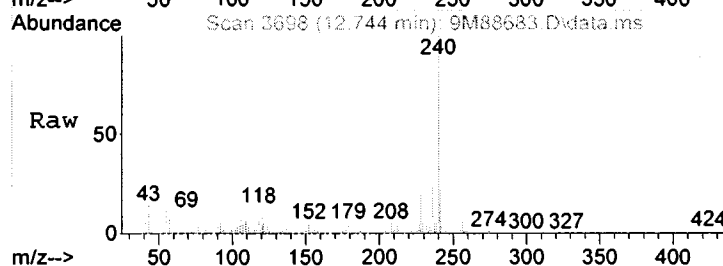
Tgt Ion: 202 Resp: 23095
Ion Ratio Lower Upper
202 100
101 14.7 0.0 62.2
100 12.8 0.0 57.8





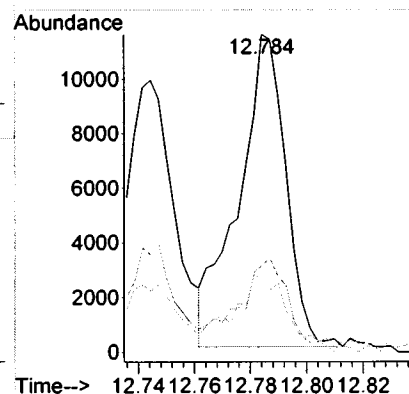
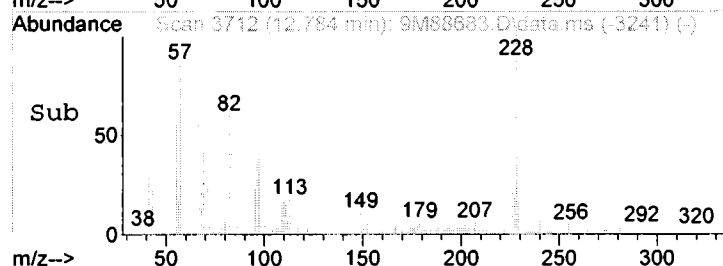
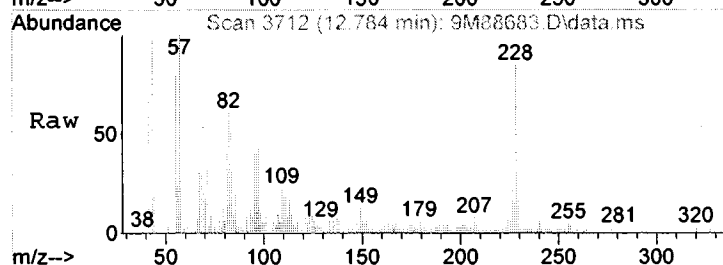
#100
Benzo[a]anthracene
Concen: 2.50 ng m
RT: 12.744 min Scan# 3698
Delta R.T. 0.011 min
Lab File: 9M88683.D
Acq: 20 Oct 2018 1:17

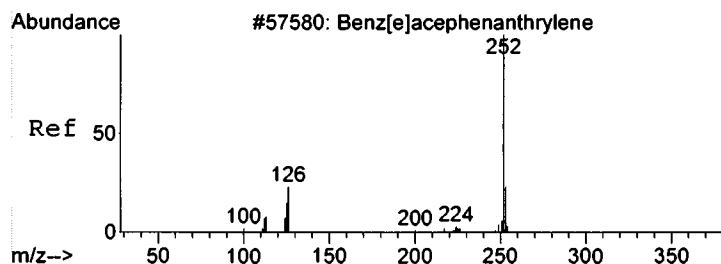
Tgt Ion	228	229	226
Resp	11639	22.4	35.8
Ratio	100	0.0	0.0
Lower		59.5	66.0
Upper			



#101
Chrysene
Concen: 3.22 ng m
RT: 12.784 min Scan# 3712
Delta R.T. 0.009 min
Lab File: 9M88683.D
Acq: 20 Oct 2018 1:17

Tgt Ion	228	226	229
Resp	13445	27.2	22.9
Ratio	100	9.5	0.0
Lower		49.5	60.2
Upper			





#105

Benzo[b]fluoranthene

Concen: 4.67 ng m

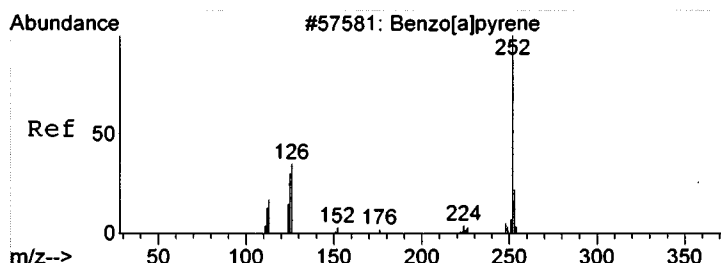
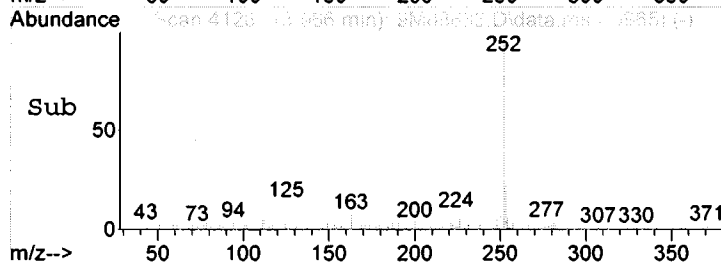
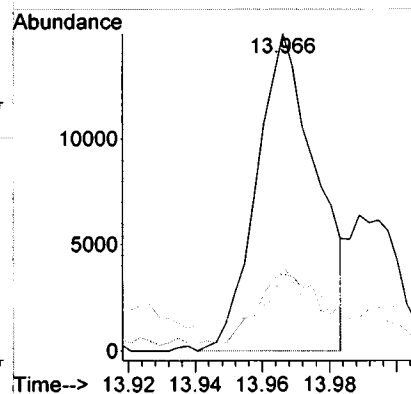
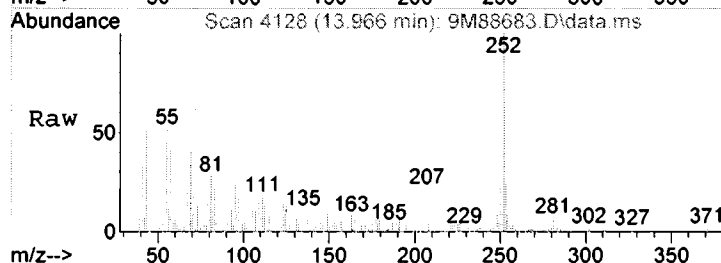
RT: 13.966 min Scan# 4128

Delta R.T. 0.009 min

Lab File: 9M88683.D

Acq: 20 Oct 2018 1:17

Tgt Ion:	252	Resp:	18320
Ion Ratio	Lower	Upper	
252	100		
253	24.2	0.0	62.3
125	13.5	0.0	58.4



#107

Benzo[a]pyrene

Concen: 3.10 ng m

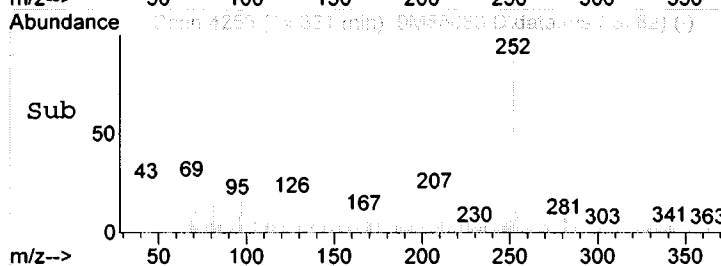
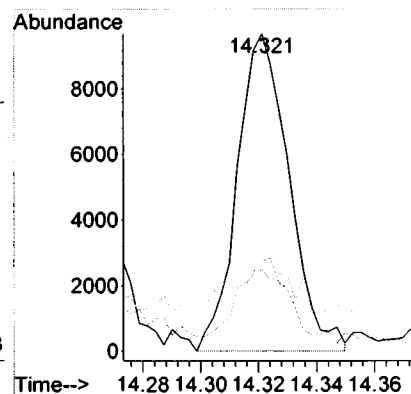
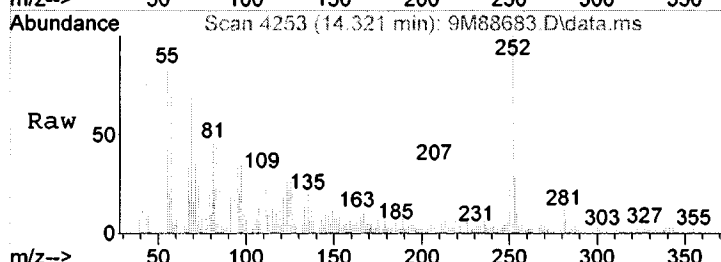
RT: 14.321 min Scan# 4253

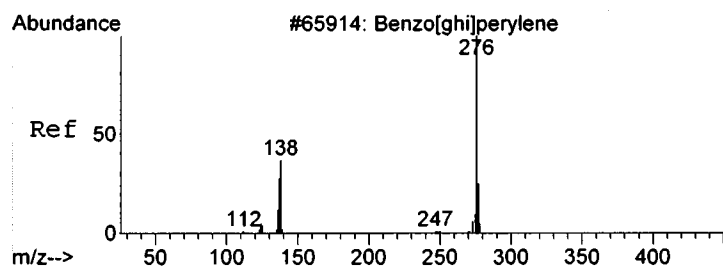
Delta R.T. 0.009 min

Lab File: 9M88683.D

Acq: 20 Oct 2018 1:17

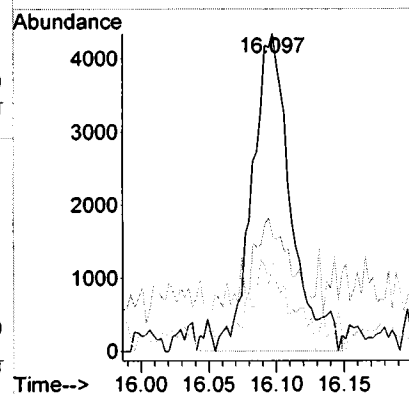
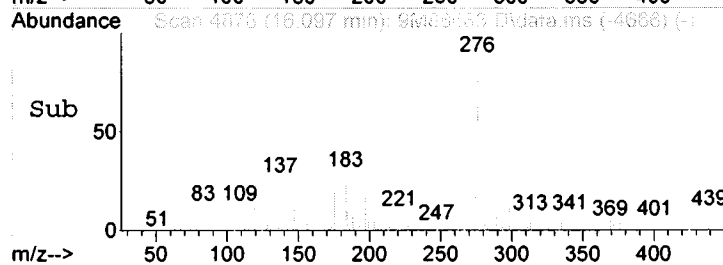
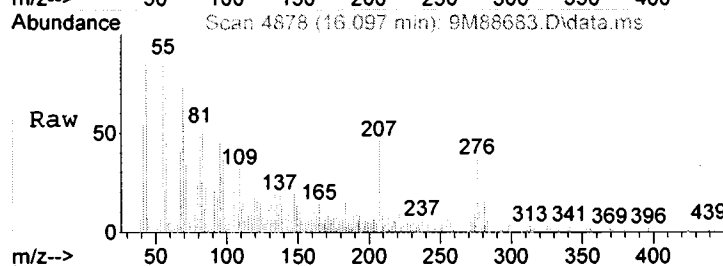
Tgt Ion:	252	Resp:	11976
Ion Ratio	Lower	Upper	
252	100		
253	28.4	0.0	62.4
125	25.7	0.0	60.9





#110
Benzo[g,h,i]perylene
Concen: 2.50 ng
RT: 16.097 min Scan# 4878
Delta R.T. 0.037 min
Lab File: 9M88683.D
Acq: 20 Oct 2018 1:17

Tgt Ion	276	Resp	8719
Ion	Ratio	Lower	Upper
276	100		
138	18.1	0.0	100.0
277	14.0	0.0	60.0



**GC/MS Base Neutral/Acid Extractable Data
Standards Data**

		Data File:		Cal Identifier:		Analysis Date/Time				Data File:		Cal Identifier:		Analysis Date/Time												
Level #:										Level #:																
1	10M71237.D	CAL BNA@50PPM		10/08/18 11:51		2	10M71230.D	CAL BNA@20PPM		10/08/18 09:15																
3	10M71229.D	CAL BNA@10PPM		10/08/18 08:51		4	10M71235.D	CAL BNA@20PPM		10/08/18 11:06																
5	10M71234.D	CAL BNA@80PPM		10/08/18 10:44		6	10M71233.D	CAL BNA@120PPM		10/08/18 10:22																
7	10M71232.D	CAL BNA@160PPM		10/08/18 10:00		8	10M71231.D	CAL BNA@196PPM		10/08/18 09:38																
9	10M71236.D	CAL BNA@5PPM		10/08/18 11:28																						
Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	0.9163	0.9784	0.8614	0.9495	0.9400	0.9860	0.9737	0.9720	1.0981	0.964	2.77	1.00	1.00	6.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Qua	2.2769	2.7582	1.1790	2.0994	2.4232	2.4394	2.5246	2.5902	----	2.29	3.26	0.994	0.997	21	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitrosodimethylamin	1	0	Avg	1.3113	1.3823	0.9896	1.2963	1.3434	1.4176	1.4304	1.4928	----	1.33	3.19	0.998	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Fluorophenol	1	0	Avg	2.2805	2.6335	1.8967	2.1528	2.3244	2.3745	2.4209	2.4407	----	2.32	4.72	0.998	0.999	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzaldehyde	1	0	Avg	1.2272	1.0507	1.2152	1.5305	1.1364	0.9923	0.8938	0.8699	----	1.11	5.53	0.982	0.997	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Aniline	1	0	Qua	3.2533	2.3390	2.2026	3.3123	3.3039	3.2747	3.3055	3.3352	1.6235	2.88	5.62	1.00	1.00	23	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.8420	1.0014	0.7371	0.8927	0.8769	0.8947	0.8767	0.8870	----	0.87	5.66	1.00	1.00	8.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethyl)ether	1	0	Qua	2.2873	2.7620	1.7684	2.2160	2.3177	2.3137	2.3343	2.2962	2.8477	2.35	5.67	1.00	1.00	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.1684	3.5247	2.4925	3.0571	3.2110	3.2116	3.1968	3.2096	----	3.13	5.58	1.00	1.00	9.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol	1	0	Avg	3.2397	3.1306	2.5361	3.0634	3.3007	3.1364	3.1745	3.2496	----	3.10	5.60	0.999	0.999	7.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Chlorophenol	1	0	Avg	2.5891	2.6709	2.0726	2.5610	2.7034	2.6508	2.7124	2.7793	----	2.59	5.72	0.999	1.00	8.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Decane	1	0	Avg	2.0449	2.2998	1.7266	1.9780	2.1168	2.0420	2.0548	2.0139	----	2.03	5.75	0.999	1.00	7.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,3-Dichlorobenzene	1	0	Avg	2.7692	3.3238	2.4153	2.8023	2.9300	2.9436	2.9013	2.9115	----	2.87	5.85	1.00	1.00	8.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,4-Dichlorobenzene	1	0	Avg	1.4230	1.7715	1.2797	1.4498	1.4832	1.4733	1.4469	1.4495	----	1.47	5.91	1.00	1.00	9.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2-Dichlorobenzene	1	0	Avg	1.4085	1.7780	1.2053	1.4363	1.4411	1.4340	1.4205	1.3825	----	1.44	6.04	0.999	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzyl alcohol	1	0	Avg	0.8117	0.7769	0.6703	0.7688	0.8537	0.8609	0.8755	0.8747	----	0.81	6.01	0.999	0.999	8.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-chloroisopropyl)le	1	0	Avg	1.3455	1.5746	1.1957	1.3577	1.3543	1.3891	1.3849	1.3214	----	1.37	6.12	0.999	0.999	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylphenol	1	0	Avg	1.1490	1.4286	0.9890	1.1678	1.1729	1.1804	1.1721	1.1438	1.0656	1.16	6.10	1.00	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.7324	1.9738	1.4531	1.7246	1.7092	1.6600	1.5341	1.3916	----	1.65	6.22	0.992	0.998	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachloroethane	1	0	Avg	0.5859	0.5137	0.4839	0.5779	0.5883	0.6086	0.6091	0.5924	----	0.57	6.31	0.999	1.00	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitroso-di-n-propyla	1	0	Avg	0.8133	0.8097	0.6830	0.8550	0.8165	0.8039	0.7464	0.6872	0.6942	0.76	6.22	0.991	0.999	8.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3,8,4-Methylphenol	1	0	Avg	1.1797	1.2818	0.9755	1.1568	1.1682	1.1235	1.0365	0.9173	1.1042	1.10	6.22	0.984	0.999	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Qua	0.1169	0.0938	0.0957	0.1214	0.1318	0.1305	0.1394	0.1375	----	0.12	6.34	0.998	0.999	15	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	0.50
Nitrobenzene	1	0	Avg	0.3394	0.3609	0.3015	0.3562	0.3520	0.3484	0.3603	0.3612	----	0.34	6.36	1.00	1.00	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Isophorone	1	0	Avg	0.5820	0.6551	0.5020	0.6125	0.6024	0.6040	0.6112	0.6157	----	0.59	6.54	1.00	1.00	7.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Nitrophenol	1	0	Avg	0.1881	0.1936	0.1384	0.1975	0.1943	0.2038	0.2029	0.2025	----	0.19	6.60	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dimethylphenol	1	0	Avg	0.3342	0.4160	0.3157	0.3610	0.3501	0.3539	0.3565	0.3534	0.3540	0.35	6.63	1.00	1.00	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2699	-----	0.0934	0.2098	0.3402	0.3661	0.3877	0.4066	----	0.29	6.71	0.995	0.999	38	50.00		10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethoxy)me	1	0	Avg	0.3731	0.4031	0.3353	0.3889	0.3806	0.3771	0.3760	0.3672	----	0.37	6.70	1.00	1.00	5.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dichlorophenol	1	0	Avg	0.2996	0.3398	0.2752	0.2990	0.3133	0.3222	0.3176	0.3097	0.3108	0.31	6.79	0.999	0.999	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3310	0.3605	0.2986	0.3524	0.3418	0.3303	0.3363	0.3350	----	0.33	6.85	1.00	1.00	5.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Naphthalene	1	0	Qua	1.0355	1.2921	0.9368	1.0487	1.0741	1.0602	1.0307	1.0025	1.2642	1.08	6.91	0.999	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Avg	0.3907	0.3412	0.2668	0.4177	0.3895	0.3455	0.3223	0.2975	0.3237	0.34	6.95	0.985	0.999	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1863	0.2134	0.1629	0.1887	0.1949	0.1840	0.1875	0.1858	----	0.18	7.00	0.999	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Caprolactam	1	0	Qua	0.1130	0.0894	0.0809	0.1061	0.1168	0.1182	0.1348	0.1392	----	0.11	7.23	0.993	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloro-3-methylbiphe	1	0	Avg	0.2776	0.2738	0.2341	0.2792	0.2962	0.2941	0.3057	0.3093	----	0.28	7.32	0.999	1.00	8.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylnaphthalene	1	0	Avg	0.6765	0.8213	0.6453	0.7119	0.6932	0.6915	0.7031	0.6667	----	0.70	7.45	0.999	0.999	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1-Methylnaphthalene	1	0	Avg	0.6736	0.8267	0.6133	0.7134	0.6749	0.6807	0.6885																

Flags

a - failed the min of criteria

c - failed the minimum correlation coeff criteria(s) applicable

Note:

Avg Rsd: 10.6

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Data File: Cal Identifier: Analysis Date/Time										Level #:										Data File: Cal Identifier: Analysis Date/Time															
Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time																
1	10M71237.D	CAL BNA@50PPM	10/08/18 11:51	2	10M71230.D	CAL BNA@2PPM	10/08/18 09:15	3	10M71229.D	CAL BNA@10PPM	10/08/18 08:51	4	10M71235.D	CAL BNA@20PPM	10/08/18 11:06	5	10M71234.D	CAL BNA@80PPM	10/08/18 10:44	6	10M71233.D	CAL BNA@120PPM	10/08/18 10:22	7	10M71232.D	CAL BNA@160PPM	10/08/18 09:38	8	10M71231.D	CAL BNA@196PPM	10/08/18 09:38	9	10M71236.D	CAL BNA@.5PPM	10/08/18 11:28
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9									
Hexachlorocyclopenta	1	0	Qua	0.1966	0.0508	0.0874	0.1670	0.2322	0.2512	0.2685	0.2510	---	0.1887	5.7	0.990	0.995	43	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,4,6-Trichlorophenol	1	0	Qua	0.3356	0.3205	0.2713	0.3391	0.3641	0.3563	0.3471	0.3306	---	0.3337	6.7	0.997	0.999	8.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,4,5-Trichlorophenol	1	0	Qua	0.3415	0.3446	0.2925	0.3705	0.3648	0.3779	0.3822	0.3562	---	0.3547	7.1	0.997	0.998	8.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2-Fluorobiphenyl	1	0	Qua	1.2471	1.4413	1.1571	1.3128	1.2871	1.2663	1.3061	1.2273	---	1.2877	7.4	0.999	0.999	6.4	---	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00									
2-Chloronaphthalene	1	0	Qua	1.0298	1.2707	0.9270	1.0509	1.0580	1.0795	1.0460	0.9877	---	1.0678	8.5	0.997	0.999	9.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
1,4-Dimethylnaphthale	1	0	Qua	0.9301	1.1310	0.8336	0.9664	0.8947	0.8151	0.7401	0.6628	---	0.8728	8.13	0.984	0.999	17	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Dimethylnaphthalenes	1	0	Qua	0.9301	1.1310	0.8336	0.9664	0.8947	0.8151	0.7401	0.6628	---	0.8728	8.13	0.984	0.999	17	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Diphenyl Ether	1	0	Qua	0.7971	0.8963	0.7002	0.8074	0.8258	0.7968	0.7571	0.6796	---	0.7837	7.91	0.989	0.998	8.9	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2-Nitroaniline	1	0	Qua	0.3804	0.3681	0.3120	0.3959	0.3856	0.3907	0.3873	0.3824	---	0.3757	7.93	1.00	1.00	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Coumarin	1	0	Qua	0.4021	0.4793	0.3507	0.4279	0.4159	0.3812	0.3494	0.3049	---	0.3898	8.12	0.976	0.999	14	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Acenaphthylene	1	0	Qua	1.5715	1.7053	1.3744	1.5893	1.5918	1.5445	1.5849	1.5011	---	1.5682	8.21	0.999	0.999	6.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Dimethylphthalate	1	0	Qua	1.2354	1.3241	1.0966	1.2762	1.2283	1.2365	1.2426	1.2290	---	1.2387	8.07	1.00	1.00	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,6-Dinitrotoluene	1	0	Qua	0.2777	0.2376	0.2508	0.2947	0.2760	0.2550	0.2373	0.2242	---	0.2578	8.13	0.991	1.00	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Acenaphthene	1	0	Qua	1.0818	1.2231	1.0239	1.1839	1.0898	1.0931	1.0696	1.0233	---	1.1083	8.36	0.998	1.00	6.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
3-Nitroaniline	1	0	Qua	0.2932	0.2879	0.2036	0.3167	0.3069	0.2916	0.2767	0.2642	---	0.2808	8.28	0.995	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,4-Dinitrophenol	1	0	Qua	0.1350	---	0.0621	0.0942	0.1700	0.1657	0.2035	0.2066	---	0.1518	8.38	0.992	0.999	37	0.01	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0									
Dibenzofuran	1	0	Qua	1.5224	1.7385	1.4063	1.6233	1.6053	1.5446	1.5149	1.4965	1.8022	---	1.5885	8.52	0.999	1.00	7.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0								
2,4-Dinitrotoluene	1	0	Qua	0.3895	0.3299	0.3054	0.3898	0.4092	0.4022	0.4134	0.4026	---	0.3808	8.49	1.00	1.00	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
4-Nitrophenol	1	0	Qua	0.2093	0.1318	0.1411	0.2024	0.2275	0.2389	0.2363	0.2436	---	0.2048	8.42	0.999	1.00	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,3,4,6-Tetrachlorophe	1	0	Qua	0.3144	0.3289	0.2508	0.3123	0.3081	0.3159	0.3199	0.3156	---	0.3088	8.63	0.999	0.999	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Fluorene	1	0	Qua	1.2227	1.4858	1.0918	1.2693	1.2969	1.2572	1.2483	1.2041	---	1.2688	8.85	0.999	1.00	8.8	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
4-Chlorophenyl-phenyl	1	0	Qua	0.5903	0.6732	0.5160	0.6290	0.6134	0.5998	0.5969	0.5889	---	0.6018	8.83	1.00	1.00	7.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Diethylphthalate	1	0	Qua	1.2048	1.2978	1.0497	1.2739	1.2542	1.2241	1.2297	1.2201	---	1.2287	8.70	1.00	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
4-Nitroaniline	1	0	Qua	0.3377	0.2393	0.2605	0.3325	0.3472	0.3568	0.3621	0.3661	---	0.3258	8.86	1.00	1.00	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Atrazine	1	0	Qua	0.3898	0.4477	0.3377	0.4270	0.4113	0.4099	0.4281	0.4218	---	0.4099	9.47	0.999	0.999	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
4,6-Dinitro-2-methylph	1	0	Qua	0.1128	---	0.0669	0.0967	0.1271	0.1315	0.1326	0.1334	---	0.1148	8.88	0.999	1.00	22	0.01	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0									
n-Nitrosodiphenylamin	1	0	Qua	0.5905	0.6958	0.5374	0.6104	0.6250	0.5951	0.5976	0.5725	---	0.6038	8.94	0.999	0.999	7.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
2,4,6-Trichlorophenol	1	0	Qua	0.0916	0.0926	0.0755	0.0828	0.0946	0.0917	0.0964	0.0897	---	0.0894	9.08	0.997	0.998	7.7	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
1,2-Diphenylhydrazine	1	0	Qua	0.7055	0.7464	0.5832	0.7208	0.7961	0.7771	0.7929	0.7640	---	0.7368	9.88	0.998	0.998	9.5	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
4-Bromophenyl-phenyl	1	0	Qua	0.1895	0.1932	0.1631	0.1812	0.1911	0.1903	0.1910	0.1822	---	0.1859	9.32	0.999	0.999	5.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Hexachlorobenzene	1	0	Qua	0.2032	0.2576	0.1645	0.1958	0.1994	0.1947	0.1903	0.1859	---	0.1999	9.39	0.992	0.993	13	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
n-Octadecane	1	0	Qua	0.3603	0.3291	0.3040	0.3470	0.3612	0.3541	0.3373	0.3142	---	0.3389	9.64	0.994	0.999	6.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Pentachlorophenol	1	0	Qua	0.0967	---	0.0538	0.0682	0.1070	0.1157	0.1180	0.1194	---	0.0970	9.59	0.998	0.999	27	0.05	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0									
Phenanthrene	1	0	Qua	1.0596	1.2312	0.9566	1.0734	1.0822	1.0477	1.0329	0.9706	---	1.0698	9.83	0.997	0.999	8.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Anthracene	1	0	Qua	1.0699	1.2487	0.9437	1.0377	1.1046	1.0843	1.0727	1.0187	---	1.0798	9.88	0.998	0.999	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0									
Carbazole	1	0	Qua	0.9928	1.0429	0.8676	0.9858	1.0048	0.9929	0.9763	0.9430	---	0.9761	10.05	0.999	1.00	5.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	16										

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criterion (if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Data File:				Cal Identifier:				Analysis Date/Time				Level #:				Data File:				Cal Identifier:				Analysis Date/Time											
Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time												
1	10M71237.D	CAL BNA@50PPM	10/08/18 11:51	2	10M71230.D	CAL BNA@2PPM	10/08/18 09:15	3	10M71229.D	CAL BNA@10PPM	10/08/18 08:51	4	10M71235.D	CAL BNA@20PPM	10/08/18 11:06	5	10M71234.D	CAL BNA@80PPM	10/08/18 10:44	6	10M71233.D	CAL BNA@120PPM	10/08/18 10:22	7	10M71232.D	CAL BNA@160PPM	10/08/18 10:00	8	10M71231.D	CAL BNA@196PPM	10/08/18 09:38	9	10M71236.D	CAL BNA@5PPM	10/08/18 11:28
Compound	Col	Mr	Fil:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9									
4,4'-DDE	1	0	Avg	0.2406	0.2750	0.2094	0.2322	0.2418	0.2678	0.2769	0.2901	----	0.254	11.54	0.996	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
4,4'-DDD	1	0	Avg	0.4141	0.4161	0.3306	0.4096	0.4292	0.4717	0.4747	0.5091	----	0.432	11.94	0.994	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Butylbenzylphthalate	1	0	Qua	0.5135	0.4061	0.3742	0.4971	0.5645	0.6092	0.6329	0.6921	----	0.536	12.18	0.993	1.00	21	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
4,4'-DDT	1	0	Avg	0.3676	0.3388	0.2963	0.3567	0.3949	0.4083	0.4362	0.4647	----	0.383	12.29	0.993	1.00	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
3,3'-Dichlorobenzidine	1	0	Qua	0.3712	0.3652	0.2515	0.3786	0.3613	0.3709	0.3592	0.3564	----	0.352	12.82	0.999	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Benzolanthracene	1	0	Avg	1.0377	1.2432	0.9244	1.0645	1.0764	1.1433	1.1873	1.2015	----	1.11	12.85	0.998	1.00	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Chrysene	1	0	Avg	1.0303	1.2216	0.8897	1.0416	1.0424	1.1118	1.1459	1.2355	----	1.09	12.89	0.995	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7455	0.7080	0.5999	0.7392	0.7806	0.8294	0.8522	0.8665	----	0.765	12.87	0.997	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Di-n-octylphthalate	1	0	Qua	1.2581	1.0359	0.9919	1.1747	1.3239	1.3908	1.3765	1.3330	----	1.24	13.62	0.999	0.999	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Benzolbifluoranthene	1	0	Avg	1.0814	1.2397	0.8877	1.0369	1.1498	1.1263	1.0829	1.0793	----	1.09	14.07	0.999	0.999	9.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Benzoklufluoranthene	1	0	Avg	1.0456	1.2451	0.9256	1.0853	1.0814	1.0734	1.1124	0.9865	----	1.07	14.10	0.993	0.996	8.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Benzolaloyene	1	0	Avg	1.0499	1.1916	0.8958	1.0233	1.0834	1.0913	1.0690	1.0284	----	1.05	14.44	0.999	0.999	7.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Indenofl, 2,3-cdlyren	1	0	Avg	1.1198	1.2702	0.9614	1.0986	1.1066	1.1194	1.1236	1.0766	----	1.11	15.86	0.999	0.999	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Dibenzola, hlanthracen	1	0	Avg	0.9448	0.9525	0.8351	0.8986	0.9505	0.9529	0.9372	0.8905	----	0.920	15.87	0.998	0.999	4.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										
Benzolq, h, llybervlene	1	0	Avg	0.9532	1.1477	0.8201	0.9510	0.9855	0.9970	0.9846	0.9997	----	0.980	16.25	1.00	1.00	9.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0										

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria (if applicable)

Note:

Avg Rsd: 10.6

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

SampleID : CAL BNA@50PPM
Data File: 10M71237.D
Acq On : 10/ 8/18 11:51

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:08
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	45717	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	91441	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	347375	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	216810	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	377671	40.00	ng	0.00
91) Chrysene-d12	12.863	240	382304	40.00	ng	0.00
103) Perylene-d12	14.494	264	369171	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	130322	54.15	ng	0.00
Spiked Amount 100.000			Recovery =	54.15%		
16) Phenol-d5	5.583	99	181064	51.38	ng	0.00
Spiked Amount 100.000			Recovery =	51.38%		
32) Nitrobenzene-d5	6.343	128	25387	22.06	ng	0.00
Spiked Amount 50.000			Recovery =	44.12%		
55) 2-Fluorobiphenyl	7.739	172	168993	24.14	ng	0.00
Spiked Amount 50.000			Recovery =	48.28%		
80) 2,4,6-Tribromophenol	9.081	330	43257	49.93	ng	0.00
Spiked Amount 100.000			Recovery =	49.93%		
94) Terphenyl-d14	11.606	244	162331	24.34	ng	0.00
Spiked Amount 50.000			Recovery =	48.68%		
Target Compounds						
8) 1,4-Dioxane	2.770	88	52367	45.5973	ng	88
9) Pyridine	3.256	79	130117	43.1946	ng	71
10) N-Nitrosodimethylamine	3.187	74	74938	45.3098	ng	77
12) Benzaldehyde	5.530	77	70134	43.8308	ng	67
13) Aniline	5.621	93	185917	54.4436	ng	75
14) Pentachloroethane	5.663	117	48118	47.6375	ng	68
15) bis(2-Chloroethyl) ether	5.674	93	130716	47.5658	ng	79
17) Phenol	5.599	94	185139	48.3720	ng	89
18) 2-Chlorophenol	5.722	128	147960	51.7011	ng	75
19) N-Decane	5.754	57	116862	45.5087	ng	77
20) 1,3-Dichlorobenzene	5.851	146	158254	49.8495	ng	97
22) 1,4-Dichlorobenzene	5.915	146	162659	47.1612	ng	99
23) 1,2-Dichlorobenzene	6.038	146	160994	49.0120	ng	97
24) Benzyl alcohol	6.011	108	92784	48.7459	ng	76
25) bis(2-chloroisopropyl)...	6.118	45	153799	49.2382	ng	80
26) 2-Methylphenol	6.097	108	131338	46.1474	ng	98
27) Acetophenone	6.225	105	198016	48.7818	ng	72
28) Hexachloroethane	6.305	117	66970	49.4736	ng	88
29) N-Nitroso-di-n-propyla...	6.220	70	92968	44.9208	ng	79
30) 3&4-Methylphenol	6.220	108	134849	47.1852	ng	98
33) Nitrobenzene	6.359	77	147375	44.4097	ng	81
34) Isophorone	6.541	82	252736	44.0425	ng	86
35) 2-Nitrophenol	6.605	139	81702	46.4798	ng	92
36) 2,4-Dimethylphenol	6.626	107	145143	47.1134	ng	99
37) Benzoic Acid	6.712	105	117202	55.0885	ng	85
38) bis(2-Chloroethoxy)met...	6.701	93	162040	44.3067	ng	96
39) 2,4-Dichlorophenol	6.787	162	130119	47.3942	ng	87
40) 1,2,4-Trichlorobenzene	6.851	180	143765	48.2929	ng	98
41) Naphthalene	6.915	128	449648	46.8628	ng	98
42) 4-Chloroaniline	6.952	127	169659m	45.3969	ng	
43) Hexachlorobutadiene	7.000	225	80902	51.1580	ng	94
44) Caprolactam	7.225	113	49068	46.0620	ng	62
45) 4-Chloro-3-methylphenol	7.316	107	120560	44.1507	ng	74
46) 2-Methylnaphthalene	7.450	142	293756	44.7266	ng	98
47) 1-Methylnaphthalene	7.530	142	292495	45.6763	ng	94
48) Methylnaphthalenes (To...	7.450	142	581411m	90.0162	ng	
49) 1,1'-Biphenyl	7.824	154	372079	44.3448	ng	92
51) 1,2,4,5-Tetrachloroben...	7.583	216	146152	47.4642	ng	95
52) Hexachlorocyclopentadiene	7.573	237	53295	39.7986	ng	99
53) 2,4,6-Trichlorophenol	7.674	196	90955	49.1363	ng	100
54) 2,4,5-Trichlorophenol	7.707	196	92575	45.7878	ng	100
56) 2-Chloronaphthalene	7.851	162	279089	46.6850	ng	94
57) 1,4-Dimethylnaphthalene	8.134	156	252091	49.5927	ng	85
58) Dimethylnaphthalenes (...)	8.134	156	252091	49.5927	ng	85
59) Diphenyl Ether	7.910	170	216025	47.0289	ng	81
60) 2-Nitroaniline	7.931	65	103105	48.1926	ng	36
61) Coumarin	8.118	146	108998	43.3886	ng	60
62) Acenaphthylene	8.215	152	425899	45.7228	ng	99
63) Dimethylphthalate	8.070	163	334831	48.8042	ng	98
64) 2,6-Dinitrotoluene	8.134	165	75278	48.3397	ng	66
65) Acenaphthene	8.364	153	293183	46.3417	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 10M71237.D
 Acq On : 10/ 8/18 11:51

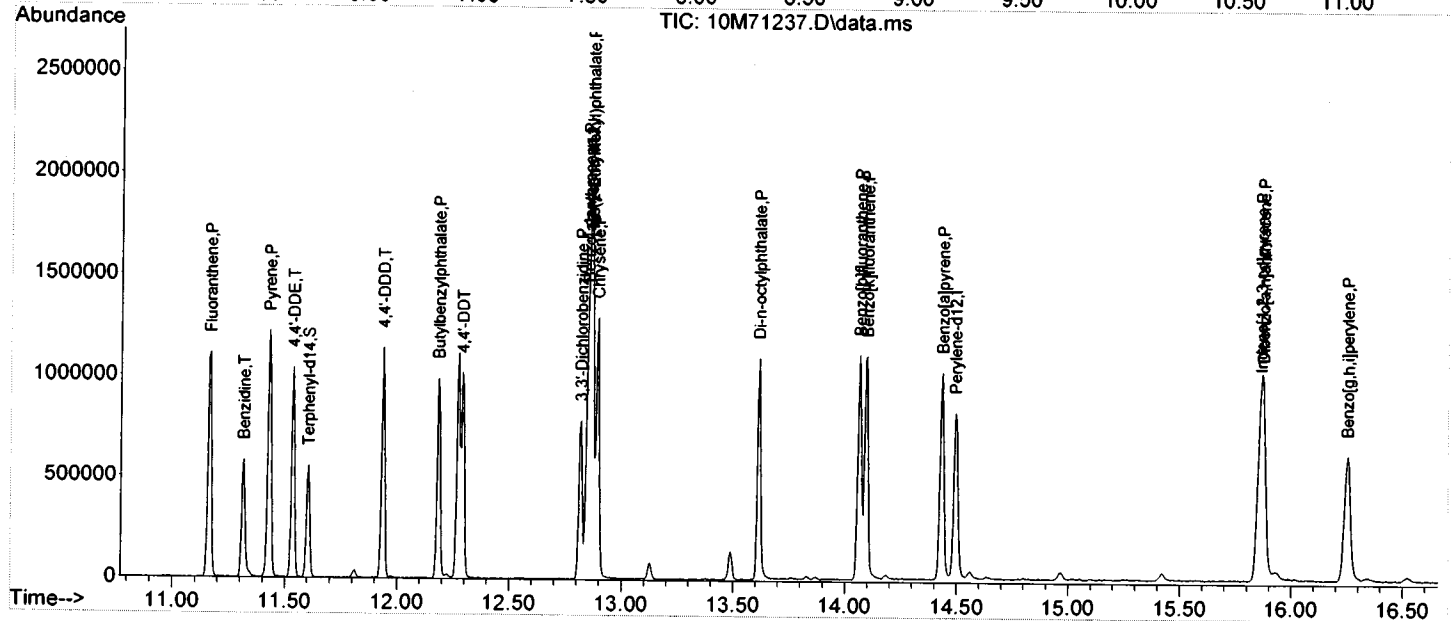
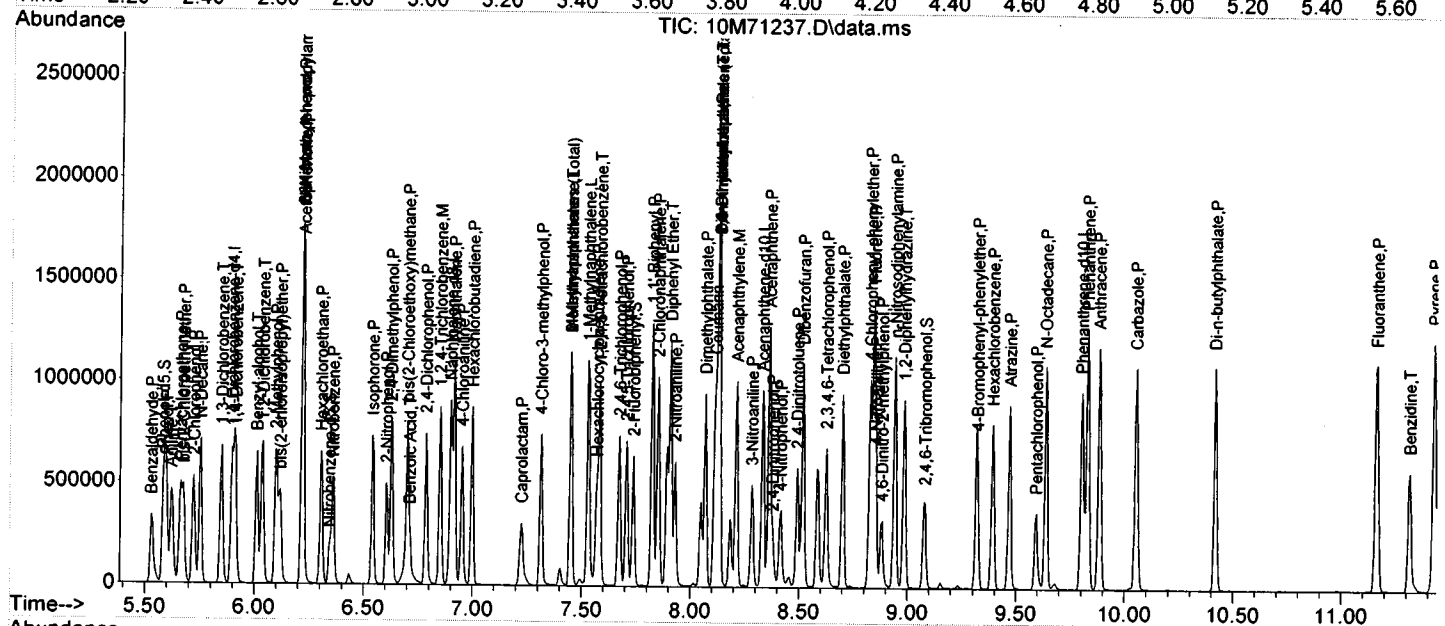
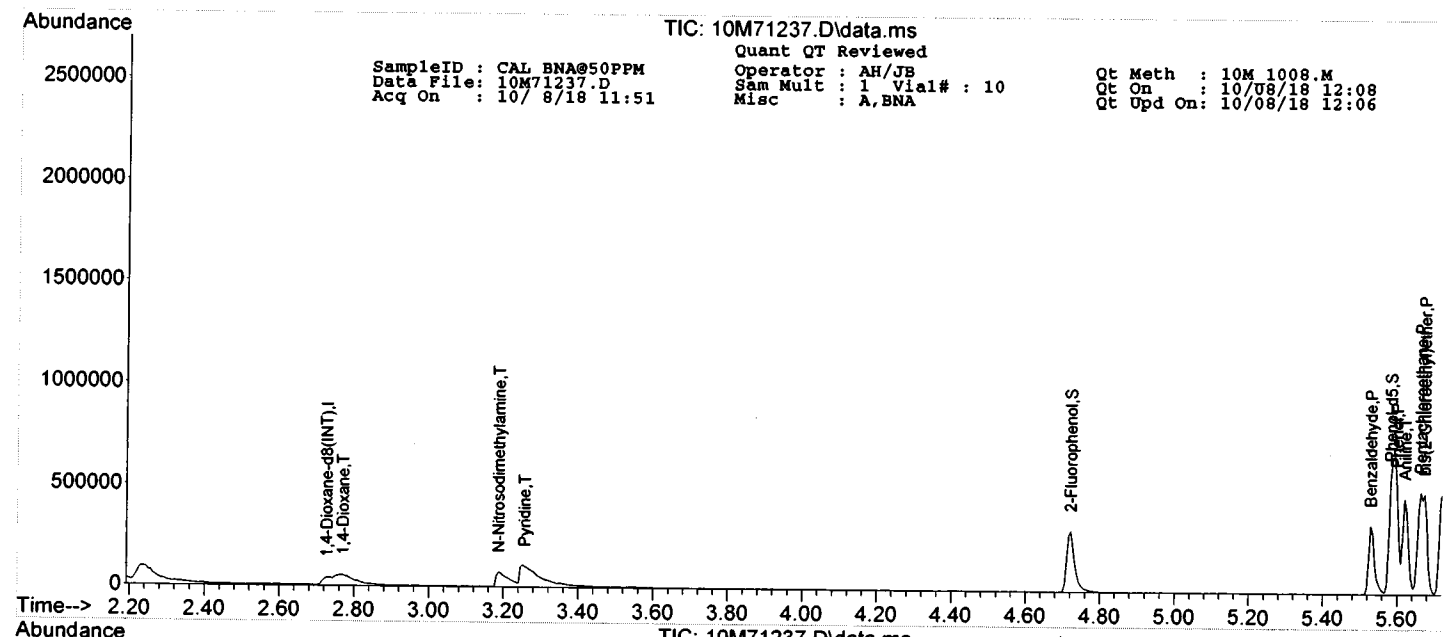
Operator : AH/JB
 Sam Mult : 1 Vial# : 10
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:08
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	79472	48.0860	ng	75
67) 2,4-Dinitrophenol	8.380	184	36604	43.7134	ng	30
68) Dibenzofuran	8.520	168	412590	48.1360	ng	87
69) 2,4-Dinitrotoluene	8.493	165	105566	50.1306	ng	65
70) 4-Nitrophenol	8.418	65	56734	41.2720	ng	42
71) 2,3,4,6-Tetrachlorophenol	8.626	232	85222	54.0762	ng	83
72) Fluorene	8.846	166	331382	46.9626	ng	99
73) 4-Chlorophenyl-phenyle...	8.830	204	159990	47.7558	ng	81
74) Diethylphthalate	8.701	149	326517	47.0733	ng	97
75) 4-Nitroaniline	8.856	138	91528	46.6464	ng	90
76) Atrazine	9.472	200	105643	49.1706	ng	96
78) 4,6-Dinitro-2-methylph...	8.883	198	53278	47.7283	ng	58
79) n-Nitrosodiphenylamine	8.942	169	278793	45.4573	ng	99
81) 1,2-Diphenylhydrazine	8.985	77	333058	47.2520	ng	86
82) 4-Bromophenyl-phenylether	9.322	248	89495	47.8965	ng	85
83) Hexachlorobenzene	9.391	284	95960	48.4180	ng	72
84) N-Octadecane	9.637	57	170112	43.1868	ng	71
85) Pentachlorophenol	9.595	266	45678	54.5512	ng	91
86) Phenanthrene	9.830	178	500249	47.5723	ng	99
87) Anthracene	9.883	178	505103	47.1067	ng	99
88) Carbazole	10.055	167	468713	47.2938	ng	98
89) Di-n-butylphthalate	10.418	149	560951	47.4675	ng	98
90) Fluoranthene	11.167	202	531817	48.5826	ng	85
92) Pyrene	11.429	202	546923	46.7639	ng	83
93) Benzidine	11.317	184	242154	50.4583	ng	80
95) 4,4'-DDE	11.536	246	115007	51.7491	ng	95
96) 4,4'-DDD	11.937	235	197925	50.9751	ng	91
97) Butylbenzylphthalate	12.183	149	245414	44.9422	ng	79
98) 4,4'-DDT	12.290	235	175673	50.4647	ng	94
99) 3,3'-Dichlorobenzidine	12.820	252	177408	49.4403	ng	96
100) Benzo[a]anthracene	12.852	228	495904	45.9269	ng	97
101) Chrysene	12.895	228	492361	47.8802	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	356274	46.9046	ng	96
104) Di-n-octylphthalate	13.617	149	580567	45.7140	ng	100
105) Benzo[b]fluoranthene	14.066	252	499050	47.4679	ng	93
106) Benzo[k]fluoranthene	14.098	252	482512	46.8382	ng	92
107) Benzo[a]pyrene	14.435	252	484499	47.8367	ng	91
108) Indeno[1,2,3-cd]pyrene	15.863	276	516782	47.0738	ng	85
109) Dibenzo[a,h]anthracene	15.874	278	436023	47.0007	ng	90
110) Benzo[g,h,i]perylene	16.254	276	439905	46.6103	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@2PPM
Data File: 10M71230.D
Acq On : 10/ 8/18 09:15

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	46994	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	93036	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	347884	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	222068	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	396093	40.00	ng	0.00
91) Chrysene-d12	12.863	240	408904	40.00	ng	0.00
103) Perylene-d12	14.494	264	391574	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.727	112	6188m	2.50	ng	0.00
Spiked Amount 100.000			Recovery	=	2.50%	
16) Phenol-d5	5.588	99	8282	2.29	ng	0.00
Spiked Amount 100.000			Recovery	=	2.29%	
32) Nitrobenzene-d5	6.348	128	816	0.71	ng	0.00
Spiked Amount 50.000			Recovery	=	1.42%	
55) 2-Fluorobiphenyl	7.739	172	8002	1.12	ng	0.00
Spiked Amount 50.000			Recovery	=	2.24%	
80) 2,4,6-Tribromophenol	9.081	330	1835	2.04	ng	0.00
Spiked Amount 100.000			Recovery	=	2.04%	
94) Terphenyl-d14	11.606	244	7693	1.08	ng	0.00
Spiked Amount 50.000			Recovery	=	2.16%	
Target Compounds						
8) 1,4-Dioxane	2.775	88	2299m	1.9474	ng	Qvalue
9) Pyridine	3.358	79	6481m	2.0930	ng	
10) N-Nitrosodimethylamine	3.246	74	3248m	1.9105	ng	
12) Benzaldehyde	5.535	77	2469	1.5011	ng	65
13) Aniline	5.626	93	5496	1.5657	ng	94
14) Pentachloroethane	5.663	117	2353	2.2662	ng	79
15) bis(2-Chloroethyl) ether	5.674	93	6490	2.2974	ng	96
17) Phenol	5.599	94	7356	1.8697	ng	84
18) 2-Chlorophenol	5.722	128	6276	2.1334	ng	71
19) N-Decane	5.749	57	5404	2.0473	ng	77
20) 1,3-Dichlorobenzene	5.851	146	7810	2.3933	ng	86
22) 1,4-Dichlorobenzene	5.915	146	8241	2.3484	ng	82
23) 1,2-Dichlorobenzene	6.038	146	8271	2.4748	ng	96
24) Benzyl alcohol	6.016	108	3614	1.8661	ng	91
25) bis(2-chloroisopropyl)...	6.118	45	7325	2.3049	ng	79
26) 2-Methylphenol	6.102	108	6646	2.2951	ng	74
27) Acetophenone	6.225	105	9182	2.2232	ng	67
28) Hexachloroethane	6.305	117	2390m	1.7353	ng	
29) N-Nitroso-di-n-propyla...	6.220	70	3767	1.7890	ng	82
30) 3&4-Methylphenol	6.225	108	5963	2.0732	ng	87
33) Nitrobenzene	6.359	77	6278	1.8890	ng	69
34) Isophorone	6.541	82	11395	1.9828	ng	86
35) 2-Nitrophenol	6.610	139	3368	1.9132	ng	84
36) 2,4-Dimethylphenol	6.631	107	7237	2.3789	ng	94
37) Benzoic Acid	0.000		0	N.D. d		
38) bis(2-Chloroethoxy)met...	6.701	93	7013	1.9148	ng	93
39) 2,4-Dichlorophenol	6.792	162	5912	2.1502	ng	77
40) 1,2,4-Trichlorobenzene	6.851	180	6271	2.1034	ng	90
41) Naphthalene	6.915	128	22475	2.3342	ng	93
42) 4-Chloroaniline	6.952	127	5935	1.4632	ng	88
43) Hexachlorobutadiene	7.000	225	3712	2.3438	ng	88
44) Caprolactam	7.198	113	1555	1.4576	ng	44
45) 4-Chloro-3-methylphenol	7.316	107	4763	1.7417	ng	59
46) 2-Methylnaphthalene	7.450	142	14287	2.1721	ng	94
47) 1-Methylnaphthalene	7.530	142	14381	2.2425	ng	94
48) Methylnaphthalenes (To...	7.450	142	28855m	4.4609	ng	
49) 1,1'-Biphenyl	7.824	154	18235	2.1701	ng	90
51) 1,2,4,5-Tetrachloroben...	7.583	216	7563	2.3980	ng	95
52) Hexachlorocyclopentadiene	7.573	237	564	0.4355	ng	58
53) 2,4,6-Trichlorophenol	7.674	196	3559m	1.8771	ng	
54) 2,4,5-Trichlorophenol	7.707	196	3827	1.8480	ng	92
56) 2-Chloronaphthalene	7.851	162	14110m	2.3044	ng	
57) 1,4-Dimethylnaphthalene	8.129	156	12558	2.4120	ng	80
58) Dimethylnaphthalenes (...)	8.129	156	12558	2.4120	ng	80
59) Diphenyl Ether	7.910	170	9952	2.1153	ng	77
60) 2-Nitroaniline	7.931	65	4088	1.8655	ng	20
61) Coumarin	8.118	146	5322	2.0684	ng	79
62) Acenaphthylene	8.209	152	18935	1.9847	ng	94
63) Dimethylphthalate	8.065	163	14703	2.0923	ng	88
64) 2,6-Dinitrotoluene	8.129	165	2639	1.6545	ng	92
65) Acenaphthene	8.359	153	13581	2.0958	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM
 Data File: 10M71230.D
 Acq On : 10/ 8/18 09:15

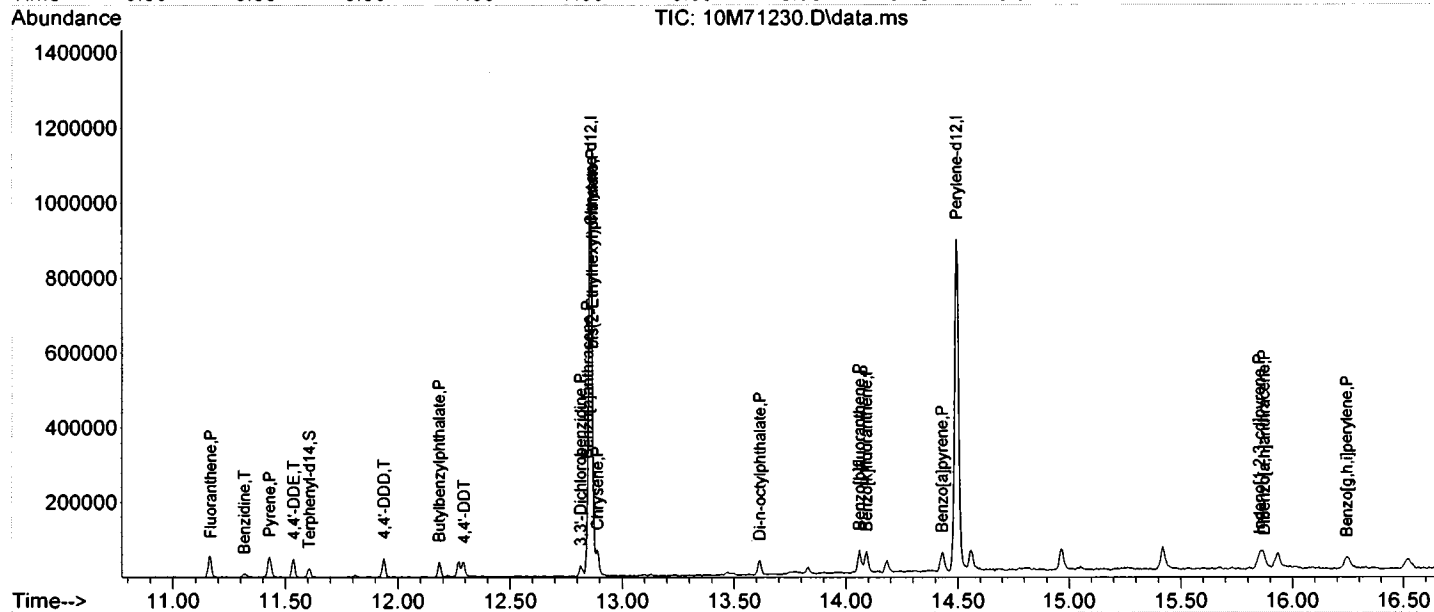
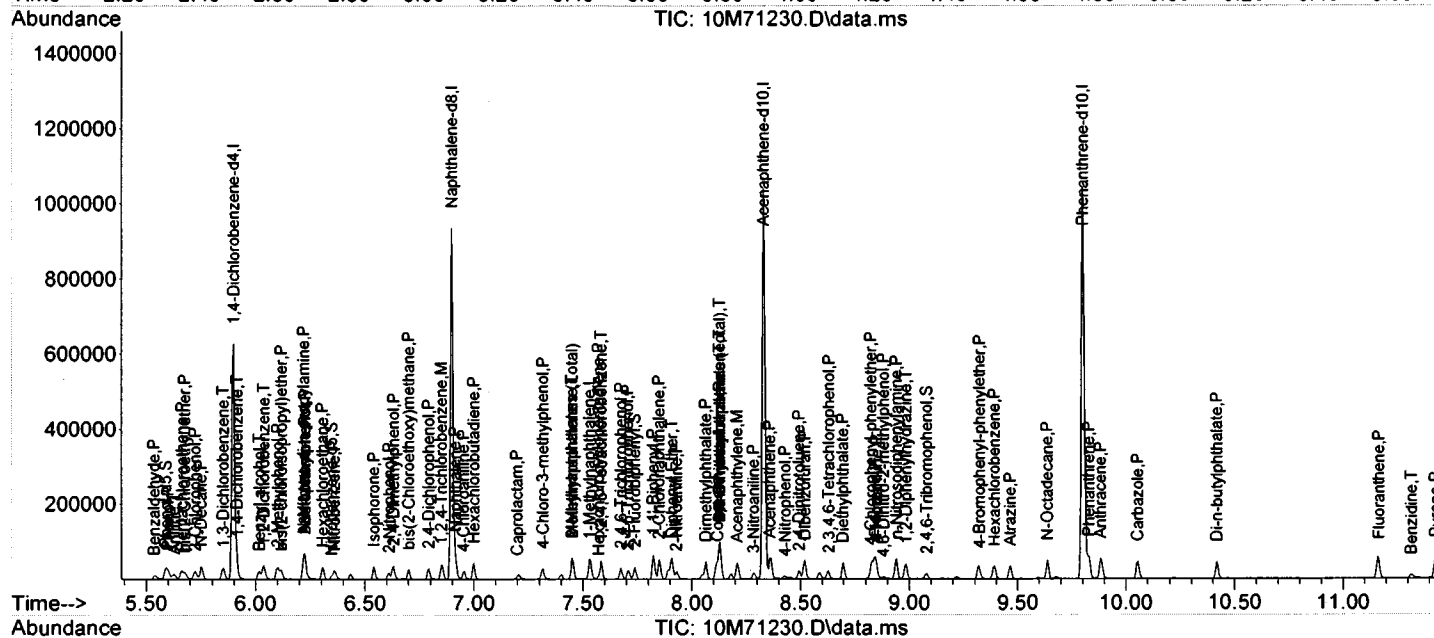
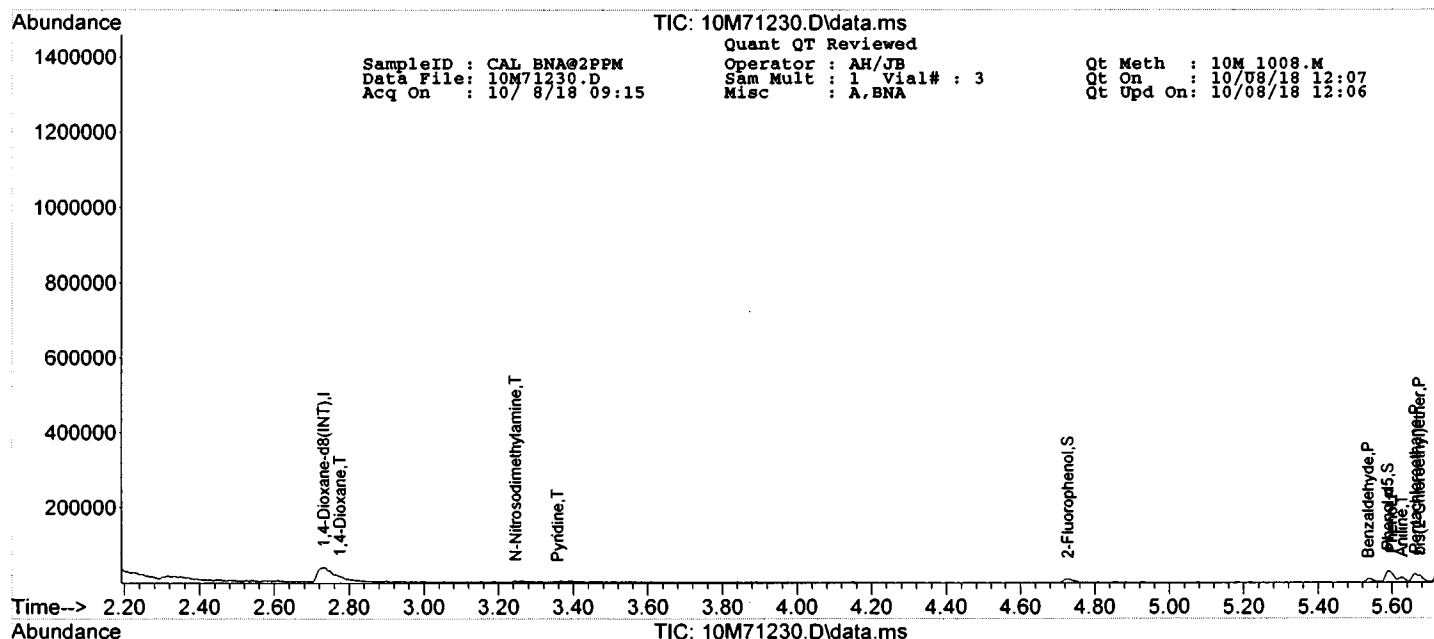
Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	3197	1.8886	ng	77
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.520	168	19304	2.1918	ng	90
69)	2,4-Dinitrotoluene	8.493	165	3663	1.6983	ng	61
70)	4-Nitrophenol	8.429	65	1464	1.0398	ng	85
71)	2,3,4,6-Tetrachlorophenol	8.632	232	3652	2.2624	ng	70
72)	Fluorene	8.846	166	16498	2.2827	ng	93
73)	4-Chlorophenyl-phenyle...	8.824	204	7475	2.1784	ng	75
74)	Diethylphthalate	8.696	149	14410	2.0283	ng	90
75)	4-Nitroaniline	8.851	138	2657	1.3221	ng	81
76)	Atrazine	9.466	200	4971	2.2589	ng	81
78)	4,6-Dinitro-2-methylph...	8.883	198	886	0.8077	ng	27
79)	n-Nitrosodiphenylamine	8.942	169	13781	2.1425	ng	91
81)	1,2-Diphenylhydrazine	8.985	77	14784	1.9999	ng	77
82)	4-Bromophenyl-phenylether	9.322	248	3828	1.9534	ng	75
83)	Hexachlorobenzene	9.391	284	5102	2.4546	ng	63
84)	N-Octadecane	9.637	57	6518	1.5778	ng	56
85)	Pentachlorophenol	0.000		0	N.D. d		
86)	Phenanthrene	9.830	178	24384	2.2110	ng	94
87)	Anthracene	9.883	178	24731	2.1992	ng	93
88)	Carbazole	10.055	167	20656	1.9873	ng	97
89)	Di-n-butylphthalate	10.418	149	21923	1.7596	ng	99
90)	Fluoranthene	11.167	202	24958	2.1739	ng	86
92)	Pyrene	11.429	202	26112	2.0874	ng	82
93)	Benzidine	11.317	184	5423	1.0488	ng	75
95)	4,4'-DDE	11.536	246	5623	2.3656	ng	91
96)	4,4'-DDD	11.937	235	8508	2.0487	ng	95
97)	Butylbenzylphthalate	12.183	149	8304	1.4218	ng	82
98)	4,4'-DDT	12.296	235	6927	1.8604	ng	96
99)	3,3'-Dichlorobenzidine	12.814	252	7467	1.8566	ng	73
100)	Benzo[a]anthracene	12.847	228	25419	2.2010	ng	97
101)	Chrysene	12.889	228	24977	2.2709	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.868	149	14476	1.7818	ng	97
104)	Di-n-octylphthalate	13.617	149	20283	1.5057	ng	96
105)	Benzo[b]fluoranthene	14.061	252	24272m	2.1766	ng	
106)	Benzo[k]fluoranthene	14.093	252	24378m	2.2310	ng	
107)	Benzo[a]pyrene	14.430	252	23331	2.1718	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.852	276	24870	2.1358	ng	67
109)	Dibenzo[a,h]anthracene	15.874	278	18649	1.8952	ng	94
110)	Benzo[g,h,i]perylene	16.243	276	22471	2.2447	ng	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@10PPM
Data File: 10M71229.D
Acq On : 10/ 8/18 08:51

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.738	96	50609	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	99323	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	356054	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	223314	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	398598	40.00	ng	0.00
91) Chrysene-d12	12.863	240	410428	40.00	ng	0.00
103) Perylene-d12	14.494	264	388983	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.727	112	23998m	9.01	ng	0.00
Spiked Amount 100.000			Recovery	=	9.01%	
16) Phenol-d5	5.583	99	31536	8.08	ng	0.00
Spiked Amount 100.000			Recovery	=	8.08%	
32) Nitrobenzene-d5	6.348	128	4262	3.61	ng	0.00
Spiked Amount 50.000			Recovery	=	7.22%	
55) 2-Fluorobiphenyl	7.739	172	32300	4.48	ng	0.00
Spiked Amount 50.000			Recovery	=	8.96%	
80) 2,4,6-Tribromophenol	9.081	330	7525	8.31	ng	0.00
Spiked Amount 100.000			Recovery	=	8.31%	
94) Terphenyl-d14	11.606	244	29871	4.17	ng	0.00
Spiked Amount 50.000			Recovery	=	8.34%	
Target Compounds						
8) 1,4-Dioxane	2.764	88	10899	8.5727	ng	58
9) Pyridine	3.331	79	14917	4.4733	ng	42
10) N-Nitrosodimethylamine	3.214	74	12521	6.8388	ng	82
12) Benzaldehyde	5.530	77	15376	8.6805	ng	73
13) Aniline	5.621	93	27869m	7.3722	ng	
14) Pentachloroethane	5.658	117	9327	8.3413	ng	83
15) bis(2-Chloroethyl)ether	5.674	93	22375	7.3549	ng	75
17) Phenol	5.594	94	32088	7.5734	ng	89
18) 2-Chlorophenol	5.722	128	26224	8.2776	ng	73
19) N-Decane	5.749	57	21846	7.6850	ng	74
20) 1,3-Dichlorobenzene	5.851	146	30560	8.6958	ng	97
22) 1,4-Dichlorobenzene	5.915	146	31776	8.4820	ng	95
23) 1,2-Dichlorobenzene	6.038	146	29929	8.3883	ng	91
24) Benzyl alcohol	6.011	108	16646	8.0513	ng	73
25) bis(2-chloroisopropyl)...	6.113	45	29692	8.7514	ng	82
26) 2-Methylphenol	6.097	108	24558	7.9440	ng	87
27) Acetophenone	6.225	105	36083	8.1837	ng	66
28) Hexachloroethane	6.305	117	12016	8.1723	ng	82
29) N-Nitroso-di-n-propyla...	6.220	70	16960	7.5445	ng	75
30) 3&4-Methylphenol	6.220	108	24223	7.8776	ng	98
33) Nitrobenzene	6.359	77	26839	7.8905	ng	76
34) Isophorone	6.541	82	44692	7.5983	ng	82
35) 2-Nitrophenol	6.605	139	12327	6.8418	ng	92
36) 2,4-Dimethylphenol	6.626	107	28104	9.0074	ng	93
37) Benzoic Acid	6.674	105	8322	4.2957	ng	93
38) bis(2-Chloroethoxy)met...	6.701	93	29851	7.9632	ng	95
39) 2,4-Dichlorophenol	6.792	162	24503	8.7074	ng	80
40) 1,2,4-Trichlorobenzene	6.851	180	26586	8.7130	ng	89
41) Naphthalene	6.915	128	83389	8.4641	ng	96
42) 4-Chloroaniline	6.952	127	23756	5.7660	ng	89
43) Hexachlorobutadiene	7.001	225	14500	8.9455	ng	97
44) Caprolactam	7.209	113	7204	6.5978	ng	66
45) 4-Chloro-3-methylphenol	7.311	107	20845	7.4477	ng	83
46) 2-Methylnaphthalene	7.450	142	57447	8.5335	ng	91
47) 1-Methylnaphthalene	7.530	142	54592	8.3173	ng	90
48) Methylnaphthalenes (To...	7.450	142	111980m	16.9145	ng	
49) 1,1'-Biphenyl	7.824	154	71969	8.3683	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	28483	8.9807	ng	95
52) Hexachlorocyclopentadiene	7.573	237	4881	3.7292	ng	70
53) 2,4,6-Trichlorophenol	7.675	196	15148	7.9450	ng	95
54) 2,4,5-Trichlorophenol	7.707	196	16331	7.8421	ng	97
56) 2-Chloronaphthalene	7.851	162	51756	8.4054	ng	92
57) 1,4-Dimethylnaphthalene	8.129	156	46541	8.8891	ng	86
58) Dimethylnaphthalenes (...)	8.129	156	46541	8.8891	ng	86
59) Diphenyl Ether	7.910	170	39094	8.2629	ng	79
60) 2-Nitroaniline	7.931	65	17421	7.9056	ng	47
61) Coumarin	8.113	146	19580	7.5672	ng	53
62) Acenaphthylene	8.209	152	76734	7.9979	ng	98
63) Dimethylphthalate	8.065	163	61224	8.6640	ng	97
64) 2,6-Dinitrotoluene	8.129	165	14003	8.7301	ng	78
65) Acenaphthene	8.364	153	57166	8.7727	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 10M 1008.M
 Data File: 10M71229.D Sam Mult : 1 Vial# : 2 Qt On : 10/08/18 12:07
 Acq On : 10/ 8/18 08:51 Misc : A,BNA Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	11370	6.6793	ng	72
67) 2,4-Dinitrophenol	8.386	184	3471	4.4741	ng	22
68) Dibenzofuran	8.520	168	78514	8.8689	ng	89
69) 2,4-Dinitrotoluene	8.493	165	17053	7.8622	ng	65
70) 4-Nitrophenol	8.418	65	7880	5.5655	ng	53
71) 2,3,4,6-Tetrachlorophenol	8.627	232	14004	8.6272	ng	80
72) Fluorene	8.846	166	60957	8.3871	ng	95
73) 4-Chlorophenyl-phenyle...	8.830	204	28809	8.3488	ng	82
74) Diethylphthalate	8.701	149	58605	8.2029	ng	93
75) 4-Nitroaniline	8.851	138	14545	7.1968	ng	79
76) Atrazine	9.466	200	18856	8.5208	ng	98
78) 4,6-Dinitro-2-methylph...	8.878	198	6676	6.0030	ng	32
79) n-Nitrosodiphenylamine	8.942	169	53553	8.2734	ng	95
81) 1,2-Diphenylhydrazine	8.985	77	58118	7.8125	ng	84
82) 4-Bromophenyl-phenylether	9.317	248	16254	8.2422	ng	95
83) Hexachlorobenzene	9.391	284	16398	7.8395	ng	71
84) N-Octadecane	9.637	57	30293	7.2868	ng	83
85) Pentachlorophenol	9.595	266	5368	6.9789	ng	95
86) Phenanthrene	9.830	178	95334	8.5900	ng	96
87) Anthracene	9.883	178	94041	8.3099	ng	98
88) Carbazole	10.055	167	86461	8.2660	ng	93
89) Di-n-butylphthalate	10.418	149	92126	7.3526	ng	98
90) Fluoranthene	11.162	202	94255	8.1583	ng	86
92) Pyrene	11.429	202	102843	8.1909	ng	83
93) Benzidine	11.317	184	33393	6.4395	ng	82
95) 4,4'-DDE	11.536	246	21493	9.0084	ng	94
96) 4,4'-DDD	11.937	235	33925	8.1386	ng	87
97) Butylbenzylphthalate	12.183	149	38401	6.5504	ng	79
98) 4,4'-DDT	12.290	235	30404	8.1355	ng	94
99) 3,3'-Dichlorobenzidine	12.820	252	25813	6.4225	ng	88
100) Benzo[a]anthracene	12.847	228	94857	8.1830	ng	98
101) Chrysene	12.889	228	91298	8.2700	ng	96
102) bis(2-Ethylhexyl)phtha...	12.868	149	61557	7.5488	ng	96
104) Di-n-octylphthalate	13.617	149	96466	7.2089	ng	98
105) Benzo[b]fluoranthene	14.061	252	86334m	7.7935	ng	
106) Benzo[k]fluoranthene	14.093	252	90012m	8.2926	ng	
107) Benzo[a]pyrene	14.430	252	87116	8.1632	ng	91
108) Indeno[1,2,3-cd]pyrene	15.853	276	93495	8.0827	ng	83
109) Dibenzo[a,h]anthracene	15.869	278	81219	8.3090	ng	86
110) Benzo[g,h,i]perylene	16.248	276	79752	8.0198	ng	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Page: 1

SampleID : CAL BNA@20PPM
Data File: 10M71235.D
Acq On : 10/ 8/18 11:06

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.738	96	46371	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	91991	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	335583	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	208898	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	378035	40.00	ng	0.00
91) Chrysene-d12	12.863	240	375028	40.00	ng	0.00
103) Perylene-d12	14.494	264	370382	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	49915	20.45	ng	0.00
Spiked Amount 100.000			Recovery =	20.45%		
16) Phenol-d5	5.583	99	70881	19.83	ng	0.00
Spiked Amount 100.000			Recovery =	19.83%		
32) Nitrobenzene-d5	6.343	128	10190	9.16	ng	0.00
Spiked Amount 50.000			Recovery =	18.32%		
55) 2-Fluorobiphenyl	7.739	172	68561	10.17	ng	0.00
Spiked Amount 50.000			Recovery =	20.34%		
80) 2,4,6-Tribromophenol	9.076	330	15653	18.18	ng	0.00
Spiked Amount 100.000			Recovery =	18.18%		
94) Terphenyl-d14	11.606	244	62767	9.59	ng	0.00
Spiked Amount 50.000			Recovery =	19.18%		
Target Compounds						
8) 1,4-Dioxane	2.770	88	22016	18.8995	ng	91
9) Pyridine	3.273	79	48677	15.9313	ng	59
10) N-Nitrosodimethylamine	3.203	74	30057	17.9171	ng	80
12) Benzaldehyde	5.530	77	35486	21.8645	ng	79
13) Aniline	5.621	93	76799	22.1725	ng	74
14) Pentachloroethane	5.658	117	20699	20.2033	ng	77
15) bis(2-Chloroethyl) ether	5.674	93	51381	18.4331	ng	73
17) Phenol	5.594	94	71027	18.2958	ng	96
18) 2-Chlorophenol	5.722	128	59380	20.4563	ng	74
19) N-Decane	5.754	57	45863	17.6082	ng	74
20) 1,3-Dichlorobenzene	5.851	146	64973	20.1776	ng	97
22) 1,4-Dichlorobenzene	5.910	146	66688	19.2199	ng	100
23) 1,2-Dichlorobenzene	6.033	146	66066	19.9925	ng	94
24) Benzyl alcohol	6.011	108	35362	18.4670	ng	78
25) bis(2-chloroisopropyl)...	6.113	45	62449	19.8733	ng	85
26) 2-Methylphenol	6.097	108	53716	18.7610	ng	92
27) Acetophenone	6.225	105	79324	19.4248	ng	68
28) Hexachloroethane	6.305	117	26583	19.5206	ng	85
29) N-Nitroso-di-n-propyla...	6.220	70	39326	18.8881	ng	80
30) 3&4-Methylphenol	6.220	108	53210	18.6352	ng	96
33) Nitrobenzene	6.359	77	59781	18.6473	ng	81
34) Isophorone	6.541	82	102777	18.5396	ng	82
35) 2-Nitrophenol	6.605	139	33148	19.5203	ng	81
36) 2,4-Dimethylphenol	6.626	107	60574	20.5237	ng	93
37) Benzoic Acid	6.685	105	35216	18.6265	ng	89
38) bis(2-Chloroethoxy)met...	6.701	93	65257	18.4703	ng	96
39) 2,4-Dichlorophenol	6.787	162	50174	18.9174	ng	86
40) 1,2,4-Trichlorobenzene	6.851	180	59130	20.5607	ng	91
41) Naphthalene	6.915	128	175969	18.9598	ng	99
42) 4-Chloroaniline	6.953	127	70092m	18.4661	ng	
43) Hexachlorobutadiene	7.001	225	31677	20.7346	ng	98
44) Caprolactam	7.215	113	17804	17.3006	ng	56
45) 4-Chloro-3-methylphenol	7.311	107	46858	17.7630	ng	80
46) 2-Methylnaphthalene	7.450	142	119464	18.8285	ng	96
47) 1-Methylnaphthalene	7.530	142	119702	19.3496	ng	93
48) Methylnaphthalenes (To...	7.450	142	237261m	38.0244	ng	
49) 1,1'-Biphenyl	7.824	154	148331	18.2995	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	58928	19.8622	ng	96
52) Hexachlorocyclopentadiene	7.568	237	17445	14.0324	ng	91
53) 2,4,6-Trichlorophenol	7.675	196	35419	19.8590	ng	93
54) 2,4,5-Trichlorophenol	7.707	196	38700	19.8661	ng	88
56) 2-Chloronaphthalene	7.851	162	109767	19.0568	ng	90
57) 1,4-Dimethylnaphthalene	8.129	156	100948	20.6112	ng	88
58) Dimethylnaphthalenes (...)	8.129	156	100948	20.6112	ng	88
59) Diphenyl Ether	7.910	170	84340	19.0563	ng	76
60) 2-Nitroaniline	7.931	65	41352	20.0605	ng	52
61) Coumarin	8.119	146	44696	18.4659	ng	63
62) Acenaphthylene	8.209	152	166003	18.4964	ng	99
63) Dimethylphthalate	8.065	163	133298	20.1651	ng	98
64) 2,6-Dinitrotoluene	8.129	165	30790	20.5206	ng	70
65) Acenaphthene	8.365	153	123659	20.2864	ng	87

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM
 Data File: 10M71235.D
 Acq On : 10/ 8/18 11:06

Operator : AH/JB
 Sam Mult : 1 Vial# : 8
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	33082	20.7750	ng	73
67)	2,4-Dinitrophenol	8.381	184	9840	13.2291	ng	47
68)	Dibenzofuran	8.520	168	169560	20.4918	ng	89
69)	2,4-Dinitrotoluene	8.493	165	40723	20.0707	ng	58
70)	4-Nitrophenol	8.413	65	21145	15.9649	ng	70
71)	2,3,4,6-Tetrachlorophenol	8.627	232	32629	21.4884	ng	84
72)	Fluorene	8.841	166	132580	19.5005	ng	96
73)	4-Chlorophenyl-phenyle...	8.830	204	65704	20.3550	ng	82
74)	Diethylphthalate	8.702	149	133066	19.9104	ng	94
75)	4-Nitroaniline	8.851	138	34734	18.3723	ng	89
76)	Atrazine	9.466	200	44602	21.5459	ng	92
78)	4,6-Dinitro-2-methylph...	8.878	198	18279	17.0620	ng	33
79)	n-Nitrosodiphenylamine	8.942	169	115379	18.7945	ng	97
81)	1,2-Diphenylhydrazine	8.985	77	136245	19.3109	ng	84
82)	4-Bromophenyl-phenylether	9.317	248	34262	18.3189	ng	91
83)	Hexachlorobenzene	9.392	284	37022	18.6620	ng	69
84)	N-Octadecane	9.638	57	65595	16.6367	ng	74
85)	Pentachlorophenol	9.595	266	12891	17.1270	ng	93
86)	Phenanthrene	9.830	178	202903	19.2769	ng	100
87)	Anthracene	9.884	178	196154	18.2760	ng	99
88)	Carbazole	10.055	167	186351	18.7850	ng	97
89)	Di-n-butylphthalate	10.418	149	208620	17.5761	ng	98
90)	Fluoranthene	11.162	202	216457	19.7548	ng	86
92)	Pyrene	11.429	202	222173	19.3652	ng	82
93)	Benzidine	11.317	184	100952	21.3519	ng	84
95)	4,4'-DDE	11.536	246	43546	19.9743	ng	97
96)	4,4'-DDD	11.937	235	76810	20.1660	ng	90
97)	Butylbenzylphthalate	12.184	149	93231	17.4045	ng	78
98)	4,4'-DDT	12.290	235	66886	19.5868	ng	92
99)	3,3'-Dichlorobenzidine	12.815	252	71183	19.6330	ng	98
100)	Benzo[a]anthracene	12.852	228	199614	18.8454	ng	97
101)	Chrysene	12.895	228	195322	19.3628	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.868	149	138615	18.6032	ng	97
104)	Di-n-octylphthalate	13.617	149	217560	17.0747	ng	99
105)	Benzo[b]fluoranthene	14.066	252	192027m	18.2052	ng	
106)	Benzo[k]fluoranthene	14.093	252	200989m	19.4465	ng	
107)	Benzo[a]pyrene	14.430	252	189523	18.6512	ng	88
108)	Indeno[1,2,3-cd]pyrene	15.853	276	203457	18.4724	ng	81
109)	Dibenzo[a,h]anthracene	15.874	278	166606	17.9004	ng	86
110)	Benzo[g,h,i]perylene	16.248	276	176133	18.6012	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@80PPM
Data File: 10M71234.D
Acq On : 10/ 8/18 10:44

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	46969	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	93648	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	355190	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	221269	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	391542	40.00	ng	0.00
91) Chrysene-d12	12.863	240	381281	40.00	ng	0.00
103) Perylene-d12	14.499	264	378763	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	218351	88.31	ng	0.00
Spiked Amount 100.000			Recovery =	88.31%		
16) Phenol-d5	5.589	99	301635	83.31	ng	0.00
Spiked Amount 100.000			Recovery =	83.31%		
32) Nitrobenzene-d5	6.348	128	46826	39.79	ng	0.00
Spiked Amount 50.000			Recovery =	79.58%		
55) 2-Fluorobiphenyl	7.739	172	284814	39.87	ng	0.00
Spiked Amount 50.000			Recovery =	79.74%		
80) 2,4,6-Tribromophenol	9.081	330	74111	81.92	ng	0.00
Spiked Amount 100.000			Recovery =	81.92%		
94) Terphenyl-d14	11.606	244	268031	40.30	ng	0.00
Spiked Amount 50.000			Recovery =	80.60%		
Target Compounds						
8) 1,4-Dioxane	2.770	88	88310	74.8442	ng	88
9) Pyridine	3.246	79	227635	73.5531	ng	70
10) N-Nitrosodimethylamine	3.187	74	126196	74.2681	ng	79
12) Benzaldehyde	5.530	77	106751	64.9366	ng	82
13) Aniline	5.621	93	310366	88.4643	ng	77
14) Pentachloroethane	5.663	117	82376	79.3795	ng	73
15) bis(2-Chloroethyl) ether	5.680	93	217728	77.1163	ng	74
17) Phenol	5.599	94	310066	78.8527	ng	89
18) 2-Chlorophenol	5.722	128	253954	86.3727	ng	76
19) N-Decane	5.754	57	198852	75.3733	ng	75
20) 1,3-Dichlorobenzene	5.851	146	275247	84.3908	ng	96
22) 1,4-Dichlorobenzene	5.915	146	277799	78.6466	ng	95
23) 1,2-Dichlorobenzene	6.038	146	269915	80.2347	ng	96
24) Benzyl alcohol	6.011	108	159907	82.0304	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	253664	79.2957	ng	78
26) 2-Methylphenol	6.102	108	219679	75.3681	ng	97
27) Acetophenone	6.225	105	320144	77.0096	ng	78
28) Hexachloroethane	6.305	117	110191	79.4844	ng	85
29) N-Nitroso-di-n-propyla...	6.220	70	152933	72.1535	ng	81
30) 3&4-Methylphenol	6.220	108	218815	74.2782	ng	95
33) Nitrobenzene	6.364	77	250111	73.7098	ng	78
34) Isophorone	6.546	82	427931	72.9318	ng	80
35) 2-Nitrophenol	6.610	139	138081	76.8251	ng	88
36) 2,4-Dimethylphenol	6.632	107	248723	78.1994	ng	94
37) Benzoic Acid	6.728	105	241671	100.9278	ng	89
38) bis(2-Chloroethoxy)met...	6.701	93	270374	72.3020	ng	96
39) 2,4-Dichlorophenol	6.792	162	222583	79.2893	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	242858	79.7849	ng	95
41) Naphthalene	6.920	128	763025	77.8846	ng	99
42) 4-Chloroaniline	6.952	127	276719m	77.0673	ng	
43) Hexachlorobutadiene	7.001	225	138513	85.6609	ng	100
44) Caprolactam	7.241	113	83014	76.2138	ng	52
45) 4-Chloro-3-methylphenol	7.316	107	210436	75.3690	ng	75
46) 2-Methylnaphthalene	7.455	142	492469	73.3324	ng	99
47) 1-Methylnaphthalene	7.535	142	479441	73.2226	ng	90
48) Methylnaphthalenes (To...	7.535	142	978911m	148.2239	ng	
49) 1,1'-Biphenyl	7.830	154	604474	70.4568	ng	92
51) 1,2,4,5-Tetrachloroben...	7.584	216	241730	76.9221	ng	98
52) Hexachlorocyclopentadiene	7.573	237	102788	71.9387	ng	98
53) 2,4,6-Trichlorophenol	7.675	196	161166	85.3115	ng	99
54) 2,4,5-Trichlorophenol	7.712	196	161442	78.2404	ng	99
56) 2-Chloronaphthalene	7.856	162	468215	76.7429	ng	90
57) 1,4-Dimethylnaphthalene	8.135	156	395971	76.3278	ng	90
58) Dimethylnaphthalenes (...)	8.135	156	395971	76.3278	ng	90
59) Diphenyl Ether	7.910	170	365473	77.9606	ng	82
60) 2-Nitroaniline	7.931	65	170684	78.1722	ng	50
61) Coumarin	8.124	146	184070	71.7957	ng	60
62) Acenaphthylene	8.215	152	704463	74.1042	ng	99
63) Dimethylphthalate	8.076	163	543573	77.6333	ng	99
64) 2,6-Dinitrotoluene	8.135	165	122178	76.8755	ng	80
65) Acenaphthene	8.365	153	482318	74.7008	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@80PPM
 Data File: 10M71234.D
 Acq On : 10/ 8/18 10:44

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.290	138	135836	80.5338	ng	70
67) 2,4-Dinitrophenol	8.381	184	75243	80.4706	ng	45
68) Dibenzofuran	8.520	168	710405	81.4011	ng	90
69) 2,4-Dinitrotoluene	8.498	165	181095	84.2644	ng	62
70) 4-Nitrophenol	8.418	65	100692	71.7738	ng	54
71) 2,3,4,6-Tetrachlorophenol	8.627	232	136379	84.7931	ng	87
72) Fluorene	8.846	166	573931	79.6969	ng	96
73) 4-Chlorophenyl-phenyle...	8.830	204	271480	79.4017	ng	86
74) Diethylphthalate	8.707	149	555069	78.4105	ng	94
75) 4-Nitroaniline	8.862	138	153687	76.7468	ng	89
76) Atrazine	9.477	200	182029	83.0165	ng	97
78) 4,6-Dinitro-2-methylph...	8.883	198	99533	82.2004	ng	59
79) n-Nitrosodiphenylamine	8.948	169	489439	76.9761	ng	98
81) 1,2-Diphenylhydrazine	8.990	77	623463	85.3191	ng	81
82) 4-Bromophenyl-phenylether	9.322	248	149646	77.2512	ng	87
83) Hexachlorobenzene	9.391	284	156189	76.0155	ng	76
84) N-Octadecane	9.637	57	282894	69.2747	ng	76
85) Pentachlorophenol	9.595	266	83829	88.4093	ng	99
86) Phenanthrene	9.830	178	847510	77.7406	ng	100
87) Anthracene	9.889	178	865036	77.8166	ng	100
88) Carbazole	10.055	167	786912	76.5877	ng	97
89) Di-n-butylphthalate	10.418	149	949793	77.7946	ng	97
90) Fluoranthene	11.167	202	885688	78.0431	ng	86
92) Pyrene	11.435	202	907238	77.7803	ng	80
93) Benzidine	11.317	184	377186	79.1419	ng	85
95) 4,4'-DDE	11.536	246	184404	83.1979	ng	97
96) 4,4'-DDD	11.937	235	327307	84.5233	ng	92
97) Butylbenzylphthalate	12.189	149	430536	79.0548	ng	73
98) 4,4'-DDT	12.296	235	301170	86.7478	ng	94
99) 3,3'-Dichlorobenzidine	12.820	252	275534	79.3856	ng	95
100) Benzo[a]anthracene	12.852	228	820855	76.2254	ng	99
101) Chrysene	12.895	228	794907	77.5090	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	595258	78.5779	ng	93
104) Di-n-octylphthalate	13.617	149	1002894	76.9683	ng	99
105) Benzo[b]fluoranthene	14.072	252	871011	80.7495	ng	92
106) Benzo[k]fluoranthene	14.098	252	819230m	77.5101	ng	
107) Benzo[a]pyrene	14.435	252	820723	78.9814	ng	91
108) Indeno[1,2,3-cd]pyrene	15.869	276	838349	74.4316	ng	85
109) Dibenzo[a,h]anthracene	15.879	278	720055	75.6520	ng	92
110) Benzo[g,h,i]perylene	16.259	276	746577	77.1006	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

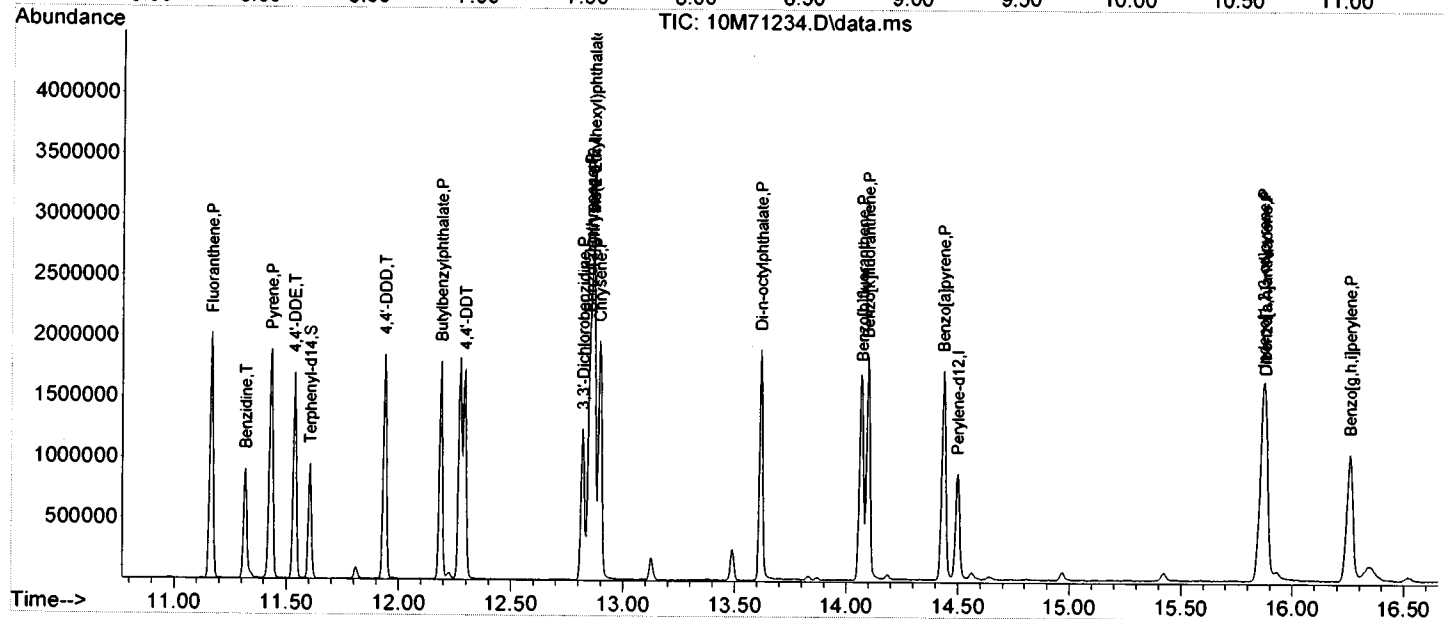
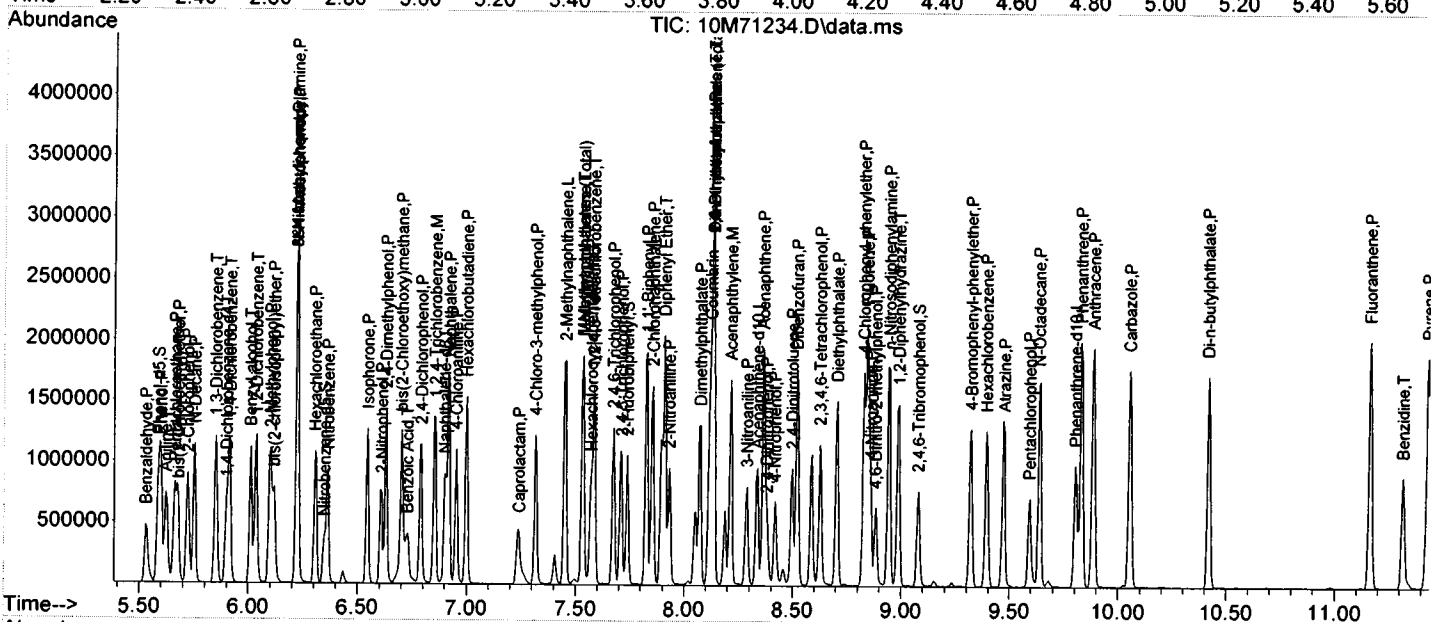
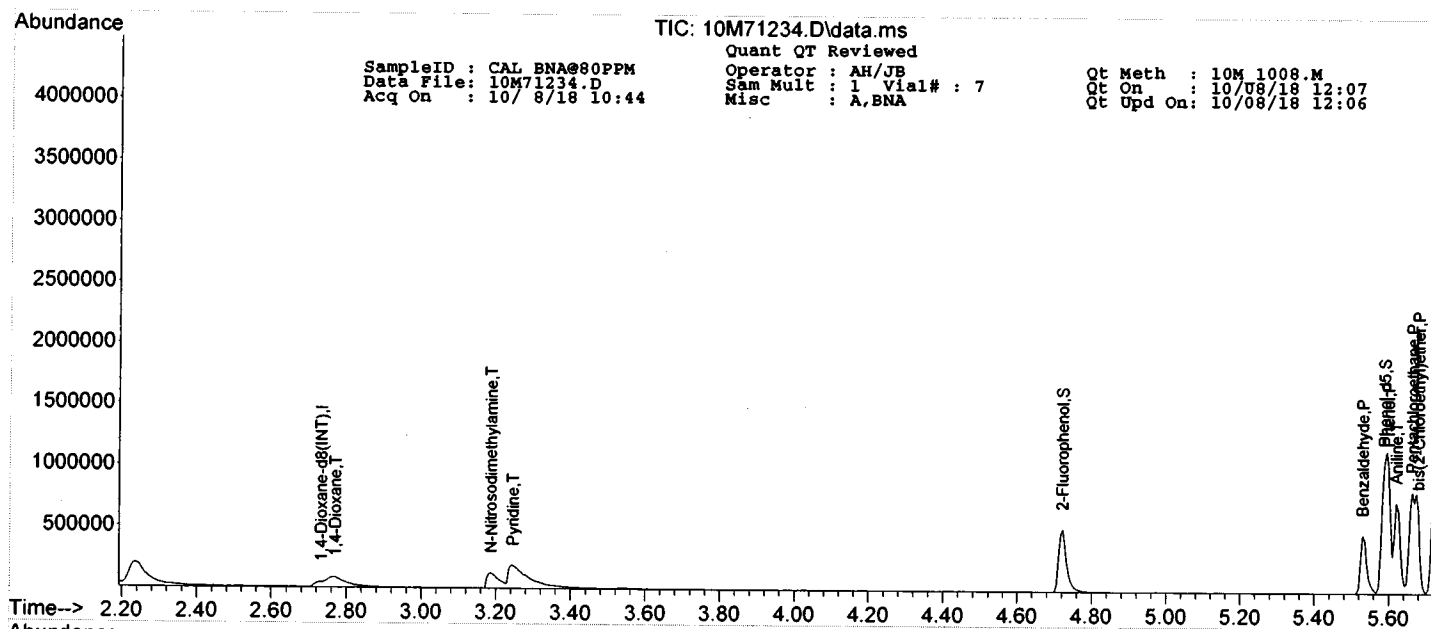
TIC: 10M71234.D\data.ms

Quant QT Reviewed

SampleID : CAL_BNA@80PPM
 Data File: 10M71234.D
 Acq On : 10/ 8/18 10:44

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 10M 1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06



SampleID : CAL BNA@120PPM
Data File: 10M71233.D
Acq On : 10/ 8/18 10:22

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.732	96	48116	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	94428	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	362591	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	229352	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	409954	40.00	ng	0.00
91) Chrysene-d12	12.868	240	364480	40.00	ng	0.00
103) Perylene-d12	14.499	264	379631	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	342767	135.32	ng	0.00
Spiked Amount 100.000			Recovery =	135.32%		
16) Phenol-d5	5.588	99	463594	124.98	ng	0.00
Spiked Amount 100.000			Recovery =	124.98%		
32) Nitrobenzene-d5	6.348	128	70988	59.09	ng	0.00
Spiked Amount 50.000			Recovery =	118.18%		
55) 2-Fluorobiphenyl	7.739	172	435665	58.83	ng	0.00
Spiked Amount 50.000			Recovery =	117.66%		
80) 2,4,6-Tribromophenol	9.081	330	112887	118.23	ng	0.00
Spiked Amount 100.000			Recovery =	118.23%		
94) Terphenyl-d14	11.606	244	418211	65.78	ng	0.00
Spiked Amount 50.000			Recovery =	131.56%		
Target Compounds						
8) 1,4-Dioxane	2.770	88	142336	117.7564	ng	90
9) Pyridine	3.235	79	352122	111.0649	ng	72
10) N-Nitrosodimethylamine	3.182	74	204641	117.5631	ng	87
12) Benzaldehyde	5.530	77	143249	85.0611	ng	81
13) Aniline	5.626	93	472696	131.5217	ng	76
14) Pentachloroethane	5.663	117	129155	121.4900	ng	71
15) bis(2-Chloroethyl)ether	5.679	93	333980	115.4714	ng	74
17) Phenol	5.599	94	452742	112.3919	ng	92
18) 2-Chlorophenol	5.722	128	382645	127.0397	ng	77
19) N-Decane	5.754	57	294768	109.0660	ng	76
20) 1,3-Dichlorobenzene	5.851	146	424908	127.1713	ng	98
22) 1,4-Dichlorobenzene	5.915	146	416799	117.0237	ng	98
23) 1,2-Dichlorobenzene	6.038	146	406245	119.7626	ng	97
24) Benzyl alcohol	6.016	108	243879	124.0737	ng	72
25) bis(2-chloroisopropyl)...	6.118	45	393520	121.9988	ng	76
26) 2-Methylphenol	6.102	108	334413	113.7837	ng	98
27) Acetophenone	6.230	105	470276	112.1890	ng	73
28) Hexachloroethane	6.311	117	172411	123.3385	ng	91
29) N-Nitroso-di-n-propyla...	6.225	70	227756	106.5673	ng	82
30) 3&4-Methylphenol	6.225	108	318295	106.3414	ng	100
33) Nitrobenzene	6.364	77	379082	109.4382	ng	77
34) Isophorone	6.546	82	657112	109.7049	ng	83
35) 2-Nitrophenol	6.610	139	221703	120.8327	ng	87
36) 2,4-Dimethylphenol	6.631	107	385051	117.1769	ng	95
37) Benzoic Acid	6.744	105	398243	148.7294	ng	87
38) bis(2-Chloroethoxy)met...	6.701	93	410259	107.4700	ng	97
39) 2,4-Dichlorophenol	6.792	162	350515	122.3131	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	359391	115.6589	ng	95
41) Naphthalene	6.920	128	1153291	115.5174	ng	99
42) 4-Chloroaniline	6.952	127	375854	109.8443	ng	92
43) Hexachlorobutadiene	7.001	225	200163	121.2605	ng	97
44) Caprolactam	7.252	113	128572	115.6304	ng	60
45) 4-Chloro-3-methylphenol	7.321	107	319934	112.2475	ng	82
46) 2-Methylnaphthalene	7.455	142	752194	109.7211	ng	98
47) 1-Methylnaphthalene	7.535	142	740536	110.7898	ng	94
48) Methylnaphthalenes (To...	7.535	142	1489184m	220.8855	ng	
49) 1,1'-Biphenyl	7.830	154	917091	104.7132	ng	92
51) 1,2,4,5-Tetrachloroben...	7.589	216	369262	113.3634	ng	99
52) Hexachlorocyclopentadiene	7.573	237	172843	110.8633	ng	100
53) 2,4,6-Trichlorophenol	7.674	196	245166	125.2024	ng	100
54) 2,4,5-Trichlorophenol	7.712	196	260022	121.5746	ng	95
56) 2-Chloronaphthalene	7.856	162	742807	117.4592	ng	93
57) 1,4-Dimethylnaphthalene	8.134	156	560850	104.2999	ng	93
58) Dimethylnaphthalenes (...)	8.134	156	560850	104.2999	ng	93
59) Diphenyl Ether	7.910	170	548288	112.8357	ng	83
60) 2-Nitroaniline	7.937	65	268877	118.8040	ng	40
61) Coumarin	8.124	146	262313	98.7083	ng	51
62) Acenaphthylene	8.215	152	1062751	107.8535	ng	99
63) Dimethylphthalate	8.076	163	850801	117.2293	ng	99
64) 2,6-Dinitrotoluene	8.140	165	175513	106.5424	ng	74
65) Acenaphthene	8.370	153	752113	112.3811	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM
 Data File: 10M71233.D
 Acq On : 10/ 8/18 10:22

Operator : AH/JB
 Sam Mult : 1 Vial# : 6
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.290	138	200634	114.7587	ng	81
67) 2,4-Dinitrophenol	8.386	184	127833	120.5764	ng	38
68) Dibenzofuran	8.525	168	1062822	117.7916	ng	88
69) 2,4-Dinitrotoluene	8.498	165	276784	124.2500	ng	67
70) 4-Nitrophenol	8.423	65	164379	113.0409	ng	48
71) 2,3,4,6-Tetrachlorophenol	8.632	232	217395	130.4009	ng	85
72) Fluorene	8.846	166	865060	115.8900	ng	98
73) 4-Chlorophenyl-phenyle...	8.830	204	412731	116.4601	ng	88
74) Diethylphthalate	8.707	149	842292	114.7910	ng	97
75) 4-Nitroaniline	8.867	138	245519	118.2841	ng	88
76) Atrazine	9.477	200	282053	124.1003	ng	98
78) 4,6-Dinitro-2-methylph...	8.889	198	161826	121.5115	ng	50
79) n-Nitrosodiphenylamine	8.947	169	731993	109.9531	ng	98
81) 1,2-Diphenylhydrazine	8.990	77	955802	124.9242	ng	84
82) 4-Bromophenyl-phenylether	9.322	248	234093	115.4176	ng	90
83) Hexachlorobenzene	9.397	284	239473	111.3144	ng	68
84) N-Octadecane	9.643	57	435579	101.8735	ng	72
85) Pentachlorophenol	9.595	266	142373	129.9434	ng	98
86) Phenanthrene	9.835	178	1288540	112.8871	ng	99
87) Anthracene	9.889	178	1333596	114.5791	ng	100
88) Carbazole	10.060	167	1221206	113.5181	ng	98
89) Di-n-butylphthalate	10.424	149	1464988	115.0977	ng	98
90) Fluoranthene	11.167	202	1392528	117.1928	ng	86
92) Pyrene	11.435	202	1432994	128.5181	ng	80
93) Benzidine	11.317	184	550346	121.5634	ng	82
95) 4,4'-DDE	11.542	246	292893	138.2365	ng	95
96) 4,4'-DDD	11.937	235	515852	139.3534	ng	91
97) Butylbenzylphthalate	12.189	149	666178	127.9618	ng	74
98) 4,4'-DDT	12.296	235	446455	134.5228	ng	93
99) 3,3'-Dichlorobenzidine	12.825	252	405593	128.8631	ng	95
100) Benzo[a]anthracene	12.857	228	1250163	121.4427	ng	98
101) Chrysene	12.900	228	1215761	124.0097	ng	98
102) bis(2-Ethylhexyl)phtha...	12.873	149	906942	125.2409	ng	94
104) Di-n-octylphthalate	13.617	149	1583969	121.2857	ng	99
105) Benzo[b]fluoranthene	14.071	252	1282823	118.6557	ng	91
106) Benzo[k]fluoranthene	14.104	252	1222585	115.4084	ng	91
107) Benzo[a]pyrene	14.440	252	1242954	119.3408	ng	90
108) Indeno[1,2,3-cd]pyrene	15.869	276	1274897	112.9310	ng	84
109) Dibenzo[a,h]anthracene	15.885	278	1085281	113.7635	ng	89
110) Benzo[g,h,i]perylene	16.270	276	1135496	116.9970	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@160PPM
Data File: 10M71232.D
Acq On : 10/ 8/18 10:00

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.727	96	47686	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	94302	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	357131	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	230365	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	414288	40.00	ng	0.00
91) Chrysene-d12	12.868	240	352830	40.00	ng	0.00
103) Perylene-d12	14.500	264	385890	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	461786	183.95	ng	0.00
Spiked Amount 100.000			Recovery =	183.95%		
16) Phenol-d5	5.594	99	609780	165.88	ng	0.00
Spiked Amount 100.000			Recovery =	165.88%		
32) Nitrobenzene-d5	6.348	128	99614	84.19	ng	0.00
Spiked Amount 50.000			Recovery =	168.38%		
55) 2-Fluorobiphenyl	7.744	172	601763	80.91	ng	0.00
Spiked Amount 50.000			Recovery =	161.82%		
80) 2,4,6-Tribromophenol	9.087	330	159906	164.05	ng	0.00
Spiked Amount 100.000			Recovery =	164.05%		
94) Terphenyl-d14	11.606	244	567560	92.21	ng	0.00
Spiked Amount 50.000			Recovery =	184.42%		
Target Compounds						
8) 1,4-Dioxane	2.770	88	185727	155.0399	ng	88
9) Pyridine	3.235	79	481555	153.2598	ng	69
10) N-Nitrosodimethylamine	3.187	74	272853	158.1633	ng	76
12) Benzaldehyde	5.535	77	170503	102.1574	ng	81
13) Aniline	5.626	93	630513	177.0143	ng	76
14) Pentachloroethane	5.664	117	167241	158.7342	ng	69
15) bis(2-Chloroethyl)ether	5.680	93	445267	155.3363	ng	78
17) Phenol	5.605	94	605527	151.6758	ng	91
18) 2-Chlorophenol	5.728	128	517385	173.3229	ng	73
19) N-Decane	5.755	57	391951	146.3321	ng	76
20) 1,3-Dichlorobenzene	5.851	146	553412	167.1250	ng	97
22) 1,4-Dichlorobenzene	5.915	146	545810	153.4506	ng	98
23) 1,2-Dichlorobenzene	6.038	146	535830	158.1758	ng	99
24) Benzyl alcohol	6.017	108	330268	168.2486	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	522414	162.1748	ng	78
26) 2-Methylphenol	6.102	108	442149	150.6417	ng	94
27) Acetophenone	6.231	105	578710	138.2414	ng	83
28) Hexachloroethane	6.311	117	229793	164.6077	ng	91
29) N-Nitroso-di-n-propyla...	6.225	70	281554	131.9155	ng	84
30) 3&4-Methylphenol	6.225	108	390987	130.0713	ng	95
33) Nitrobenzene	6.364	77	514722	150.8683	ng	79
34) Isophorone	6.551	82	873108	147.9940	ng	80
35) 2-Nitrophenol	6.610	139	289906	160.4204	ng	90
36) 2,4-Dimethylphenol	6.632	107	509352	155.5482	ng	97
37) Benzoic Acid	6.760	105	553836	193.9969	ng	86
38) bis(2-Chloroethoxy)met...	6.707	93	537215	142.8784	ng	96
39) 2,4-Dichlorophenol	6.792	162	453829	160.7860	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	480454	156.9832	ng	98
41) Naphthalene	6.921	128	1472515	149.9849	ng	99
42) 4-Chloroaniline	6.953	127	460527m	149.5542	ng	
43) Hexachlorobutadiene	7.001	225	267950	164.8082	ng	96
44) Caprolactam	7.257	113	192628	175.8874	ng	61
45) 4-Chloro-3-methylphenol	7.322	107	436710	155.5603	ng	81
46) 2-Methylnaphthalene	7.455	142	1004414	148.7520	ng	99
47) 1-Methylnaphthalene	7.536	142	978693	148.6584	ng	93
48) Methylnaphthalenes (To...	7.455	142	1973986m	297.2708	ng	
49) 1,1'-Biphenyl	7.830	154	1206961	139.9175	ng	93
51) 1,2,4,5-Tetrachloroben...	7.589	216	474204	144.9405	ng	99
52) Hexachlorocyclopentadiene	7.573	237	247494	150.4001	ng	98
53) 2,4,6-Trichlorophenol	7.675	196	319910	162.6545	ng	98
54) 2,4,5-Trichlorophenol	7.712	196	352197	163.9473	ng	97
56) 2-Chloronaphthalene	7.857	162	963876	151.7463	ng	93
57) 1,4-Dimethylnaphthalene	8.140	156	682028	126.2773	ng	95
58) Dimethylnaphthalenes (...)	8.140	156	682028	126.2773	ng	95
59) Diphenyl Ether	7.915	170	697667	142.9460	ng	79
60) 2-Nitroaniline	7.937	65	356956	157.0284	ng	44
61) Coumarin	8.129	146	321970	120.6244	ng	43
62) Acenaphthylene	8.220	152	1460471	147.5644	ng	99
63) Dimethylphthalate	8.081	163	1145042	157.0781	ng	99
64) 2,6-Dinitrotoluene	8.140	165	218689	132.1679	ng	97
65) Acenaphthene	8.370	153	985628	146.6254	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM

Operator : AH/JB

Qt Meth : 10M_1008.M

Data File: 10M71232.D

Sam Mult : 1 Vial# : 5

Qt On : 10/08/18 12:07

Acq On : 10/ 8/18 10:00

Misc : A,BNA

Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.295	138	255039	145.2358	ng	71
67) 2,4-Dinitrophenol	8.386	184	187532	161.8247	ng	41
68) Dibenzofuran	8.525	168	1396003	154.4360	ng	90
69) 2,4-Dinitrotoluene	8.504	165	380955	170.2610	ng	65
70) 4-Nitrophenol	8.429	65	217746	149.0821	ng	50
71) 2,3,4,6-Tetrachlorophenol	8.632	232	294817	176.0636	ng	84
72) Fluorene	8.851	166	1150322	153.4283	ng	98
73) 4-Chlorophenyl-phenyle...	8.835	204	550085	154.5347	ng	85
74) Diethylphthalate	8.707	149	1133195	153.7574	ng	96
75) 4-Nitroaniline	8.873	138	333699	160.0597	ng	88
76) Atrazine	9.483	200	394500	172.8124	ng	97
78) 4,6-Dinitro-2-methylph...	8.894	198	219844	156.6276	ng	52
79) n-Nitrosodiphenylamine	8.953	169	990340	147.2034	ng	98
81) 1,2-Diphenylhydrazine	8.990	77	1314004	169.9449	ng	85
82) 4-Bromophenyl-phenylether	9.322	248	316564	154.4464	ng	94
83) Hexachlorobenzene	9.397	284	315351	145.0514	ng	75
84) N-Octadecane	9.643	57	559114	129.3980	ng	71
85) Pentachlorophenol	9.600	266	195643	164.0473	ng	97
86) Phenanthrene	9.836	178	1711814	148.4006	ng	100
87) Anthracene	9.894	178	1777655	151.1337	ng	99
88) Carbazole	10.060	167	1617877	148.8176	ng	98
89) Di-n-butylphthalate	10.424	149	1989690	155.4103	ng	99
90) Fluoranthene	11.173	202	1841109	153.3237	ng	83
92) Pyrene	11.440	202	1885649	174.6984	ng	79
93) Benzidine	11.322	184	742465	170.6672	ng	80
95) 4,4'-DDE	11.542	246	390880	190.5748	ng	95
96) 4,4'-DDD	11.943	235	670002	186.9721	ng	90
97) Butylbenzylphthalate	12.194	149	893278	177.2495	ng	72
98) 4,4'-DDT	12.301	235	615678	191.6373	ng	93
99) 3,3'-Dichlorobenzidine	12.825	252	507042	175.3294	ng	96
100) Benzo[a]anthracene	12.858	228	1675702	168.1550	ng	98
101) Chrysene	12.906	228	1617265	170.4107	ng	99
102) bis(2-Ethylhexyl)phtha...	12.874	149	1202749	171.5733	ng	94
104) Di-n-octylphthalate	13.622	149	2124756	160.0553	ng	99
105) Benzo[b]fluoranthene	14.077	252	1671543	152.1030	ng	91
106) Benzo[k]fluoranthene	14.109	252	1717131	159.4629	ng	90
107) Benzo[a]pyrene	14.446	252	1650186	155.8709	ng	91
108) Indeno[1,2,3-cd]pyrene	15.874	276	1734400	151.1422	ng	83
109) Dibenzo[a,h]anthracene	15.896	278	1446746	149.1939	ng	86
110) Benzo[g,h,i]perylene	16.275	276	1519870	154.0614	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@196PPM
Data File: 10M71231.D
Acq On : 10/ 8/18 09:38

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	46558	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	95237	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	358254	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	237684	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	438766	40.00	ng	0.00
91) Chrysene-d12	12.874	240	339080	40.00	ng	0.01
103) Perylene-d12	14.500	264	408006	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	556812	227.18	ng	0.00
Spiked Amount 100.000			Recovery =	227.18%		
16) Phenol-d5	5.594	99	732223	204.01	ng	0.00
Spiked Amount 100.000			Recovery =	204.01%		
32) Nitrobenzene-d5	6.354	128	120762	101.74	ng	0.00
Spiked Amount 50.000			Recovery =	203.48%		
55) 2-Fluorobiphenyl	7.744	172	714699	93.13	ng	0.00
Spiked Amount 50.000			Recovery =	186.26%		
80) 2,4,6-Tribromophenol	9.087	330	192882	185.95	ng	0.00
Spiked Amount 100.000			Recovery =	185.95%		
94) Terphenyl-d14	11.611	244	738491	124.85	ng	0.00
Spiked Amount 50.000			Recovery =	249.70%		
Target Compounds						
8) 1,4-Dioxane	2.759	88	221767	189.6103	ng	86
9) Pyridine	3.230	79	590920	192.6228	ng	70
10) N-Nitrosodimethylamine	3.182	74	340569	202.1989	ng	86
12) Benzaldehyde	5.530	77	198458	121.7876	ng	76
13) Aniline	5.626	93	760890	218.7926	ng	76
14) Pentachloroethane	5.664	117	202373	196.7329	ng	70
15) bis(2-Chloroethyl)ether	5.685	93	523855	187.1803	ng	75
17) Phenol	5.610	94	741355	190.1979	ng	91
18) 2-Chlorophenol	5.728	128	634062	217.5556	ng	73
19) N-Decane	5.755	57	459451	175.6886	ng	77
20) 1,3-Dichlorobenzene	5.851	146	664218	205.4471	ng	96
22) 1,4-Dichlorobenzene	5.915	146	676465	188.3162	ng	97
23) 1,2-Dichlorobenzene	6.038	146	645170	188.5829	ng	97
24) Benzyl alcohol	6.017	108	408228	205.9222	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	616647	189.5485	ng	77
26) 2-Methylphenol	6.102	108	533772	180.0726	ng	96
27) Acetophenone	6.236	105	649437	153.6135	ng	75
28) Hexachloroethane	6.311	117	276470	196.0996	ng	88
29) N-Nitroso-di-n-propyla...	6.231	70	320717	148.7891	ng	91
30) 3&4-Methylphenol	6.231	108	428108	140.6713	ng	99
33) Nitrobenzene	6.370	77	634148	185.2902	ng	75
34) Isophorone	6.551	82	1080992	182.6566	ng	85
35) 2-Nitrophenol	6.610	139	355628	196.1711	ng	93
36) 2,4-Dimethylphenol	6.637	107	620465	187.1020	ng	96
37) Benzoic Acid	6.771	105	713779	233.6436	ng	85
38) bis(2-Chloroethoxy)met...	6.707	93	644756	170.9426	ng	96
39) 2,4-Dichlorophenol	6.798	162	543790	192.0541	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	588069	191.5430	ng	98
41) Naphthalene	6.921	128	1759855	178.9293	ng	100
42) 4-Chloroaniline	6.958	127	522350m	184.3630	ng	
43) Hexachlorobutadiene	7.001	225	326215	200.0163	ng	95
44) Caprolactam	7.274	113	244421	222.4796	ng	56
45) 4-Chloro-3-methylphenol	7.327	107	543122	192.8589	ng	82
46) 2-Methylnaphthalene	7.455	142	1170458	172.7994	ng	99
47) 1-Methylnaphthalene	7.536	142	1141341	172.8204	ng	93
48) Methylnaphthalenes (To...	7.455	142	2297970m	344.9762	ng	
49) 1,1'-Biphenyl	7.830	154	1465633	169.3715	ng	93
51) 1,2,4,5-Tetrachloroben...	7.589	216	575316	170.4305	ng	97
52) Hexachlorocyclopentadiene	7.573	237	292412	168.4937	ng	97
53) 2,4,6-Trichlorophenol	7.680	196	385051	189.7462	ng	99
54) 2,4,5-Trichlorophenol	7.712	196	414932m	187.2027	ng	
56) 2-Chloronaphthalene	7.857	162	1150433	175.5395	ng	94
57) 1,4-Dimethylnaphthalene	8.140	156	772001	138.5344	ng	97
58) Dimethylnaphthalenes (...)	8.140	156	772001	138.5344	ng	97
59) Diphenyl Ether	7.915	170	791516	157.1810	ng	83
60) 2-Nitroaniline	7.937	65	445404	189.9040	ng	52
61) Coumarin	8.135	146	355115	128.9452	ng	33
62) Acenaphthylene	8.220	152	1748257	171.2027	ng	99
63) Dimethylphthalate	8.087	163	1431435	190.3191	ng	99
64) 2,6-Dinitrotoluene	8.145	165	261204	153.0014	ng	79
65) Acenaphthene	8.370	153	1191791	171.8354	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM

Operator : AH/JB

Qt Meth : 10M_1008.M

Data File: 10M71231.D

Sam Mult : 1 Vial# : 4

Qt On : 10/08/18 12:07

Acq On : 10/ 8/18 09:38

Misc : A,BNA

Qt Upd On: 10/08/18 12:06

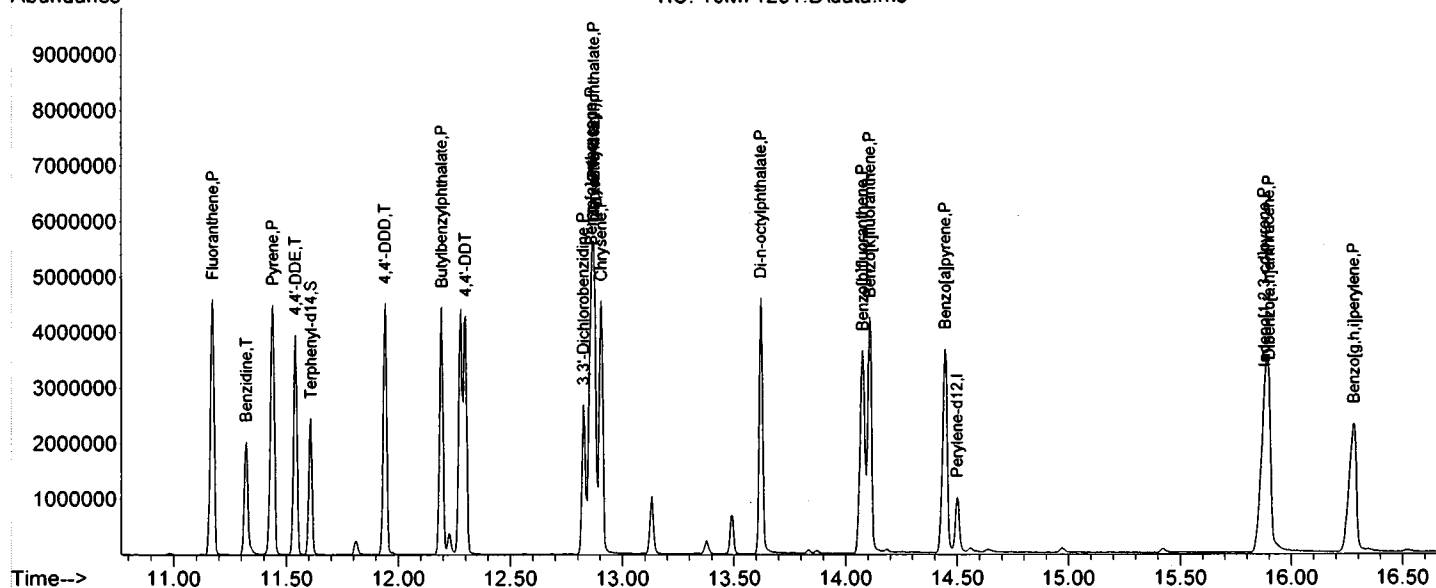
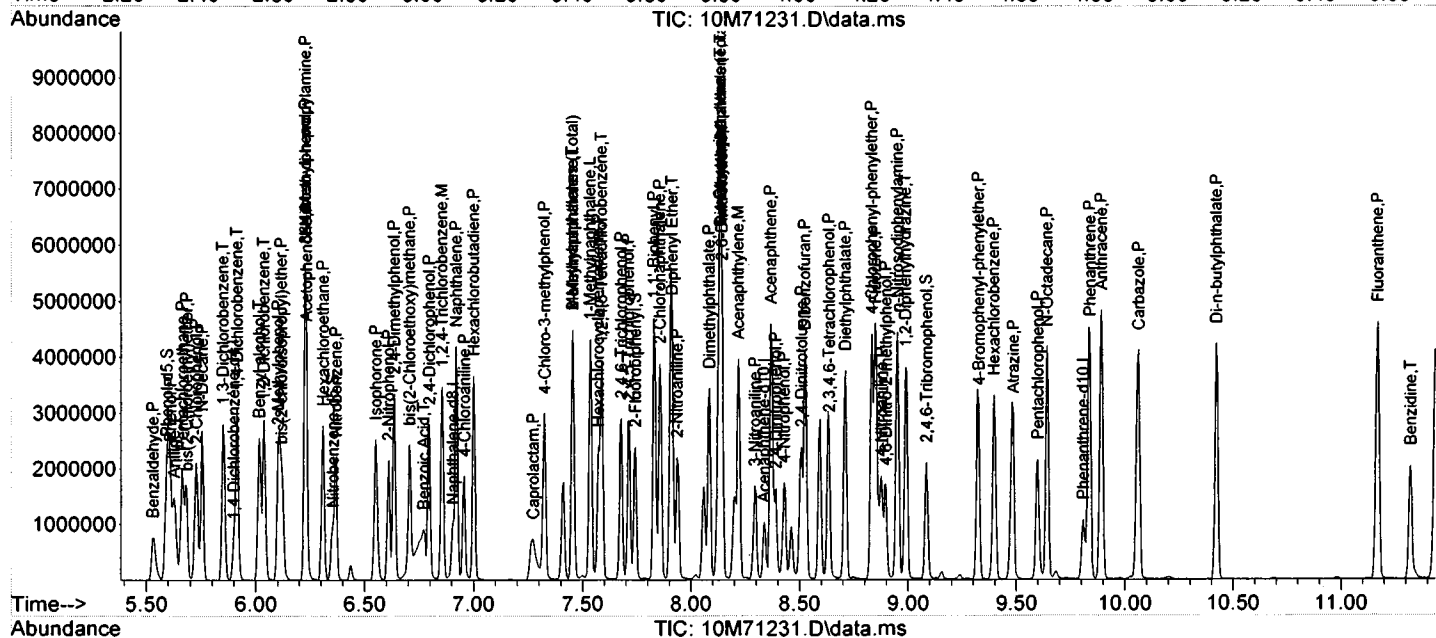
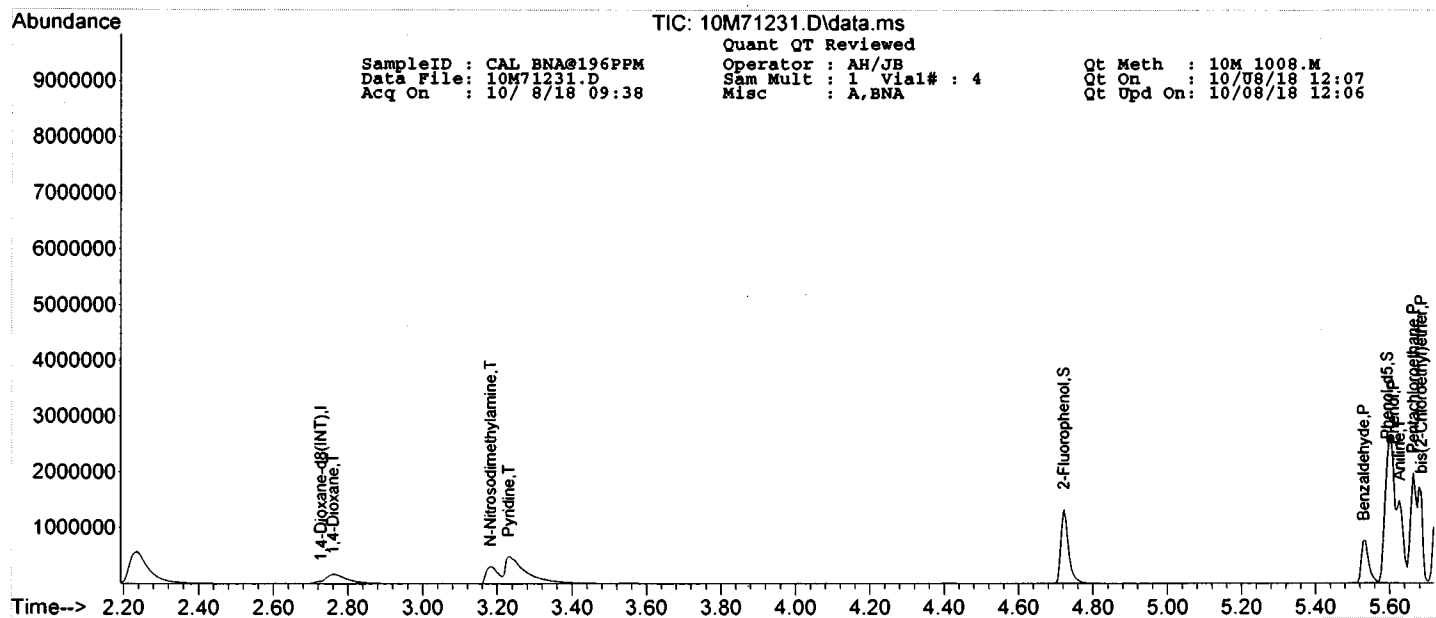
Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.295	138	307749	169.8558	ng	75
67) 2,4-Dinitrophenol	8.391	184	240705	190.5498	ng	35
68) Dibenzofuran	8.525	168	1743000	187.3208	ng	91
69) 2,4-Dinitrotoluene	8.509	165	468982	203.1488	ng	63
70) 4-Nitrophenol	8.429	65	283725	188.2736	ng	61
71) 2,3,4,6-Tetrachlorophenol	8.637	232	367564	212.7486	ng	87
72) Fluorene	8.851	166	1402376	181.2871	ng	100
73) 4-Chlorophenyl-phenyle...	8.835	204	685935	186.7651	ng	90
74) Diethylphthalate	8.712	149	1421066	186.8797	ng	97
75) 4-Nitroaniline	8.878	138	426465	198.2563	ng	88
76) Atrazine	9.488	200	491274	208.5779	ng	98
78) 4,6-Dinitro-2-methylph...	8.900	198	286960	186.5085	ng	60
79) n-Nitrosodiphenylamine	8.953	169	1231051	172.7742	ng	99
81) 1,2-Diphenylhydrazine	8.990	77	1642597	200.5912	ng	86
82) 4-Bromophenyl-phenylether	9.327	248	391878	180.5246	ng	90
83) Hexachlorobenzene	9.397	284	399721	173.6018	ng	81
84) N-Octadecane	9.643	57	675625	147.6394	ng	74
85) Pentachlorophenol	9.600	266	256888	192.0823	ng	98
86) Phenanthrene	9.841	178	2086934	170.8273	ng	99
87) Anthracene	9.894	178	2190228	175.8218	ng	99
88) Carbazole	10.066	167	2027536	176.0949	ng	98
89) Di-n-butylphthalate	10.424	149	2409706	178.1880	ng	98
90) Fluoranthene	11.173	202	2289404	180.0203	ng	83
92) Pyrene	11.440	202	2354962	227.0259	ng	80
93) Benzidine	11.322	184	906983	218.5126	ng	83
95) 4,4'-DDE	11.542	246	482070	244.5656	ng	94
96) 4,4'-DDD	11.943	235	845933	245.6405	ng	89
97) Butylbenzylphthalate	12.194	149	1149970	237.4368	ng	76
98) 4,4'-DDT	12.301	235	772245	250.1179	ng	91
99) 3,3'-Dichlorobenzidine	12.825	252	592165	226.3971	ng	96
100) Benzo[a]anthracene	12.863	228	1996289	208.4490	ng	99
101) Chrysene	12.906	228	2052808	225.0750	ng	98
102) bis(2-Ethylhexyl)phtha...	12.874	149	1439783	213.7151	ng	94
104) Di-n-octylphthalate	13.622	149	2665071	189.8746	ng	99
105) Benzo[b]fluoranthene	14.077	252	2157906m	185.7161	ng	
106) Benzo[k]fluoranthene	14.109	252	1972412m	173.2411	ng	
107) Benzo[a]pyrene	14.446	252	2056194	183.6933	ng	90
108) Indeno[1,2,3-cd]pyrene	15.879	276	2152490	177.4085	ng	82
109) Dibenzo[a,h]anthracene	15.901	278	1780392	173.6486	ng	86
110) Benzo[g,h,i]perylene	16.281	276	1998793	191.6250	ng	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@.5PPM
Data File: 10M71236.D
Acq On : 10/ 8/18 11:28

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	45678	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	87007	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	329675	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	208232	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	382719	40.00	ng	0.00
91) Chrysene-d12	12.863	240	376330	40.00	ng	0.00
103) Perylene-d12	14.494	264	356360	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						
8) 1,4-Dioxane	2.775	88	627m	0.5464	ng	
9) Pyridine	0.000		0	N.D.		
10) N-Nitrosodimethylamine	0.000		0	N.D.		
12) Benzaldehyde	0.000		0	N.D.		
13) Aniline	5.626	93	927	0.2717	ng	58
14) Pentachloroethane	0.000		0	N.D. d		
15) bis(2-Chloroethyl)ether	5.680	93	1626	0.5922	ng	71
17) Phenol	0.000		0	N.D. d		
18) 2-Chlorophenol	0.000		0	N.D. d		
19) N-Decane	0.000		0	N.D. d		
20) 1,3-Dichlorobenzene	0.000		0	N.D. d		
22) 1,4-Dichlorobenzene	0.000		0	N.D. d		
23) 1,2-Dichlorobenzene	0.000		0	N.D. d		
24) Benzyl alcohol	0.000		0	N.D. d		
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d		
26) 2-Methylphenol	6.102	108	1159	0.4280	ng	99
27) Acetophenone	0.000		0	N.D. d		
28) Hexachloroethane	0.000		0	N.D. d		
29) N-Nitroso-di-n-propyla...	6.220	70	755m	0.3834	ng	
30) 3&4-Methylphenol	6.230	108	1201	0.4467	ng	67
33) Nitrobenzene	0.000		0	N.D. d		
34) Isophorone	0.000		0	N.D. d		
35) 2-Nitrophenol	0.000		0	N.D. d		
36) 2,4-Dimethylphenol	6.632	107	1459	0.5064	ng	90
37) Benzoic Acid	0.000		0	N.D. d		
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d		
39) 2,4-Dichlorophenol	6.797	162	1281m	0.4916	ng	
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d		
41) Naphthalene	6.915	128	5210	0.5709	ng	83
42) 4-Chloroaniline	6.958	127	1334	0.3464	ng	82
43) Hexachlorobutadiene	0.000		0	N.D. d		
44) Caprolactam	0.000		0	N.D.		
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d		
46) 2-Methylnaphthalene	0.000		0	N.D. d		
47) 1-Methylnaphthalene	0.000		0	N.D. d		
48) Methylnaphthalenes (To...	0.000		0	N.D. d		
49) 1,1'-Biphenyl	0.000		0	N.D. d		
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d		
52) Hexachlorocyclopentadiene	0.000		0	N.D.		
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d		
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d		
56) 2-Chloronaphthalene	0.000		0	N.D. d		
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d		
58) Dimethylnaphthalenes (...)	0.000		0	N.D. d		
59) Diphenyl Ether	0.000		0	N.D. d		
60) 2-Nitroaniline	0.000		0	N.D. d		
61) Coumarin	0.000		0	N.D. d		
62) Acenaphthylene	0.000		0	N.D. d		
63) Dimethylphthalate	0.000		0	N.D. d		
64) 2,6-Dinitrotoluene	0.000		0	N.D. d		
65) Acenaphthene	0.000		0	N.D. d		

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM
 Data File: 10M71236.D
 Acq On : 10/ 8/18 11:28

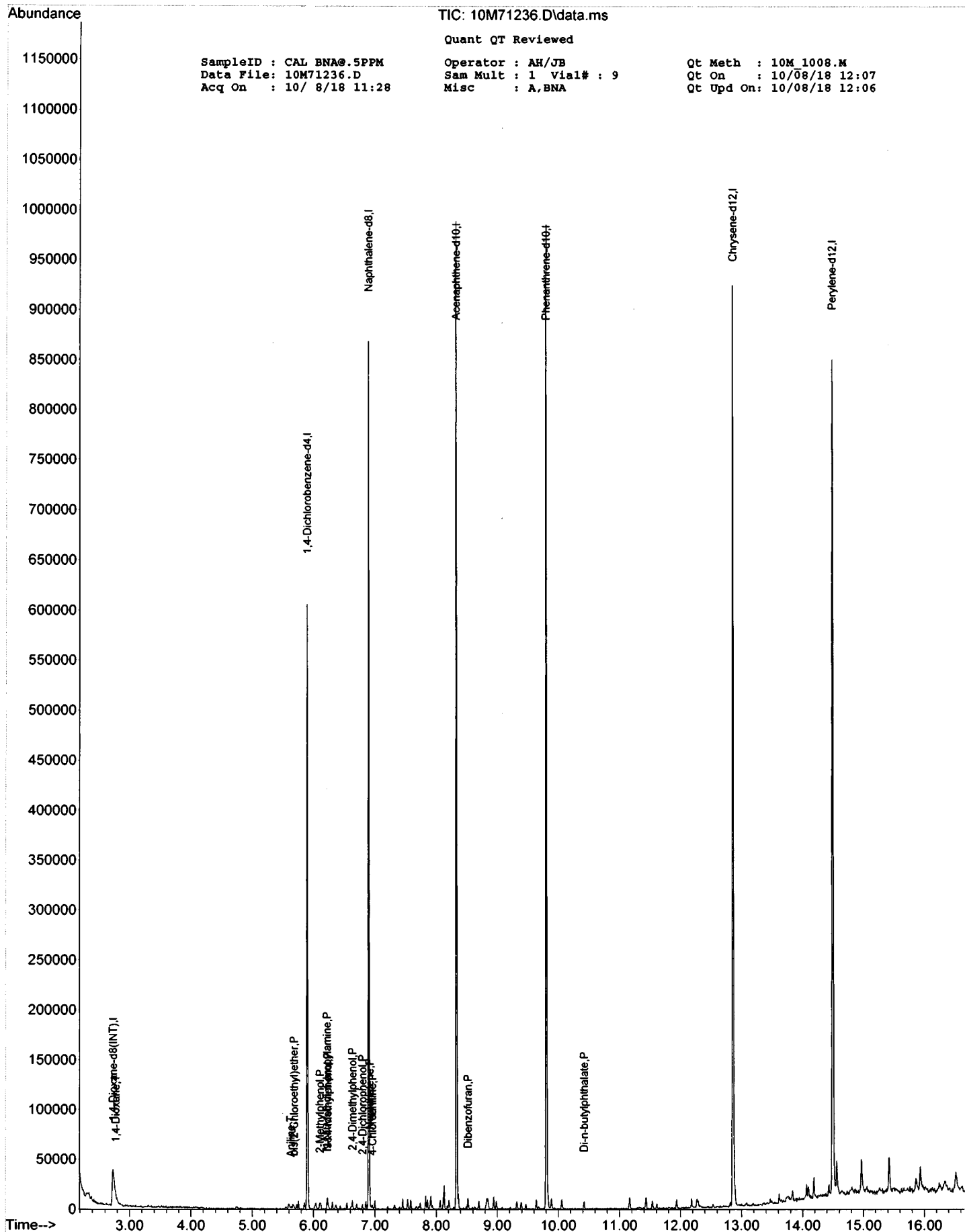
Operator : AH/JB
 Sam Mult : 1 Vial# : 9
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.		
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.520	168	4691	0.5679	ng	73
69) 2,4-Dinitrotoluene	0.000		0	N.D. d		
70) 4-Nitrophenol	0.000		0	N.D. d		
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D. d		
72) Fluorene	0.000		0	N.D. d		
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D. d		
74) Diethylphthalate	0.000		0	N.D. d		
75) 4-Nitroaniline	0.000		0	N.D. d		
76) Atrazine	0.000		0	N.D. d		
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D. d		
81) 1,2-Diphenylhydrazine	0.000		0	N.D. d		
82) 4-Bromophenyl-phenylether	0.000		0	N.D. d		
83) Hexachlorobenzene	0.000		0	N.D. d		
84) N-Octadecane	0.000		0	N.D. d		
85) Pentachlorophenol	0.000		0	N.D.		
86) Phenanthrene	0.000		0	N.D. d		
87) Anthracene	0.000		0	N.D. d		
88) Carbazole	0.000		0	N.D. d		
89) Di-n-butylphthalate	10.418	149	4791	0.3979	ng	95
90) Fluoranthene	0.000		0	N.D. d		
92) Pyrene	0.000		0	N.D. d		
93) Benzidine	0.000		0	N.D. d		
95) 4,4'-DDE	0.000		0	N.D. d		
96) 4,4'-DDD	0.000		0	N.D. d		
97) Butylbenzylphthalate	0.000		0	N.D. d		
98) 4,4'-DDT	0.000		0	N.D. d		
99) 3,3'-Dichlorobenzidine	0.000		0	N.D. d		
100) Benzo[a]anthracene	0.000		0	N.D. d		
101) Chrysene	0.000		0	N.D. d		
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D. d		
104) Di-n-octylphthalate	0.000		0	N.D. d		
105) Benzo[b]fluoranthene	0.000		0	N.D. d		
106) Benzo[k]fluoranthene	0.000		0	N.D. d		
107) Benzo[a]pyrene	0.000		0	N.D. d		
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D. d		
109) Dibenzo[a,h]anthracene	0.000		0	N.D. d		
110) Benzo[g,h,i]perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Level #:	Data File	Cal Identifier:	Analysis Date/Time					Level #:	Data File	Cal Identifier:	Analysis Date/Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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1	10M71237.D	CAL BNA@50PPM							2	10M71230.D	CAL BNA@20PPM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

Flags

a - failed the min rf criteria

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Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #	Data File	Cal Identifier	Analysis Date/Time									Level #	Data File	Cal Identifier	Analysis Date/Time												
			RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
1	10M71237.D	CAL BNA@50PPM																									
3	10M71229.D	CAL BNA@10PPM																									
5	10M71234.D	CAL BNA@80PPM																									
7	10M71232.D	CAL BNA@160PPM																									
9	10M71236.D	CAL BNA@5PPM																									
Compound	Col Mr	Ft1	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9		
Hexachlorocyclopenta	1	0	Qua	0.1966	0.0508	0.0874	0.1670	0.2322	0.2512	0.2685	0.2510	0.1887	5.7	0.990	0.995	43	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,4,6-Trichlorophenol	1	0	Avg	0.3356	0.3205	0.2713	0.3391	0.3641	0.3563	0.3471	0.3306	0.3337	6.7	0.997	0.999	8.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,4,5-Trichlorophenol	1	0	Avg	0.3415	0.3446	0.2925	0.3705	0.3648	0.3779	0.3822	0.3562	0.3547	7.1	0.997	0.998	8.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2-Fluorobiphenyl	1	0	Avg	1.2471	1.4413	1.1571	1.3128	1.2871	1.2663	1.3061	1.2273	1.2877	7.4	0.999	0.999	6.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00		
2-Chloronaphthalene	1	0	Avg	1.0298	1.2707	0.9270	1.0509	1.0580	1.0795	1.0460	0.9877	1.0677	8.5	0.997	0.999	9.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
1,4-Dimethylnaphthale	1	0	Avg	0.9301	1.1310	0.8336	0.9664	0.8947	0.8151	0.7401	0.6628	0.872	8.13	0.984	0.999	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Dimethylnaphthalenes	1	0	Avg	0.9301	1.1310	0.8336	0.9664	0.8947	0.8151	0.7401	0.6628	0.872	8.13	0.984	0.999	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Dibhenyl Ether	1	0	Avg	0.7971	0.8963	0.7002	0.8074	0.8258	0.7968	0.7571	0.6796	0.783	7.91	0.989	0.998	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2-Nitroaniline	1	0	Avg	0.3804	0.3681	0.3120	0.3959	0.3856	0.3907	0.3873	0.3824	0.3757	9.3	1.00	1.00	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Coumarin	1	0	Avg	0.4021	0.4793	0.3507	0.4279	0.4159	0.3812	0.3494	0.3049	0.389	8.12	0.976	0.999	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Acenaphthylene	1	0	Avg	1.5715	1.7053	1.3744	1.5893	1.5918	1.5445	1.5849	1.5011	1.56	8.21	0.999	0.999	6.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Dimethylbiphenylate	1	0	Avg	1.2354	1.3241	1.0966	1.2762	1.2283	1.2365	1.2426	1.2290	1.23	8.07	1.00	1.00	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,6-Dinitrotoluene	1	0	Avg	0.2777	0.2376	0.2508	0.2947	0.2760	0.2550	0.2373	0.2242	0.257	8.13	0.991	1.00	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Acenaphthene	1	0	Avg	1.0818	1.2231	1.0239	1.1839	1.0898	1.0931	1.0696	1.0233	1.10	8.36	0.998	1.00	6.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
3-Nitroaniline	1	0	Qua	0.2932	0.2879	0.2036	0.3167	0.3069	0.2916	0.2767	0.2642	0.280	8.28	0.995	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,4-Dinitrophenol	1	0	Qua	0.1350	0.0621	0.0942	0.1700	0.1857	0.2035	0.2066	0.2066	0.151	8.38	0.992	0.999	37	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Dibenzofuran	1	0	Qua	1.5224	1.7385	1.4063	1.6233	1.6053	1.5446	1.5149	1.4965	1.58	8.52	0.999	1.00	7.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
2,4-Dinitrotoluene	1	0	Qua	0.3896	0.3299	0.3054	0.3898	0.4092	0.4022	0.4134	0.4026	0.380	8.49	1.00	1.00	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4-Nitrophenol	1	0	Qua	0.2093	0.318	0.1411	0.2024	0.2275	0.2389	0.2363	0.2436	0.204	8.42	0.999	1.00	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3144	0.3289	0.2508	0.3123	0.3081	0.3159	0.3199	0.3156	0.308	8.63	0.999	0.999	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Fluorene	1	0	Avg	1.2221	1.4858	1.0918	1.2693	1.2969	1.2572	1.2483	1.2041	1.26	8.85	0.999	1.00	8.8	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4-Chlorophenyl-phenyl	1	0	Avg	0.5903	0.6732	0.5160	0.6290	0.6134	0.5998	0.5969	0.5889	0.601	8.83	1.00	1.00	7.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Diethylbiphenylate	1	0	Avg	1.2048	1.2978	1.0497	1.2739	1.2542	1.2241	1.2297	1.2201	1.22	8.70	1.00	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4-Nitroaniline	1	0	Qua	0.3377	0.2393	0.2605	0.3325	0.3472	0.3568	0.3621	0.3661	0.325	8.86	1.00	1.00	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Atrazine	1	0	Avg	0.3898	0.4477	0.3377	0.4270	0.4113	0.4099	0.4281	0.4218	0.409	9.47	0.999	0.999	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4,6-Dinitro-2-methylph	1	0	Qua	0.1128	0.0669	0.0967	0.1271	0.1315	0.1326	0.1334	0.1334	0.114	8.88	0.999	1.00	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
n-Nitrosodiphenylamin	1	0	Avg	0.5905	0.6958	0.5374	0.6104	0.6250	0.5951	0.5976	0.5725	0.603	8.94	0.999	0.999	7.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
2,4,6-Tribromophenol	1	0	Qua	0.0916	0.0926	0.0755	0.0828	0.0946	0.0917	0.0964	0.0897	0.0894	9.08	0.997	0.998	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
1,2-Diphenylhydrazine	1	0	Avg	0.7055	0.7464	0.5832	0.7208	0.7961	0.7771	0.7929	0.7640	0.736	8.98	0.998	0.998	9.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4-Bromophenyl-phenyl	1	0	Avg	0.1895	0.1932	0.1631	0.1812	0.1911	0.1903	0.1910	0.1822	0.185	9.32	0.999	0.999	5.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Hexachlorobenzene	1	0	Avg	0.2032	0.2576	0.1645	0.1958	0.1994	0.1947	0.1903	0.1859	0.199	9.39	0.992	0.993	13	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
N-Octadecane	1	0	Avg	0.3603	0.3291	0.3040	0.3470	0.3612	0.3541	0.3373	0.3142	0.338	9.64	0.994	0.999	6.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Pentachlorophenol	1	0	Qua	0.0967	0.0538	0.0682	0.1070	0.1157	0.1180	0.1194	0.1194	0.0970	9.59	0.998	0.999	27	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Phenanthrene	1	0	Avg	1.0596	1.2312	0.9566	1.0734	1.0822	1.0477	1.0329	0.9706	1.06	9.83	0.997	0.999	8.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Anthracene	1	0	Avg	1.0699	1.2487	0.9437	1.0377	1.1046	1.0843	1.0727	1.0187	1.07	9.88	0.998	0.999	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Carbazole	1	0	Avg	0.9928	1.0429	0.8676	0.9858	1.0048	0.9929	0.9763	0.9430	0.976	10.05	0.999	1.00	5.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Di-n-butylphthalate	1	0	Qua	1.1862	1.069	0.9245	1.1037	1.2128	1.1911	1.2006	1.1208	1.12	10.42	0.998	0.999												

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Note:

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Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 10.6

8101509 0287

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M71237.D	CAL BNA@50PPM	10/08/18 11:51	2	10M71230.D	CAL BNA@2PPM	10/08/18 09:15
3	10M71229.D	CAL BNA@10PPM	10/08/18 08:51	4	10M71235.D	CAL BNA@20PPM	10/08/18 11:06
5	10M71234.D	CAL BNA@80PPM	10/08/18 10:44	6	10M71233.D	CAL BNA@120PPM	10/08/18 10:22
7	10M71232.D	CAL BNA@160PPM	10/08/18 10:00	8	10M71231.D	CAL BNA@196PPM	10/08/18 09:38
9	10M71236.D	CAL BNA@5PPM	10/08/18 11:28				

Compound	Col	M	F	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
4,4'-DDE	1	0	Avg	0.2406	0.2750	0.2094	0.2322	0.2418	0.2678	0.2769	0.2901	-----	0.254	11.54	0.996	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4141	0.4161	0.3306	0.4096	0.4292	0.4717	0.4747	0.5091	-----	0.432	11.94	0.994	0.999	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzophthalate	1	0	Qua	0.5135	0.4061	0.3742	0.4971	0.5645	0.6092	0.6329	0.6921	-----	0.536	12.18	0.993	1.00	21	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3676	0.3388	0.2963	0.3567	0.3949	0.4083	0.4362	0.4647	-----	0.383	12.29	0.993	1.00	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3712	0.3652	0.2515	0.3796	0.3613	0.3709	0.3592	0.3564	-----	0.352	12.82	0.999	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolanthracene	1	0	Avg	1.0377	1.2432	0.9244	1.0645	1.0764	1.1433	1.1873	1.2015	-----	1.11	12.85	0.998	1.00	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0303	1.2216	0.8897	1.0416	1.0424	1.1118	1.1459	1.2355	-----	1.09	12.89	0.995	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7455	0.7080	0.5999	0.7392	0.7806	0.8294	0.8522	0.8665	-----	0.765	12.87	0.997	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2581	1.0359	0.9919	1.1747	1.3239	1.3908	1.3765	1.3330	-----	1.24	13.62	0.999	0.999	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzobifluoranthene	1	0	Avg	1.0814	1.2397	0.8877	1.0369	1.1498	1.1263	1.0829	1.0793	-----	1.09	14.07	0.999	0.999	9.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzokifluoranthene	1	0	Avg	1.0456	1.2451	0.9256	1.0853	1.0834	1.0734	1.1124	0.9865	-----	1.07	14.10	0.993	0.996	8.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolaprene	1	0	Avg	1.0499	1.1916	0.8958	1.0233	1.0834	1.0913	1.0690	1.0284	-----	1.05	14.44	0.999	0.999	7.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl,2,3-cdlpyren	1	0	Avg	1.1198	1.2702	0.9614	1.0986	1.1066	1.1194	1.1236	1.0766	-----	1.11	15.86	0.999	0.999	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzola,h,lanthracen	1	0	Avg	0.9448	0.9525	0.8351	0.8996	0.9505	0.9529	0.9372	0.8905	-----	0.920	15.87	0.998	0.999	4.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzola,h,lberylene	1	0	Avg	0.9532	1.1477	0.8201	0.9510	0.9855	0.9970	0.9846	0.9997	-----	0.980	16.25	1.00	1.00	9.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

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Avg Rsd: 10.6

8101509 0288

SampleID : CAL BNA@50PPM
Data File: 10M71237.D
Acq On : 10/ 8/18 11:51

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 10M 1000.M
Qt On : 10/08/18 12:08
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	45717	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	91441	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	347375	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	216810	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	377671	40.00	ng	0.00
91) Chrysene-d12	12.863	240	382304	40.00	ng	0.00
103) Perylene-d12	14.494	264	369171	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	130322	54.15	ng	0.00
Spiked Amount 100.000			Recovery	=	54.15%	
16) Phenol-d5	5.583	99	181064	51.38	ng	0.00
Spiked Amount 100.000			Recovery	=	51.38%	
32) Nitrobenzene-d5	6.343	128	25387	22.06	ng	0.00
Spiked Amount 50.000			Recovery	=	44.12%	
55) 2-Fluorobiphenyl	7.739	172	168993	24.14	ng	0.00
Spiked Amount 50.000			Recovery	=	48.28%	
80) 2,4,6-Tribromophenol	9.081	330	43257	49.93	ng	0.00
Spiked Amount 100.000			Recovery	=	49.93%	
94) Terphenyl-d14	11.606	244	162331	24.34	ng	0.00
Spiked Amount 50.000			Recovery	=	48.68%	
Target Compounds						
8) 1,4-Dioxane	2.770	88	52367	45.5973	ng	88
9) Pyridine	3.256	79	130117	43.1946	ng	71
10) N-Nitrosodimethylamine	3.187	74	74938	45.3098	ng	77
12) Benzaldehyde	5.530	77	70134	43.8308	ng	67
13) Aniline	5.621	93	185917	54.4436	ng	75
14) Pentachloroethane	5.663	117	48118	47.6375	ng	68
15) bis(2-Chloroethyl)ether	5.674	93	130716	47.5658	ng	79
17) Phenol	5.599	94	185139	48.3720	ng	89
18) 2-Chlorophenol	5.722	128	147960	51.7011	ng	75
19) N-Decane	5.754	57	116862	45.5087	ng	77
20) 1,3-Dichlorobenzene	5.851	146	158254	49.8495	ng	97
22) 1,4-Dichlorobenzene	5.915	146	162659	47.1612	ng	99
23) 1,2-Dichlorobenzene	6.038	146	160994	49.0120	ng	97
24) Benzyl alcohol	6.011	108	92784	48.7459	ng	76
25) bis(2-chloroisopropyl)...	6.118	45	153799	49.2382	ng	80
26) 2-Methylphenol	6.097	108	131338	46.1474	ng	98
27) Acetophenone	6.225	105	198016	48.7818	ng	72
28) Hexachloroethane	6.305	117	66970	49.4736	ng	88
29) N-Nitroso-di-n-propyla...	6.220	70	92968	44.9208	ng	79
30) 3&4-Methylphenol	6.220	108	134849	47.1852	ng	98
33) Nitrobenzene	6.359	77	147375	44.4097	ng	81
34) Isophorone	6.541	82	252736	44.0425	ng	86
35) 2-Nitrophenol	6.605	139	81702	46.4798	ng	92
36) 2,4-Dimethylphenol	6.626	107	145143	47.1134	ng	99
37) Benzoic Acid	6.712	105	117202	55.0885	ng	85
38) bis(2-Chloroethoxy)met...	6.701	93	162040	44.3067	ng	96
39) 2,4-Dichlorophenol	6.787	162	130119	47.3942	ng	87
40) 1,2,4-Trichlorobenzene	6.851	180	143765	48.2929	ng	98
41) Naphthalene	6.915	128	449648	46.8628	ng	98
42) 4-Chloroaniline	6.952	127	169659m	45.3969	ng	
43) Hexachlorobutadiene	7.000	225	80902	51.1580	ng	94
44) Caprolactam	7.225	113	49068	46.0620	ng	62
45) 4-Chloro-3-methylphenol	7.316	107	120560	44.1507	ng	74
46) 2-Methylnaphthalene	7.450	142	293756	44.7266	ng	98
47) 1-Methylnaphthalene	7.530	142	292495	45.6763	ng	94
48) Methylnaphthalenes (To...	7.450	142	581411m	90.0162	ng	
49) 1,1'-Biphenyl	7.824	154	372079	44.3448	ng	92
51) 1,2,4,5-Tetrachloroben...	7.583	216	146152	47.4642	ng	95
52) Hexachlorocyclopentadiene	7.573	237	53295	39.7986	ng	99
53) 2,4,6-Trichlorophenol	7.674	196	90955	49.1363	ng	100
54) 2,4,5-Trichlorophenol	7.707	196	92575	45.7878	ng	100
56) 2-Chloronaphthalene	7.851	162	279089	46.6850	ng	94
57) 1,4-Dimethylnaphthalene	8.134	156	252091	49.5927	ng	85
58) Dimethylnaphthalenes (...)	8.134	156	252091	49.5927	ng	85
59) Diphenyl Ether	7.910	170	216025	47.0289	ng	81
60) 2-Nitroaniline	7.931	65	103105	48.1926	ng	36
61) Coumarin	8.118	146	108998	43.3886	ng	60
62) Acenaphthylene	8.215	152	425899	45.7228	ng	99
63) Dimethylphthalate	8.070	163	334831	48.8042	ng	98
64) 2,6-Dinitrotoluene	8.134	165	75278	48.3397	ng	66
65) Acenaphthene	8.364	153	293183	46.3417	ng	99

SampleID : CAL BNA@50PPM
 Data File: 10M71237.D
 Acq On : 10/ 8/18 11:51

Operator : AH/JB
 Sam Mult : 1 Vial# : 10
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:08
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	79472	48.0860	ng	75
67)	2,4-Dinitrophenol	8.380	184	36604	43.7134	ng	30
68)	Dibenzofuran	8.520	168	412590	48.1360	ng	87
69)	2,4-Dinitrotoluene	8.493	165	105566	50.1306	ng	65
70)	4-Nitrophenol	8.418	65	56734	41.2720	ng	42
71)	2,3,4,6-Tetrachlorophenol	8.626	232	85222	54.0762	ng	83
72)	Fluorene	8.846	166	331382	46.9626	ng	99
73)	4-Chlorophenyl-phenyle...	8.830	204	159990	47.7558	ng	81
74)	Diethylphthalate	8.701	149	326517	47.0733	ng	97
75)	4-Nitroaniline	8.856	138	91528	46.6464	ng	90
76)	Atrazine	9.472	200	105643	49.1706	ng	96
78)	4,6-Dinitro-2-methylph...	8.883	198	53278	47.7283	ng	58
79)	n-Nitrosodiphenylamine	8.942	169	278793	45.4573	ng	99
81)	1,2-Diphenylhydrazine	8.985	77	333058	47.2520	ng	86
82)	4-Bromophenyl-phenylether	9.322	248	89495	47.8965	ng	85
83)	Hexachlorobenzene	9.391	284	95960	48.4180	ng	72
84)	N-Octadecane	9.637	57	170112	43.1868	ng	71
85)	Pentachlorophenol	9.595	266	45678	54.5512	ng	91
86)	Phenanthrene	9.830	178	500249	47.5723	ng	99
87)	Anthracene	9.883	178	505103	47.1067	ng	99
88)	Carbazole	10.055	167	468713	47.2938	ng	98
89)	Di-n-butylphthalate	10.418	149	560951	47.4675	ng	98
90)	Fluoranthene	11.167	202	531817	48.5826	ng	85
92)	Pyrene	11.429	202	546923	46.7639	ng	83
93)	Benzidine	11.317	184	242154	50.4583	ng	80
95)	4,4'-DDE	11.536	246	115007	51.7491	ng	95
96)	4,4'-DDD	11.937	235	197925	50.9751	ng	91
97)	Butylbenzylphthalate	12.183	149	245414	44.9422	ng	79
98)	4,4'-DDT	12.290	235	175673	50.4647	ng	94
99)	3,3'-Dichlorobenzidine	12.820	252	177408	49.4403	ng	96
100)	Benzo[a]anthracene	12.852	228	495904	45.9269	ng	97
101)	Chrysene	12.895	228	492361	47.8802	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.868	149	356274	46.9046	ng	96
104)	Di-n-octylphthalate	13.617	149	580567	45.7140	ng	100
105)	Benzo[b]fluoranthene	14.066	252	499050	47.4679	ng	93
106)	Benzo[k]fluoranthene	14.098	252	482512	46.8382	ng	92
107)	Benzo[a]pyrene	14.435	252	484499	47.8367	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.863	276	516782	47.0738	ng	85
109)	Dibenzo[a,h]anthracene	15.874	278	436023	47.0007	ng	90
110)	Benzo[g,h,i]perylene	16.254	276	439905	46.6103	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@2PPM
Data File: 10M71230.D
Acq On : 10/ 8/18 09:15

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 10M 1001509 0291
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	46994	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	93036	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	347884	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	222068	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	396093	40.00	ng	0.00
91) Chrysene-d12	12.863	240	408904	40.00	ng	0.00
103) Perylene-d12	14.494	264	391574	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.727	112	6188m	2.50	ng	0.00
Spiked Amount 100.000			Recovery =	2.50%		
16) Phenol-d5	5.588	99	8282	2.29	ng	0.00
Spiked Amount 100.000			Recovery =	2.29%		
32) Nitrobenzene-d5	6.348	128	816	0.71	ng	0.00
Spiked Amount 50.000			Recovery =	1.42%		
55) 2-Fluorobiphenyl	7.739	172	8002	1.12	ng	0.00
Spiked Amount 50.000			Recovery =	2.24%		
80) 2,4,6-Tribromophenol	9.081	330	1835	2.04	ng	0.00
Spiked Amount 100.000			Recovery =	2.04%		
94) Terphenyl-d14	11.606	244	7693	1.08	ng	0.00
Spiked Amount 50.000			Recovery =	2.16%		
Target Compounds						
8) 1,4-Dioxane	2.775	88	2299m	1.9474	ng	
9) Pyridine	3.358	79	6481m	2.0930	ng	
10) N-Nitrosodimethylamine	3.246	74	3248m	1.9105	ng	
12) Benzaldehyde	5.535	77	2469	1.5011	ng	65
13) Aniline	5.626	93	5496	1.5657	ng	94
14) Pentachloroethane	5.663	117	2353	2.2662	ng	79
15) bis(2-Chloroethyl) ether	5.674	93	6490	2.2974	ng	96
17) Phenol	5.599	94	7356	1.8697	ng	84
18) 2-Chlorophenol	5.722	128	6276	2.1334	ng	71
19) N-Decane	5.749	57	5404	2.0473	ng	77
20) 1,3-Dichlorobenzene	5.851	146	7810	2.3933	ng	86
22) 1,4-Dichlorobenzene	5.915	146	8241	2.3484	ng	82
23) 1,2-Dichlorobenzene	6.038	146	8271	2.4748	ng	96
24) Benzyl alcohol	6.016	108	3614	1.8661	ng	91
25) bis(2-chloroisopropyl)...	6.118	45	7325	2.3049	ng	79
26) 2-Methylphenol	6.102	108	6646	2.2951	ng	74
27) Acetophenone	6.225	105	9182	2.2232	ng	67
28) Hexachloroethane	6.305	117	2390m	1.7353	ng	
29) N-Nitroso-di-n-propyla...	6.220	70	3767	1.7890	ng	82
30) 3&4-Methylphenol	6.225	108	5963	2.0732	ng	87
33) Nitrobenzene	6.359	77	6278	1.8890	ng	69
34) Isophorone	6.541	82	11395	1.9828	ng	86
35) 2-Nitrophenol	6.610	139	3368	1.9132	ng	84
36) 2,4-Dimethylphenol	6.631	107	7237	2.3789	ng	94
37) Benzoic Acid	0.000		0	N.D. d		
38) bis(2-Chloroethoxy)met...	6.701	93	7013	1.9148	ng	93
39) 2,4-Dichlorophenol	6.792	162	5912	2.1502	ng	77
40) 1,2,4-Trichlorobenzene	6.851	180	6271	2.1034	ng	90
41) Naphthalene	6.915	128	22475	2.3342	ng	93
42) 4-Chloroaniline	6.952	127	5935	1.4632	ng	88
43) Hexachlorobutadiene	7.000	225	3712	2.3438	ng	88
44) Caprolactam	7.198	113	1555	1.4576	ng	44
45) 4-Chloro-3-methylphenol	7.316	107	4763	1.7417	ng	59
46) 2-Methylnaphthalene	7.450	142	14287	2.1721	ng	94
47) 1-Methylnaphthalene	7.530	142	14381	2.2425	ng	94
48) Methylnaphthalenes (To...	7.450	142	28855m	4.4609	ng	
49) 1,1'-Biphenyl	7.824	154	18235	2.1701	ng	90
51) 1,2,4,5-Tetrachloroben...	7.583	216	7563	2.3980	ng	95
52) Hexachlorocyclopentadiene	7.573	237	564	0.4355	ng	58
53) 2,4,6-Trichlorophenol	7.674	196	3559m	1.8771	ng	
54) 2,4,5-Trichlorophenol	7.707	196	3827	1.8480	ng	92
56) 2-Chloronaphthalene	7.851	162	14110m	2.3044	ng	
57) 1,4-Dimethylnaphthalene	8.129	156	12558	2.4120	ng	80
58) Dimethylnaphthalenes (...)	8.129	156	12558	2.4120	ng	80
59) Diphenyl Ether	7.910	170	9952	2.1153	ng	77
60) 2-Nitroaniline	7.931	65	4088	1.8655	ng	20
61) Coumarin	8.118	146	5322	2.0684	ng	79
62) Acenaphthylene	8.209	152	18935	1.9847	ng	94
63) Dimethylphthalate	8.065	163	14703	2.0923	ng	88
64) 2,6-Dinitrotoluene	8.129	165	2639	1.6545	ng	92
65) Acenaphthene	8.359	153	13581	2.0958	ng	96

SampleID : CAL BNA@2PPM
 Data File: 10M71230.D
 Acq On : 10/ 8/18 09:15

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	3197	1.8886	ng	77
57)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.520	168	19304	2.1918	ng	90
69)	2,4-Dinitrotoluene	8.493	165	3663	1.6983	ng	61
70)	4-Nitrophenol	8.429	65	1464	1.0398	ng	85
71)	2,3,4,6-Tetrachlorophenol	8.632	232	3652	2.2624	ng	70
72)	Fluorene	8.846	166	16498	2.2827	ng	93
73)	4-Chlorophenyl-phenyle...	8.824	204	7475	2.1784	ng	75
74)	Diethylphthalate	8.696	149	14410	2.0283	ng	90
75)	4-Nitroaniline	8.851	138	2657	1.3221	ng	81
76)	Atrazine	9.466	200	4971	2.2589	ng	81
78)	4,6-Dinitro-2-methylph...	8.883	198	886	0.8077	ng	27
79)	n-Nitrosodiphenylamine	8.942	169	13781	2.1425	ng	91
81)	1,2-Diphenylhydrazine	8.985	77	14784	1.9999	ng	77
82)	4-Bromophenyl-phenylether	9.322	248	3828	1.9534	ng	75
83)	Hexachlorobenzene	9.391	284	5102	2.4546	ng	63
84)	N-Octadecane	9.637	57	6518	1.5778	ng	56
85)	Pentachlorophenol	0.000		0	N.D.	d	
86)	Phenanthrene	9.830	178	24384	2.2110	ng	94
87)	Anthracene	9.883	178	24731	2.1992	ng	93
88)	Carbazole	10.055	167	20656	1.9873	ng	97
89)	Di-n-butylphthalate	10.418	149	21923	1.7596	ng	99
90)	Fluoranthene	11.167	202	24958	2.1739	ng	86
92)	Pyrene	11.429	202	26112	2.0874	ng	82
93)	Benzidine	11.317	184	5423	1.0488	ng	75
95)	4,4'-DDE	11.536	246	5623	2.3656	ng	91
96)	4,4'-DDD	11.937	235	8508	2.0487	ng	95
97)	Butylbenzylphthalate	12.183	149	8304	1.4218	ng	82
98)	4,4'-DDT	12.296	235	6927	1.8604	ng	96
99)	3,3'-Dichlorobenzidine	12.814	252	7467	1.8566	ng	73
100)	Benzo[a]anthracene	12.847	228	25419	2.2010	ng	97
101)	Chrysene	12.889	228	24977	2.2709	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.868	149	14476	1.7818	ng	97
104)	Di-n-octylphthalate	13.617	149	20283	1.5057	ng	96
105)	Benzo[b]fluoranthene	14.061	252	24272m	2.1766	ng	
106)	Benzo[k]fluoranthene	14.093	252	24378m	2.2310	ng	
107)	Benzo[a]pyrene	14.430	252	23331	2.1718	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.852	276	24870	2.1358	ng	67
109)	Dibenzo[a,h]anthracene	15.874	278	18649	1.8952	ng	94
110)	Benzo[g,h,i]perylene	16.243	276	22471	2.2447	ng	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@10PPM
Data File: 10M71229.D
Acq On : 10/ 8/18 08:51

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1008N
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

8101509 0294

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.738	96	50609	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	99323	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	356054	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	223314	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	398598	40.00	ng	0.00
91) Chrysene-d12	12.863	240	410428	40.00	ng	0.00
103) Perylene-d12	14.494	264	388983	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.727	112	23998m	9.01	ng	0.00
Spiked Amount 100.000			Recovery	=	9.01%	
16) Phenol-d5	5.583	99	31536	8.08	ng	0.00
Spiked Amount 100.000			Recovery	=	8.08%	
32) Nitrobenzene-d5	6.348	128	4262	3.61	ng	0.00
Spiked Amount 50.000			Recovery	=	7.22%	
55) 2-Fluorobiphenyl	7.739	172	32300	4.48	ng	0.00
Spiked Amount 50.000			Recovery	=	8.96%	
80) 2,4,6-Tribromophenol	9.081	330	7525	8.31	ng	0.00
Spiked Amount 100.000			Recovery	=	8.31%	
94) Terphenyl-d14	11.606	244	29871	4.17	ng	0.00
Spiked Amount 50.000			Recovery	=	8.34%	
Target Compounds						
8) 1,4-Dioxane	2.764	88	10899	8.5727	ng	58
9) Pyridine	3.331	79	14917	4.4733	ng	42
10) N-Nitrosodimethylamine	3.214	74	12521	6.8388	ng	82
12) Benzaldehyde	5.530	77	15376	8.6805	ng	73
13) Aniline	5.621	93	27869m	7.3722	ng	
14) Pentachloroethane	5.658	117	9327	8.3413	ng	83
15) bis(2-Chloroethyl) ether	5.674	93	22375	7.3549	ng	75
17) Phenol	5.594	94	32088	7.5734	ng	89
18) 2-Chlorophenol	5.722	128	26224	8.2776	ng	73
19) N-Decane	5.749	57	21846	7.6850	ng	74
20) 1,3-Dichlorobenzene	5.851	146	30560	8.6958	ng	97
22) 1,4-Dichlorobenzene	5.915	146	31776	8.4820	ng	95
23) 1,2-Dichlorobenzene	6.038	146	29929	8.3883	ng	31
24) Benzyl alcohol	6.011	108	16646	8.0513	ng	73
25) bis(2-chloroisopropyl)...	6.113	45	29692	8.7514	ng	82
26) 2-Methylphenol	6.097	108	24558	7.9440	ng	87
27) Acetophenone	6.225	105	36083	8.1837	ng	66
28) Hexachloroethane	6.305	117	12016	8.1723	ng	82
29) N-Nitroso-di-n-propyla...	6.220	70	16960	7.5445	ng	75
30) 3&4-Methylphenol	6.220	108	24223	7.8776	ng	98
33) Nitrobenzene	6.359	77	26839	7.8905	ng	76
34) Isophorone	6.541	82	44692	7.5983	ng	82
35) 2-Nitrophenol	6.605	139	12327	6.8418	ng	92
36) 2,4-Dimethylphenol	6.626	107	28104	9.0074	ng	93
37) Benzoic Acid	6.674	105	8322	4.2957	ng	93
38) bis(2-Chloroethoxy)met...	6.701	93	29851	7.9632	ng	95
39) 2,4-Dichlorophenol	6.792	162	24503	8.7074	ng	80
40) 1,2,4-Trichlorobenzene	6.851	180	26586	8.7130	ng	89
41) Naphthalene	6.915	128	83389	8.4641	ng	96
42) 4-Chloroaniline	6.952	127	23756	5.7660	ng	89
43) Hexachlorobutadiene	7.001	225	14500	8.9455	ng	97
44) Caprolactam	7.209	113	7204	6.5978	ng	66
45) 4-Chloro-3-methylphenol	7.311	107	20845	7.4477	ng	83
46) 2-Methylnaphthalene	7.450	142	57447	8.5335	ng	91
47) 1-Methylnaphthalene	7.530	142	54592	8.3173	ng	90
48) Methylnaphthalenes (To...	7.450	142	111980m	16.9145	ng	
49) 1,1'-Biphenyl	7.824	154	71969	8.3683	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	28483	8.9807	ng	95
52) Hexachlorocyclopentadiene	7.573	237	4881	3.7292	ng	70
53) 2,4,6-Trichlorophenol	7.675	196	15148	7.9450	ng	95
54) 2,4,5-Trichlorophenol	7.707	196	16331	7.8421	ng	97
56) 2-Chloronaphthalene	7.851	162	51756	8.4054	ng	92
57) 1,4-Dimethylnaphthalene	8.129	156	46541	8.8891	ng	85
58) Dimethylnaphthalenes (...)	8.129	156	46541	8.8891	ng	86
59) Diphenyl Ether	7.910	170	39094	8.2629	ng	79
60) 2-Nitroaniline	7.931	65	17421	7.9056	ng	47
61) Coumarin	8.113	146	19580	7.5672	ng	53
62) Acenaphthylene	8.209	152	76734	7.9979	ng	98
63) Dimethylphthalate	8.065	163	61224	8.6640	ng	97
64) 2,6-Dinitrotoluene	8.129	165	14003	8.7301	ng	78
65) Acenaphthene	8.364	153	57166	8.7727	ng	95

SampleID : CAL BNA@10PPM
Data File: 10M71229.D
Acq On : 10/ 8/18 08:51

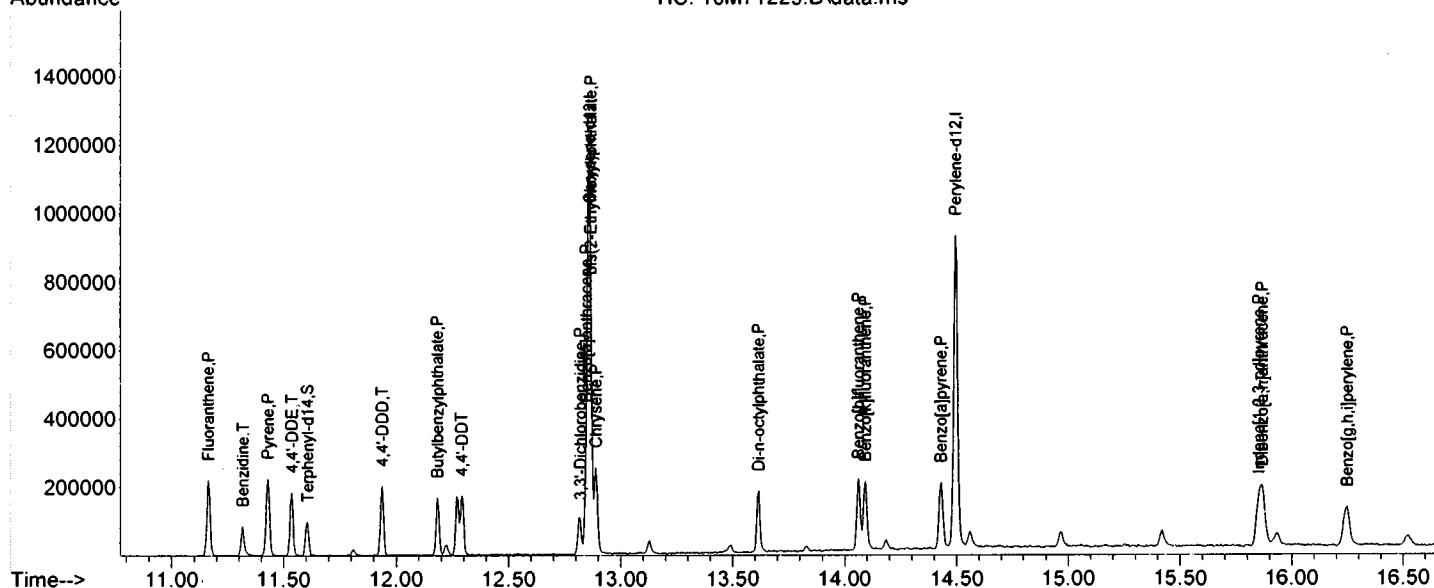
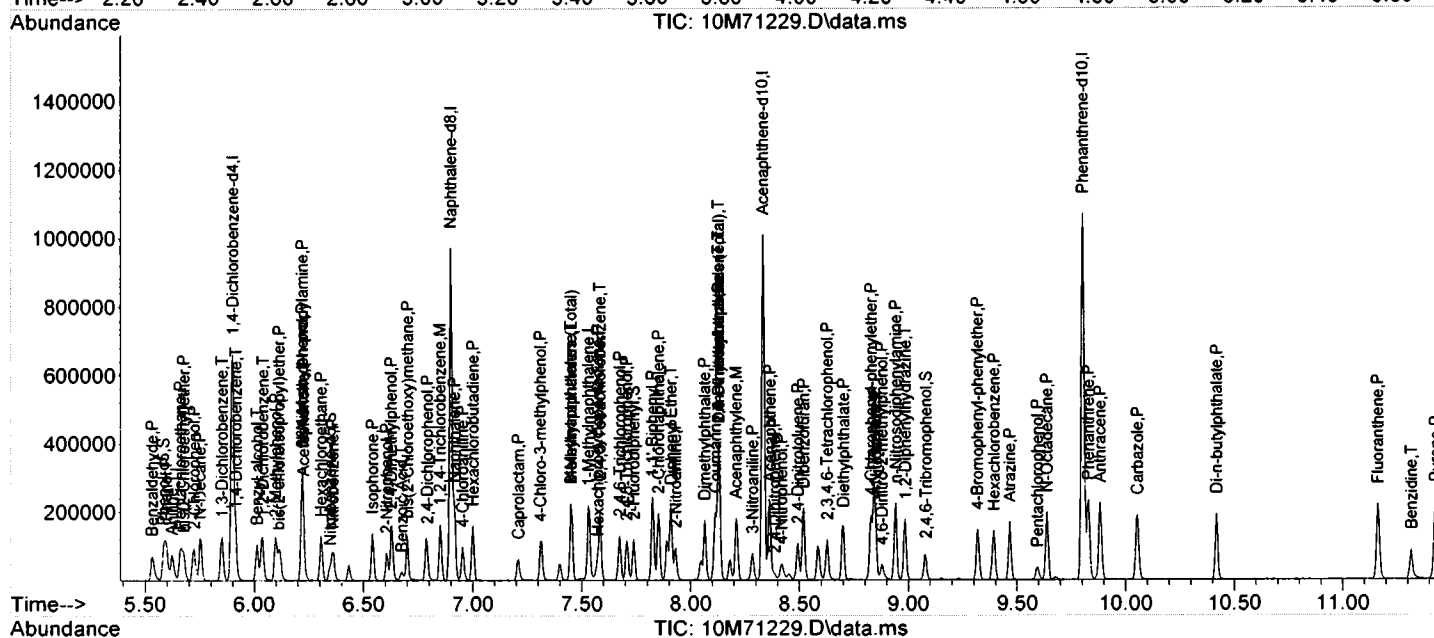
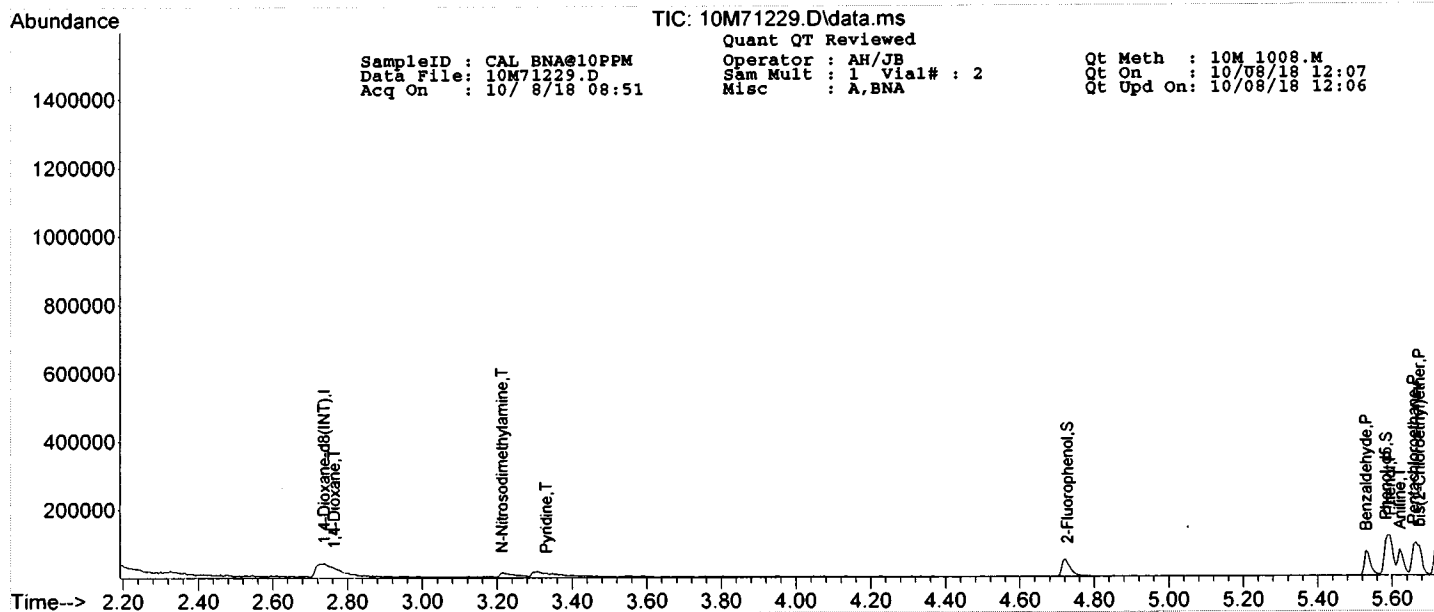
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	11370	6.6793	ng	72
67) 2,4-Dinitrophenol	8.386	184	3471	4.4741	ng	22
68) Dibenzofuran	8.520	168	78514	8.8689	ng	89
69) 2,4-Dinitrotoluene	8.493	165	17053	7.8622	ng	65
70) 4-Nitrophenol	8.418	65	7880	5.5655	ng	53
71) 2,3,4,6-Tetrachlorophenol	8.627	232	14004	8.6272	ng	80
72) Fluorene	8.846	166	60957	8.3871	ng	95
73) 4-Chlorophenyl-phenyle...	8.830	204	28809	8.3488	ng	82
74) Diethylphthalate	8.701	149	58605	8.2029	ng	93
75) 4-Nitroaniline	8.851	138	14545	7.1968	ng	79
76) Atrazine	9.466	200	18856	8.5208	ng	98
78) 4,6-Dinitro-2-methylph...	8.878	198	6676	6.0030	ng	32
79) n-Nitrosodiphenylamine	8.942	169	53553	8.2734	ng	95
81) 1,2-Diphenylhydrazine	8.985	77	58118	7.8125	ng	84
82) 4-Bromophenyl-phenylether	9.317	248	16254	8.2422	ng	95
83) Hexachlorobenzene	9.391	284	16398	7.8395	ng	71
84) N-Octadecane	9.637	57	30293	7.2868	ng	83
85) Pentachlorophenol	9.595	266	5368	6.9789	ng	95
86) Phenanthrene	9.830	178	95334	8.5900	ng	96
87) Anthracene	9.883	178	94041	8.3099	ng	98
88) Carbazole	10.055	167	86461	8.2660	ng	93
89) Di-n-butylphthalate	10.418	149	92126	7.3526	ng	98
90) Fluoranthene	11.162	202	94255	8.1583	ng	86
92) Pyrene	11.429	202	102843	8.1909	ng	83
93) Benzidine	11.317	184	33393	6.4395	ng	82
95) 4,4'-DDE	11.536	246	21493	9.0084	ng	94
96) 4,4'-DDD	11.937	235	33925	8.1386	ng	87
97) Butylbenzylphthalate	12.183	149	38401	6.5504	ng	79
98) 4,4'-DDT	12.290	235	30404	8.1355	ng	94
99) 3,3'-Dichlorobenzidine	12.820	252	25813	6.4225	ng	88
100) Benzo[a]anthracene	12.847	228	94857	8.1830	ng	98
101) Chrysene	12.889	228	91298	8.2700	ng	96
102) bis(2-Ethylhexyl)phtha...	12.868	149	61557	7.5488	ng	96
104) Di-n-octylphthalate	13.617	149	96466	7.2089	ng	98
105) Benzo[b]fluoranthene	14.061	252	86334m	7.7935	ng	
106) Benzo[k]fluoranthene	14.093	252	90012m	8.2926	ng	
107) Benzo[a]pyrene	14.430	252	87116	8.1632	ng	91
108) Indeno[1,2,3-cd]pyrene	15.853	276	93495	8.0827	ng	83
109) Dibenzo[a,h]anthracene	15.869	278	81219	8.3090	ng	86
110) Benzo[g,h,i]perylene	16.248	276	79752	8.0198	ng	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@20PPM
Data File: 10M71235.D
Acq On : 10/ 8/18 11:06

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 10M_1068M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.738	96	46371	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	91991	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	335583	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	208898	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	378035	40.00	ng	0.00
91) Chrysene-d12	12.863	240	375028	40.00	ng	0.00
103) Perylene-d12	14.494	264	370382	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	49915	20.45	ng	0.00
Spiked Amount 100.000			Recovery	=	20.45%	
16) Phenol-d5	5.583	99	70881	19.83	ng	0.00
Spiked Amount 100.000			Recovery	=	19.83%	
32) Nitrobenzene-d5	6.343	128	10190	9.16	ng	0.00
Spiked Amount 50.000			Recovery	=	18.32%	
55) 2-Fluorobiphenyl	7.739	172	68561	10.17	ng	0.00
Spiked Amount 50.000			Recovery	=	20.34%	
80) 2,4,6-Tribromophenol	9.076	330	15653	18.18	ng	0.00
Spiked Amount 100.000			Recovery	=	18.18%	
94) Terphenyl-d14	11.606	244	62767	9.59	ng	0.00
Spiked Amount 50.000			Recovery	=	19.18%	
Target Compounds						
8) 1,4-Dioxane	2.770	88	22016	18.8995	ng	91
9) Pyridine	3.273	79	48677	15.9313	ng	59
10) N-Nitrosodimethylamine	3.203	74	30057	17.9171	ng	80
12) Benzaldehyde	5.530	77	35486	21.8645	ng	79
13) Aniline	5.621	93	76799	22.1725	ng	74
14) Pentachloroethane	5.658	117	20699	20.2033	ng	77
15) bis(2-Chloroethyl) ether	5.674	93	51381	18.4331	ng	73
17) Phenol	5.594	94	71027	18.2958	ng	96
18) 2-Chlorophenol	5.722	128	59380	20.4563	ng	74
19) N-Decane	5.754	57	45863	17.6082	ng	74
20) 1,3-Dichlorobenzene	5.851	146	64973	20.1776	ng	97
22) 1,4-Dichlorobenzene	5.910	146	66688	19.2199	ng	100
23) 1,2-Dichlorobenzene	6.033	146	66066	19.9925	ng	94
24) Benzyl alcohol	6.011	108	35362	18.4670	ng	78
25) bis(2-chloroisopropyl)...	6.113	45	62449	19.8733	ng	85
26) 2-Methylphenol	6.097	108	53716	18.7610	ng	92
27) Acetophenone	6.225	105	79324	19.4248	ng	68
28) Hexachloroethane	6.305	117	26583	19.5206	ng	85
29) N-Nitroso-di-n-propyla...	6.220	70	39326	18.8881	ng	80
30) 3&4-Methylphenol	6.220	108	53210	18.6352	ng	96
33) Nitrobenzene	6.359	77	59781	18.6473	ng	81
34) Isophorone	6.541	82	102777	18.5396	ng	82
35) 2-Nitrophenol	6.605	139	33148	19.5203	ng	81
36) 2,4-Dimethylphenol	6.626	107	60574	20.5237	ng	93
37) Benzoic Acid	6.685	105	35216	18.6265	ng	89
38) bis(2-Chloroethoxy)met...	6.701	93	65257	18.4703	ng	96
39) 2,4-Dichlorophenol	6.787	162	50174	18.9174	ng	86
40) 1,2,4-Trichlorobenzene	6.851	180	59130	20.5607	ng	91
41) Naphthalene	6.915	128	175969	18.9598	ng	99
42) 4-Chloroaniline	6.953	127	70092m	18.4661	ng	
43) Hexachlorobutadiene	7.001	225	31677	20.7346	ng	98
44) Caprolactam	7.215	113	17804	17.3006	ng	56
45) 4-Chloro-3-methylphenol	7.311	107	46858	17.7630	ng	80
46) 2-Methylnaphthalene	7.450	142	119464	18.8285	ng	96
47) 1-Methylnaphthalene	7.530	142	119702	19.3496	ng	93
48) Methylnaphthalenes (To...	7.450	142	237261m	38.0244	ng	
49) 1,1'-Biphenyl	7.824	154	148331	18.2995	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	58928	19.8622	ng	96
52) Hexachlorocyclopentadiene	7.568	237	17445	14.0324	ng	91
53) 2,4,6-Trichlorophenol	7.675	196	35419	19.8590	ng	93
54) 2,4,5-Trichlorophenol	7.707	196	38700	19.8661	ng	88
56) 2-Chloronaphthalene	7.851	162	109767	19.0568	ng	90
57) 1,4-Dimethylnaphthalene	8.129	156	100948	20.6112	ng	88
58) Dimethylnaphthalenes (...)	8.129	156	100948	20.6112	ng	88
59) Diphenyl Ether	7.910	170	84340	19.0563	ng	76
60) 2-Nitroaniline	7.931	65	41352	20.0605	ng	52
61) Coumarin	8.119	146	44696	18.4659	ng	63
62) Acenaphthylene	8.209	152	166003	18.4964	ng	99
63) Dimethylphthalate	8.065	163	133298	20.1651	ng	98
64) 2,6-Dinitrotoluene	8.129	165	30790	20.5206	ng	70
65) Acenaphthene	8.365	153	123659	20.2864	ng	87

SampleID : CAL BNA@20PPM
Data File: 10M71235.D
Acq On : 10/ 8/18 11:06

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	33082	20.7750	ng	73
67) 2,4-Dinitrophenol	8.381	184	9840	13.2291	ng	47
68) Dibenzofuran	8.520	168	169560	20.4918	ng	89
69) 2,4-Dinitrotoluene	8.493	165	40723	20.0707	ng	58
70) 4-Nitrophenol	8.413	65	21145	15.9649	ng	70
71) 2,3,4,6-Tetrachlorophenol	8.627	232	32629	21.4884	ng	84
72) Fluorene	8.841	166	132580	19.5005	ng	96
73) 4-Chlorophenyl-phenyle...	8.830	204	65704	20.3550	ng	82
74) Diethylphthalate	8.702	149	133066	19.9104	ng	94
75) 4-Nitroaniline	8.851	138	34734	18.3723	ng	89
76) Atrazine	9.466	200	44602	21.5459	ng	92
78) 4,6-Dinitro-2-methylph...	8.878	198	18279	17.0620	ng	33
79) n-Nitrosodiphenylamine	8.942	169	115379	18.7945	ng	97
81) 1,2-Diphenylhydrazine	8.985	77	136245	19.3109	ng	84
82) 4-Bromophenyl-phenylether	9.317	248	34262	18.3189	ng	91
83) Hexachlorobenzene	9.392	284	37022	18.6620	ng	69
84) N-Octadecane	9.638	57	65595	16.6367	ng	74
85) Pentachlorophenol	9.595	266	12891	17.1270	ng	93
86) Phenanthrene	9.830	178	202903	19.2769	ng	100
87) Anthracene	9.884	178	196154	18.2760	ng	99
88) Carbazole	10.055	167	186351	18.7850	ng	97
89) Di-n-butylphthalate	10.418	149	208620	17.5761	ng	98
90) Fluoranthene	11.162	202	216457	19.7548	ng	86
92) Pyrene	11.429	202	222173	19.3652	ng	82
93) Benzidine	11.317	184	100952	21.3519	ng	84
95) 4,4'-DDE	11.536	246	43546	19.9743	ng	97
96) 4,4'-DDD	11.937	235	76810	20.1660	ng	90
97) Butylbenzylphthalate	12.184	149	93231	17.4045	ng	78
98) 4,4'-DDT	12.290	235	66886	19.5868	ng	92
99) 3,3'-Dichlorobenzidine	12.815	252	71183	19.6330	ng	98
100) Benzo[a]anthracene	12.852	228	199614	18.8454	ng	97
101) Chrysene	12.895	228	195322	19.3628	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	138615	18.6032	ng	97
104) Di-n-octylphthalate	13.617	149	217560	17.0747	ng	99
105) Benzo[b]fluoranthene	14.066	252	192027m	18.2052	ng	
106) Benzo[k]fluoranthene	14.093	252	200989m	19.4465	ng	
107) Benzo[a]pyrene	14.430	252	189523	18.6512	ng	88
108) Indeno[1,2,3-cd]pyrene	15.853	276	203457	18.4724	ng	81
109) Dibenzo[a,h]anthracene	15.874	278	166606	17.9004	ng	86
110) Benzo[g,h,i]perylene	16.248	276	176133	18.6012	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

8101509 0300

SampleID : CAL BNA@80PPM
Data File: 10M71234.D
Acq On : 10/ 8/18 10:44

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA

Qt Meth : 10M_1000.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	46969	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	93648	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	355190	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	221269	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	391542	40.00	ng	0.00
91) Chrysene-d12	12.863	240	381281	40.00	ng	0.00
103) Perylene-d12	14.499	264	378763	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	218351	88.31	ng	0.00
Spiked Amount 100.000			Recovery =	88.31%		
16) Phenol-d5	5.589	99	301635	83.31	ng	0.00
Spiked Amount 100.000			Recovery =	83.31%		
32) Nitrobenzene-d5	6.348	128	46826	39.79	ng	0.00
Spiked Amount 50.000			Recovery =	79.58%		
55) 2-Fluorobiphenyl	7.739	172	284814	39.87	ng	0.00
Spiked Amount 50.000			Recovery =	79.74%		
80) 2,4,6-Tribromophenol	9.081	330	74111	81.92	ng	0.00
Spiked Amount 100.000			Recovery =	81.92%		
94) Terphenyl-d14	11.606	244	268031	40.30	ng	0.00
Spiked Amount 50.000			Recovery =	80.60%		
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.770	88	88310	74.8442	ng	88
9) Pyridine	3.246	79	227635	73.5531	ng	70
10) N-Nitrosodimethylamine	3.187	74	126196	74.2681	ng	79
12) Benzaldehyde	5.530	77	106751	64.9366	ng	82
13) Aniline	5.621	93	310366	88.4643	ng	77
14) Pentachloroethane	5.663	117	82376	79.3795	ng	73
15) bis(2-Chloroethyl)ether	5.680	93	217728	77.1163	ng	74
17) Phenol	5.599	94	310066	78.8527	ng	89
18) 2-Chlorophenol	5.722	128	253954	86.3727	ng	76
19) N-Decane	5.754	57	198852	75.3733	ng	75
20) 1,3-Dichlorobenzene	5.851	146	275247	84.3908	ng	96
22) 1,4-Dichlorobenzene	5.915	146	277799	78.6466	ng	95
23) 1,2-Dichlorobenzene	6.038	146	269915	80.2347	ng	96
24) Benzyl alcohol	6.011	108	159907	82.0304	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	253664	79.2957	ng	78
26) 2-Methylphenol	6.102	108	219679	75.3681	ng	97
27) Acetophenone	6.225	105	320144	77.0096	ng	78
28) Hexachloroethane	6.305	117	110191	79.4844	ng	85
29) N-Nitroso-di-n-propyla...	6.220	70	152933	72.1535	ng	81
30) 3&4-Methylphenol	6.220	108	218815	74.2782	ng	95
33) Nitrobenzene	6.364	77	250111	73.7098	ng	78
34) Isophorone	6.546	82	427931	72.9318	ng	80
35) 2-Nitrophenol	6.610	139	138081	76.8251	ng	88
36) 2,4-Dimethylphenol	6.632	107	248723	78.1994	ng	94
37) Benzoic Acid	6.728	105	241671	100.9278	ng	89
38) bis(2-Chloroethoxy)met...	6.701	93	270374	72.3020	ng	96
39) 2,4-Dichlorophenol	6.792	162	222583	79.2893	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	242858	79.7849	ng	95
41) Naphthalene	6.920	128	763025	77.8846	ng	99
42) 4-Chloroaniline	6.952	127	276719m	77.0673	ng	
43) Hexachlorobutadiene	7.001	225	138513	85.6609	ng	100
44) Caprolactam	7.241	113	83014	76.2138	ng	52
45) 4-Chloro-3-methylphenol	7.316	107	210436	75.3690	ng	75
46) 2-Methylnaphthalene	7.455	142	492469	73.3324	ng	99
47) 1-Methylnaphthalene	7.535	142	479441	73.2226	ng	90
48) Methylnaphthalenes (To...	7.535	142	978911m	148.2239	ng	
49) 1,1'-Biphenyl	7.830	154	604474	70.4568	ng	92
51) 1,2,4,5-Tetrachloroben...	7.584	216	241730	76.9221	ng	98
52) Hexachlorocyclopentadiene	7.573	237	102788	71.9387	ng	98
53) 2,4,6-Trichlorophenol	7.675	196	161166	85.3115	ng	99
54) 2,4,5-Trichlorophenol	7.712	196	161442	78.2404	ng	99
56) 2-Chloronaphthalene	7.856	162	468215	76.7429	ng	90
57) 1,4-Dimethylnaphthalene	8.135	156	395971	76.3278	ng	90
58) Dimethylnaphthalenes (...)	8.135	156	395971	76.3278	ng	90
59) Diphenyl Ether	7.910	170	365473	77.9606	ng	82
60) 2-Nitroaniline	7.931	65	170684	78.1722	ng	50
61) Coumarin	8.124	146	184070	71.7957	ng	60
62) Acenaphthylene	8.215	152	704463	74.1042	ng	99
63) Dimethylphthalate	8.076	163	543573	77.6333	ng	99
64) 2,6-Dinitrotoluene	8.135	165	122178	76.8755	ng	80
65) Acenaphthene	8.365	153	482318	74.7008	ng	97

SampleID : CAL BNA@80PPM
Data File: 10M71234.D
Acq On : 10/ 8/18 10:44

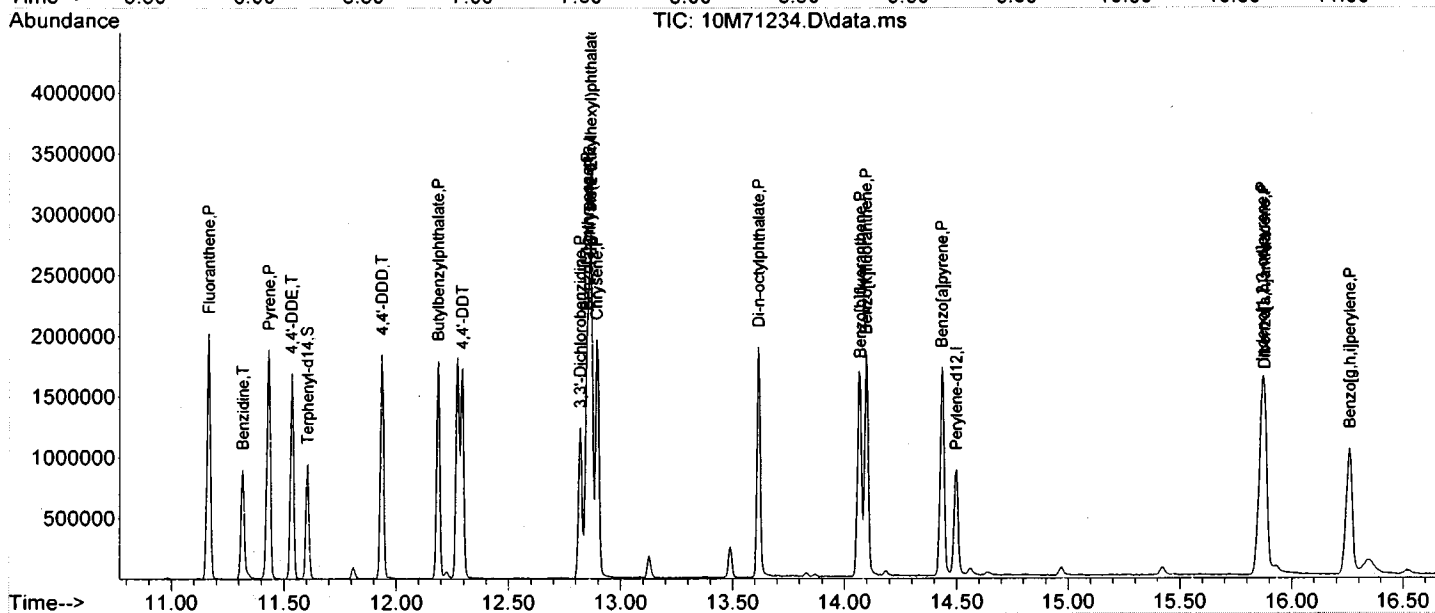
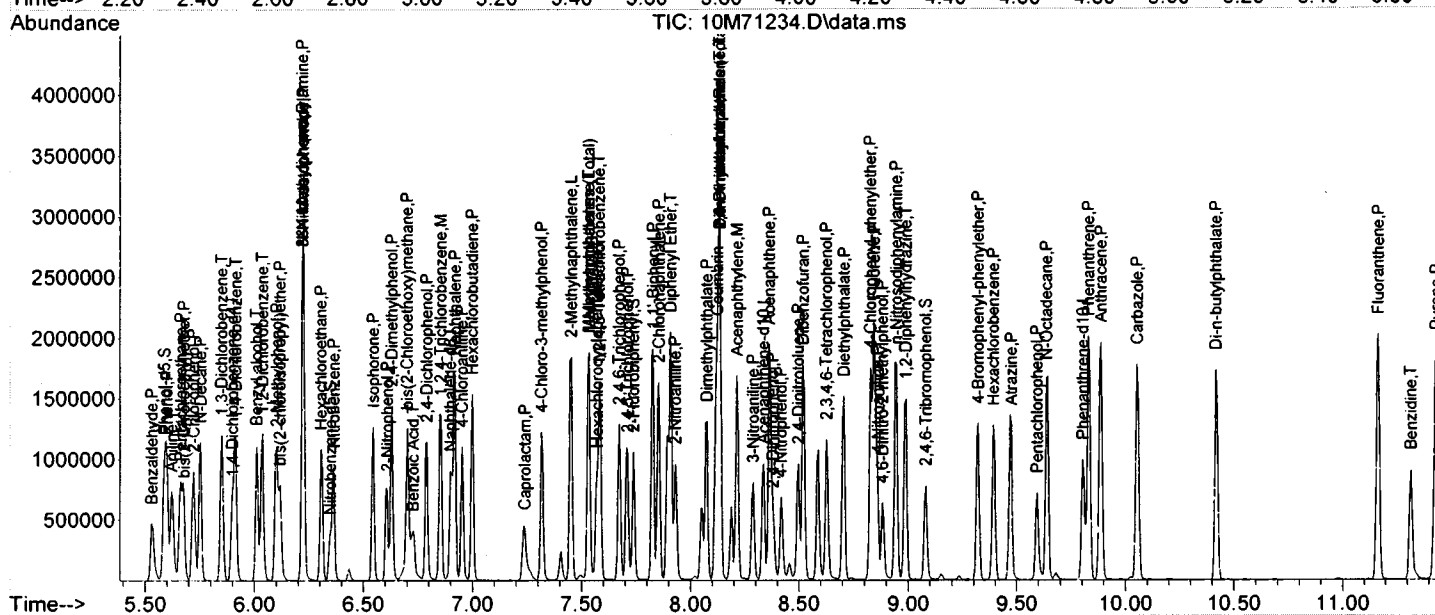
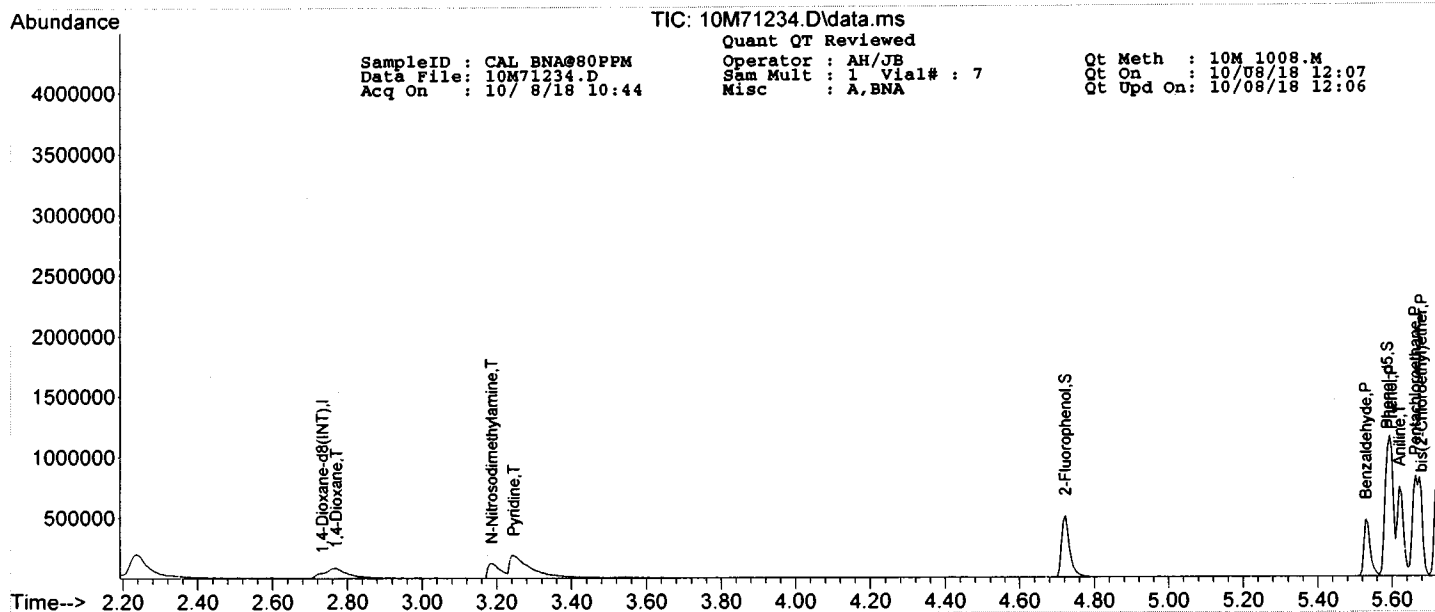
Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA

Qt Meth : 10M 1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.290	138	135836	80.5338	ng	70
67) 2,4-Dinitrophenol	8.381	184	75243	80.4706	ng	45
68) Dibenzofuran	8.520	168	710405	81.4011	ng	90
69) 2,4-Dinitrotoluene	8.498	165	181095	84.2644	ng	62
70) 4-Nitrophenol	8.418	65	100692	71.7738	ng	54
71) 2,3,4,6-Tetrachlorophenol	8.627	232	136379	84.7931	ng	87
72) Fluorene	8.846	166	573931	79.6969	ng	96
73) 4-Chlorophenyl-phenyle...	8.830	204	271480	79.4017	ng	86
74) Diethylphthalate	8.707	149	555069	78.4105	ng	94
75) 4-Nitroaniline	8.862	138	153687	76.7468	ng	89
76) Atrazine	9.477	200	182029	83.0165	ng	97
78) 4,6-Dinitro-2-methylph...	8.883	198	99533	82.2004	ng	59
79) n-Nitrosodiphenylamine	8.948	169	489439	76.9761	ng	98
81) 1,2-Diphenylhydrazine	8.990	77	623463	85.3191	ng	81
82) 4-Bromophenyl-phenylether	9.322	248	149646	77.2512	ng	87
83) Hexachlorobenzene	9.391	284	156189	76.0155	ng	76
84) N-Octadecane	9.637	57	282894	69.2747	ng	76
85) Pentachlorophenol	9.595	266	83829	88.4093	ng	99
86) Phenanthrene	9.830	178	847510	77.7406	ng	100
87) Anthracene	9.889	178	865036	77.8166	ng	100
88) Carbazole	10.055	167	786912	76.5877	ng	97
89) Di-n-butylphthalate	10.418	149	949793	77.7946	ng	97
90) Fluoranthene	11.167	202	885688	78.0431	ng	86
92) Pyrene	11.435	202	907238	77.7803	ng	80
93) Benzidine	11.317	184	377186	79.1419	ng	85
95) 4,4'-DDE	11.536	246	184404	83.1979	ng	97
96) 4,4'-DDD	11.937	235	327307	84.5233	ng	92
97) Butylbenzylphthalate	12.189	149	430536	79.0548	ng	73
98) 4,4'-DDT	12.296	235	301170	86.7478	ng	94
99) 3,3'-Dichlorobenzidine	12.820	252	275534	79.3856	ng	95
100) Benzo[a]anthracene	12.852	228	820855	76.2254	ng	99
101) Chrysene	12.895	228	794907	77.5090	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	595258	78.5779	ng	93
104) Di-n-octylphthalate	13.617	149	1002894	76.9683	ng	99
105) Benzo[b]fluoranthene	14.072	252	871011	80.7495	ng	92
106) Benzo[k]fluoranthene	14.098	252	819230m	77.5101	ng	
107) Benzo[a]pyrene	14.435	252	820723	78.9814	ng	91
108) Indeno[1,2,3-cd]pyrene	15.869	276	838349	74.4316	ng	85
109) Dibenzo[a,h]anthracene	15.879	278	720055	75.6520	ng	92
110) Benzo[g,h,i]perylene	16.259	276	746577	77.1006	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed



8101509 0303

SampleID : CAL BNA@120PPM
Data File: 10M71233.D
Acq On : 10/ 8/18 10:22

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	48116	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	94428	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	362591	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	229352	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	409954	40.00	ng	0.00
91) Chrysene-d12	12.868	240	364480	40.00	ng	0.00
103) Perylene-d12	14.499	264	379631	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	342767	135.32	ng	0.00
Spiked Amount 100.000			Recovery	=	135.32%	
16) Phenol-d5	5.588	99	463594	124.98	ng	0.00
Spiked Amount 100.000			Recovery	=	124.98%	
32) Nitrobenzene-d5	6.348	128	70988	59.09	ng	0.00
Spiked Amount 50.000			Recovery	=	118.18%	
55) 2-Fluorobiphenyl	7.739	172	435665	58.83	ng	0.00
Spiked Amount 50.000			Recovery	=	117.66%	
80) 2,4,6-Tribromophenol	9.081	330	112887	118.23	ng	0.00
Spiked Amount 100.000			Recovery	=	118.23%	
94) Terphenyl-d14	11.606	244	418211	65.78	ng	0.00
Spiked Amount 50.000			Recovery	=	131.56%	
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.770	88	142336	117.7564	ng	90
9) Pyridine	3.235	79	352122	111.0649	ng	72
10) N-Nitrosodimethylamine	3.182	74	204641	117.5631	ng	87
12) Benzaldehyde	5.530	77	143249	85.0611	ng	81
13) Aniline	5.626	93	472696	131.5217	ng	76
14) Pentachloroethane	5.663	117	129155	121.4900	ng	71
15) bis(2-Chloroethyl) ether	5.679	93	333980	115.4714	ng	74
17) Phenol	5.599	94	452742	112.3919	ng	92
18) 2-Chlorophenol	5.722	128	382645	127.0397	ng	77
19) N-Decane	5.754	57	294768	109.0660	ng	76
20) 1,3-Dichlorobenzene	5.851	146	424908	127.1713	ng	98
22) 1,4-Dichlorobenzene	5.915	146	416799	117.0237	ng	98
23) 1,2-Dichlorobenzene	6.038	146	406245	119.7626	ng	97
24) Benzyl alcohol	6.016	108	243879	124.0737	ng	72
25) bis(2-chloroisopropyl)...	6.118	45	393520	121.9988	ng	76
26) 2-Methylphenol	6.102	108	334413	113.7837	ng	98
27) Acetophenone	6.230	105	470276	112.1890	ng	73
28) Hexachloroethane	6.311	117	172411	123.3385	ng	91
29) N-Nitroso-di-n-propyla...	6.225	70	227756	106.5673	ng	82
30) 3&4-Methylphenol	6.225	108	318295	106.3414	ng	100
33) Nitrobenzene	6.364	77	379082	109.4382	ng	77
34) Isophorone	6.546	82	657112	109.7049	ng	83
35) 2-Nitrophenol	6.610	139	221703	120.8327	ng	87
36) 2,4-Dimethylphenol	6.631	107	385051	117.1769	ng	95
37) Benzoic Acid	6.744	105	398243	148.7294	ng	87
38) bis(2-Chloroethoxy)met...	6.701	93	410259	107.4700	ng	97
39) 2,4-Dichlorophenol	6.792	162	350515	122.3131	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	359391	115.6589	ng	95
41) Naphthalene	6.920	128	1153291	115.5174	ng	99
42) 4-Chloroaniline	6.952	127	375854	109.8443	ng	92
43) Hexachlorobutadiene	7.001	225	200163	121.2605	ng	97
44) Caprolactam	7.252	113	128572	115.6304	ng	60
45) 4-Chloro-3-methylphenol	7.321	107	319934	112.2475	ng	82
46) 2-Methylnaphthalene	7.455	142	752194	109.7211	ng	98
47) 1-Methylnaphthalene	7.535	142	740536	110.7898	ng	94
48) Methylnaphthalenes (To...	7.535	142	1489184m	220.8855	ng	
49) 1,1'-Biphenyl	7.830	154	917091	104.7132	ng	92
51) 1,2,4,5-Tetrachloroben...	7.589	216	369262	113.3634	ng	99
52) Hexachlorocyclopentadiene	7.573	237	172843	110.8633	ng	100
53) 2,4,6-Trichlorophenol	7.674	196	245166	125.2024	ng	100
54) 2,4,5-Trichlorophenol	7.712	196	260022	121.5746	ng	95
56) 2-Chloronaphthalene	7.856	162	742807	117.4592	ng	93
57) 1,4-Dimethylnaphthalene	8.134	156	560850	104.2999	ng	93
58) Dimethylnaphthalenes (...)	8.134	156	560850	104.2999	ng	93
59) Diphenyl Ether	7.910	170	548288	112.8357	ng	83
60) 2-Nitroaniline	7.937	65	268877	118.8040	ng	40
61) Coumarin	8.124	146	262313	98.7083	ng	51
62) Acenaphthylene	8.215	152	1062751	107.8535	ng	99
63) Dimethylphthalate	8.076	163	850801	117.2293	ng	99
64) 2,6-Dinitrotoluene	8.140	165	175513	106.5424	ng	74
65) Acenaphthene	8.370	153	752113	112.3811	ng	95

SampleID : CAL BNA@120PPM

Operator : AH/JB

Qt Meth : 10M_1008.M

Data File: 10M71233.D

Sam Mult : 1 Vial# : 6

Qt On : 10/08/18 12:07

Acq On : 10/ 8/18 10:22

Misc : A,BNA

Qt Upd On: 10/08/18 12:06

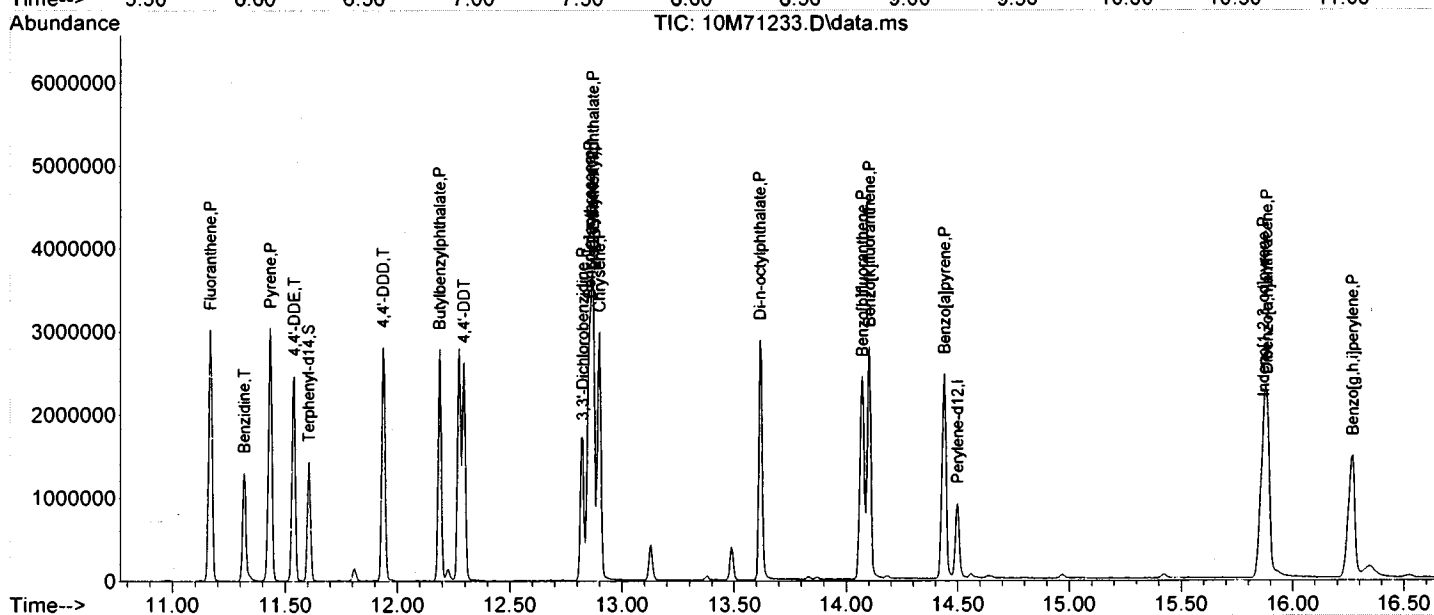
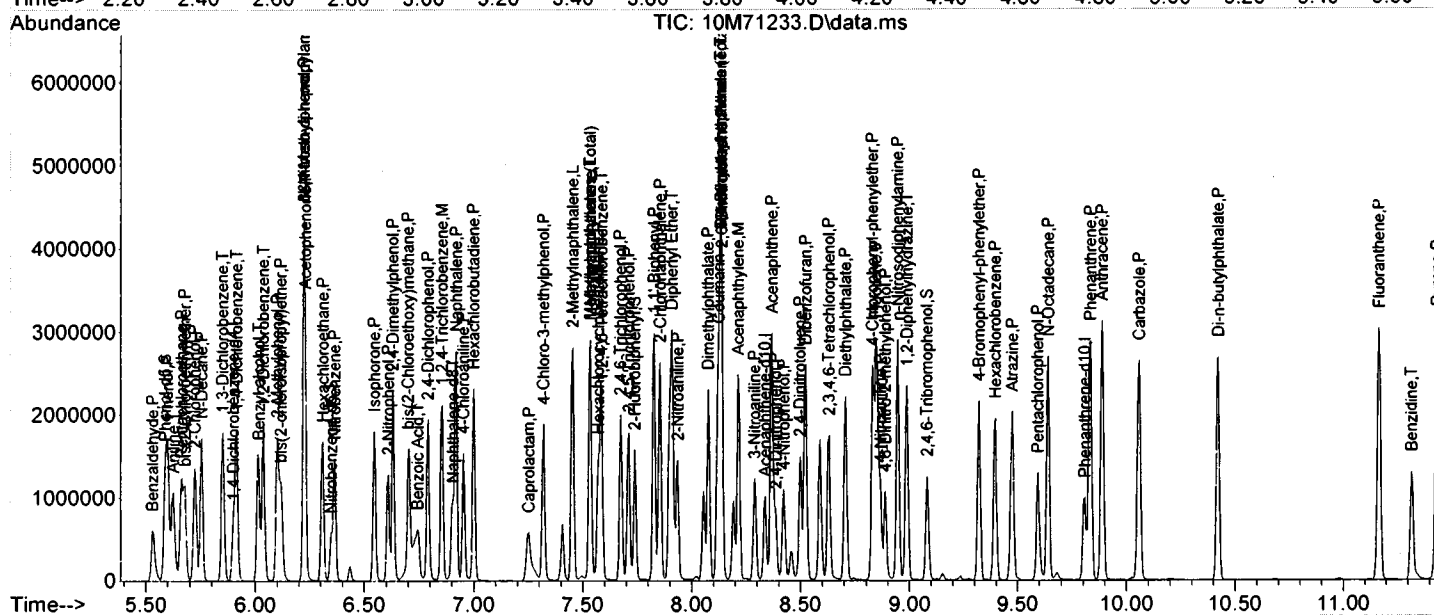
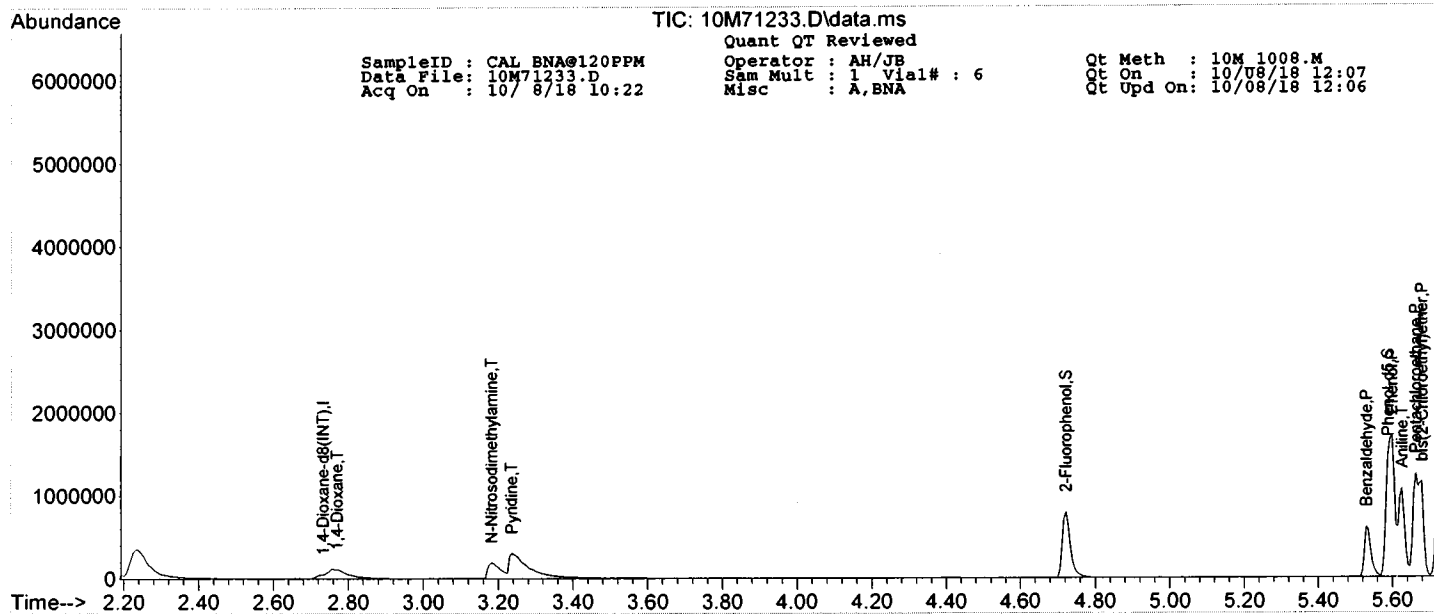
Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\

Qt Resp Via : Initial Calibration

	Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.290	138	200634	114.7587	ng	81
67)	2,4-Dinitrophenol	8.386	184	127833	120.5764	ng	38
68)	Dibenzofuran	8.525	168	1062822	117.7916	ng	88
69)	2,4-Dinitrotoluene	8.498	165	276784	124.2500	ng	67
70)	4-Nitrophenol	8.423	65	164379	113.0409	ng	48
71)	2,3,4,6-Tetrachlorophenol	8.632	232	217395	130.4009	ng	85
72)	Fluorene	8.846	166	865060	115.8900	ng	98
73)	4-Chlorophenyl-phenyle...	8.830	204	412731	116.4601	ng	88
74)	Diethylphthalate	8.707	149	842292	114.7910	ng	97
75)	4-Nitroaniline	8.867	138	245519	118.2841	ng	88
76)	Atrazine	9.477	200	282053	124.1003	ng	98
78)	4,6-Dinitro-2-methylph...	8.889	198	161826	121.5115	ng	50
79)	n-Nitrosodiphenylamine	8.947	169	731993	109.9531	ng	98
81)	1,2-Diphenylhydrazine	8.990	77	955802	124.9242	ng	84
82)	4-Bromophenyl-phenylether	9.322	248	234093	115.4176	ng	90
83)	Hexachlorobenzene	9.397	284	239473	111.3144	ng	68
84)	N-Octadecane	9.643	57	435579	101.8735	ng	72
85)	Pentachlorophenol	9.595	266	142373	129.9434	ng	98
86)	Phenanthrene	9.835	178	1288540	112.8871	ng	99
87)	Anthracene	9.889	178	1333596	114.5791	ng	100
88)	Carbazole	10.060	167	1221206	113.5181	ng	98
89)	Di-n-butylphthalate	10.424	149	1464988	115.0977	ng	98
90)	Fluoranthene	11.167	202	1392528	117.1928	ng	86
92)	Pyrene	11.435	202	1432994	128.5181	ng	80
93)	Benzidine	11.317	184	550346	121.5634	ng	82
95)	4,4'-DDE	11.542	246	292893	138.2365	ng	95
96)	4,4'-DDD	11.937	235	515852	139.3534	ng	91
97)	Butylbenzylphthalate	12.189	149	666178	127.9618	ng	74
98)	4,4'-DDT	12.296	235	446455	134.5228	ng	93
99)	3,3'-Dichlorobenzidine	12.825	252	405593	128.8631	ng	95
100)	Benzo[a]anthracene	12.857	228	1250163	121.4427	ng	98
101)	Chrysene	12.900	228	1215761	124.0097	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.873	149	906942	125.2409	ng	94
104)	Di-n-octylphthalate	13.617	149	1583969	121.2857	ng	99
105)	Benzo[b]fluoranthene	14.071	252	1282823	118.6557	ng	91
106)	Benzo[k]fluoranthene	14.104	252	1222585	115.4084	ng	91
107)	Benzo[a]pyrene	14.440	252	1242954	119.3408	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.869	276	1274897	112.9310	ng	84
109)	Dibenzo[a,h]anthracene	15.885	278	1085281	113.7635	ng	89
110)	Benzo[g,h,i]perylene	16.270	276	1135496	116.9970	ng	95

(#)= qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@160PPM
Data File: 10M71232.D
Acq On : 10/ 8/18 10:00

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA

Qt Meth : 10M 108101509 0306
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	47686	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	94302	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	357131	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	230365	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	414288	40.00	ng	0.00
91) Chrysene-d12	12.868	240	352830	40.00	ng	0.00
103) Perylene-d12	14.500	264	385890	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	461786	183.95	ng	0.00
Spiked Amount 100.000			Recovery	=	183.95%	
16) Phenol-d5	5.594	99	609780	165.88	ng	0.00
Spiked Amount 100.000			Recovery	=	165.88%	
32) Nitrobenzene-d5	6.348	128	99614	84.19	ng	0.00
Spiked Amount 50.000			Recovery	=	168.38%	
55) 2-Fluorobiphenyl	7.744	172	601763	80.91	ng	0.00
Spiked Amount 50.000			Recovery	=	161.82%	
80) 2,4,6-Tribromophenol	9.087	330	159906	164.05	ng	0.00
Spiked Amount 100.000			Recovery	=	164.05%	
94) Terphenyl-d14	11.606	244	567560	92.21	ng	0.00
Spiked Amount 50.000			Recovery	=	184.42%	
Target Compounds						
8) 1,4-Dioxane	2.770	88	185727	155.0399	ng	88
9) Pyridine	3.235	79	481555	153.2598	ng	69
10) N-Nitrosodimethylamine	3.187	74	272853	158.1633	ng	76
12) Benzaldehyde	5.535	77	170503	102.1574	ng	81
13) Aniline	5.626	93	630513	177.0143	ng	76
14) Pentachloroethane	5.664	117	167241	158.7342	ng	69
15) bis(2-Chloroethyl) ether	5.680	93	445267	155.3363	ng	78
17) Phenol	5.605	94	605527	151.6758	ng	91
18) 2-Chlorophenol	5.728	128	517385	173.3229	ng	73
19) N-Decane	5.755	57	391951	146.3321	ng	76
20) 1,3-Dichlorobenzene	5.851	146	553412	167.1250	ng	97
22) 1,4-Dichlorobenzene	5.915	146	545810	153.4506	ng	98
23) 1,2-Dichlorobenzene	6.038	146	535830	158.1758	ng	99
24) Benzyl alcohol	6.017	108	330268	168.2486	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	522414	162.1748	ng	78
26) 2-Methylphenol	6.102	108	442149	150.6417	ng	94
27) Acetophenone	6.231	105	578710	138.2414	ng	83
28) Hexachloroethane	6.311	117	229793	164.6077	ng	91
29) N-Nitroso-di-n-propyla...	6.225	70	281554	131.9155	ng	84
30) 3&4-Methylphenol	6.225	108	390987	130.0713	ng	95
33) Nitrobenzene	6.364	77	514722	150.8683	ng	79
34) Isophorone	6.551	82	873108	147.9940	ng	80
35) 2-Nitrophenol	6.610	139	289906	160.4204	ng	90
36) 2,4-Dimethylphenol	6.632	107	509352	155.5482	ng	97
37) Benzoic Acid	6.760	105	553836	193.9969	ng	86
38) bis(2-Chloroethoxy)met...	6.707	93	537215	142.8784	ng	96
39) 2,4-Dichlorophenol	6.792	162	453829	160.7860	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	480454	156.9832	ng	98
41) Naphthalene	6.921	128	1472515	149.9849	ng	99
42) 4-Chloroaniline	6.953	127	460527m	149.5542	ng	
43) Hexachlorobutadiene	7.001	225	267950	164.8082	ng	96
44) Caprolactam	7.257	113	192628	175.8874	ng	61
45) 4-Chloro-3-methylphenol	7.322	107	436710	155.5603	ng	81
46) 2-Methylnaphthalene	7.455	142	1004414	148.7520	ng	99
47) 1-Methylnaphthalene	7.536	142	978693	148.6584	ng	93
48) Methylnaphthalenes (To...	7.455	142	1973986m	297.2708	ng	
49) 1,1'-Biphenyl	7.830	154	1206961	139.9175	ng	93
51) 1,2,4,5-Tetrachloroben...	7.589	216	474204	144.9405	ng	99
52) Hexachlorocyclopentadiene	7.573	237	247494	150.4001	ng	98
53) 2,4,6-Trichlorophenol	7.675	196	319910	162.6545	ng	98
54) 2,4,5-Trichlorophenol	7.712	196	352197	163.9473	ng	97
56) 2-Chloronaphthalene	7.857	162	963876	151.7463	ng	93
57) 1,4-Dimethylnaphthalene	8.140	156	682028	126.2773	ng	95
58) Dimethylnaphthalenes (...)	8.140	156	682028	126.2773	ng	95
59) Diphenyl Ether	7.915	170	697667	142.9460	ng	79
60) 2-Nitroaniline	7.937	65	356956	157.0284	ng	44
61) Coumarin	8.129	146	321970	120.6244	ng	43
62) Acenaphthylene	8.220	152	1460471	147.5644	ng	99
63) Dimethylphthalate	8.081	163	1145042	157.0781	ng	99
64) 2,6-Dinitrotoluene	8.140	165	218689	132.1679	ng	97
65) Acenaphthene	8.370	153	985628	146.6254	ng	96

SampleID : CAL BNA@160PPM

Operator : AH/JB

Qt Meth : 10M_1008.M

Data File: 10M71232.D

Sam Mult : 1 Vial# : 5

Qt On : 10/08/18 12:07

Acq On : 10/ 8/18 10:00

Misc : A,BNA

Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\

Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.295	138	255039	145.2358	ng	71
67)	2,4-Dinitrophenol	8.386	184	187532	161.8247	ng	41
68)	Dibenzofuran	8.525	168	1396003	154.4360	ng	90
69)	2,4-Dinitrotoluene	8.504	165	380955	170.2610	ng	65
70)	4-Nitrophenol	8.429	65	217746	149.0821	ng	50
71)	2,3,4,6-Tetrachlorophenol	8.632	232	294817	176.0636	ng	84
72)	Fluorene	8.851	166	1150322	153.4283	ng	98
73)	4-Chlorophenyl-phenyle...	8.835	204	550085	154.5347	ng	85
74)	Diethylphthalate	8.707	149	1133195	153.7574	ng	96
75)	4-Nitroaniline	8.873	138	333699	160.0597	ng	88
76)	Atrazine	9.483	200	394500	172.8124	ng	97
78)	4,6-Dinitro-2-methylph...	8.894	198	219844	156.6276	ng	52
79)	n-Nitrosodiphenylamine	8.953	169	990340	147.2034	ng	98
81)	1,2-Diphenylhydrazine	8.990	77	1314004	169.9449	ng	85
82)	4-Bromophenyl-phenylether	9.322	248	316564	154.4464	ng	94
83)	Hexachlorobenzene	9.397	284	315351	145.0514	ng	75
84)	N-Octadecane	9.643	57	559114	129.3980	ng	71
85)	Pentachlorophenol	9.600	266	195643	164.0473	ng	97
86)	Phenanthrene	9.836	178	1711814	148.4006	ng	100
87)	Anthracene	9.894	178	1777655	151.1337	ng	99
88)	Carbazole	10.060	167	1617877	148.8176	ng	98
89)	Di-n-butylphthalate	10.424	149	1989690	155.4103	ng	99
90)	Fluoranthene	11.173	202	1841109	153.3237	ng	83
92)	Pyrene	11.440	202	1885649	174.6984	ng	79
93)	Benzidine	11.322	184	742465	170.6672	ng	80
95)	4,4'-DDE	11.542	246	390880	190.5748	ng	95
96)	4,4'-DDD	11.943	235	670002	186.9721	ng	90
97)	Butylbenzylphthalate	12.194	149	893278	177.2495	ng	72
98)	4,4'-DDT	12.301	235	615678	191.6373	ng	93
99)	3,3'-Dichlorobenzidine	12.825	252	507042	175.3294	ng	96
100)	Benzo[a]anthracene	12.858	228	1675702	168.1550	ng	98
101)	Chrysene	12.906	228	1617265	170.4107	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.874	149	1202749	171.5733	ng	94
104)	Di-n-octylphthalate	13.622	149	2124756	160.0553	ng	99
105)	Benzo[b]fluoranthene	14.077	252	1671543	152.1030	ng	91
106)	Benzo[k]fluoranthene	14.109	252	1717131	159.4629	ng	90
107)	Benzo[a]pyrene	14.446	252	1650186	155.8709	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.874	276	1734400	151.1422	ng	83
109)	Dibenzo[a,h]anthracene	15.896	278	1446746	149.1939	ng	86
110)	Benzo[g,h,i]perylene	16.275	276	1519870	154.0614	ng	95

(#)= qualifier out of range (m) = manual integration (+) = signals summed

Quant QT Reviewed

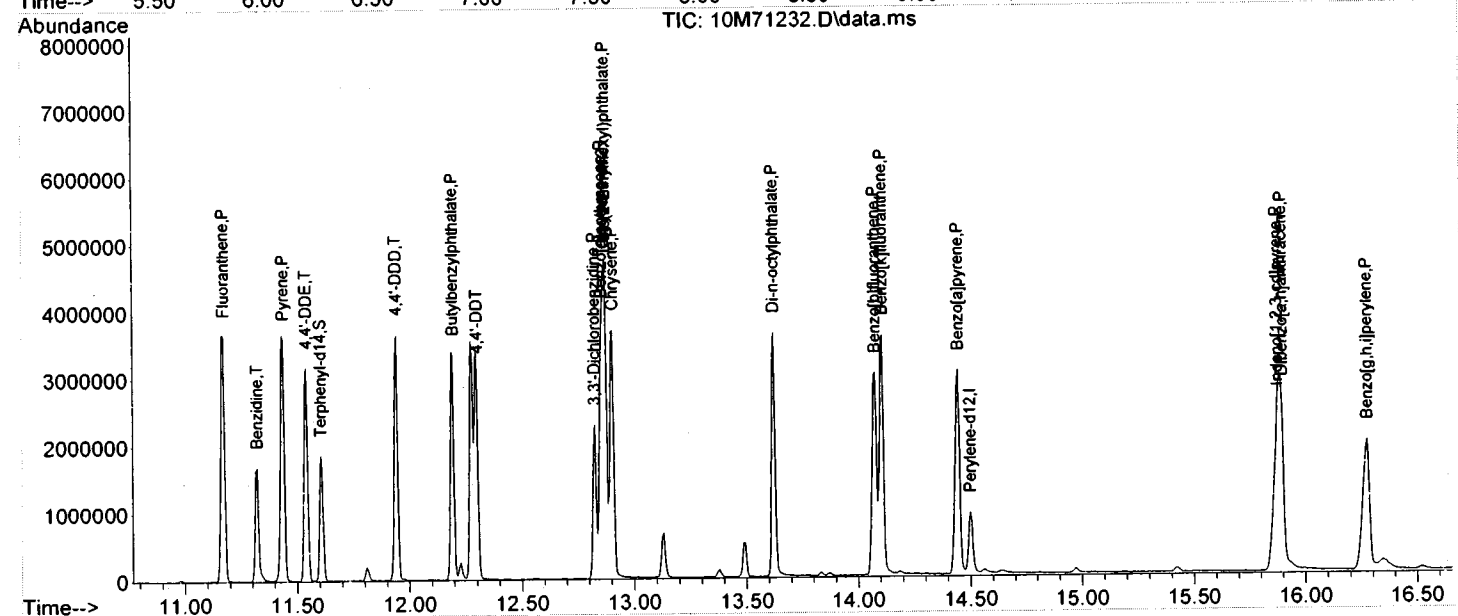
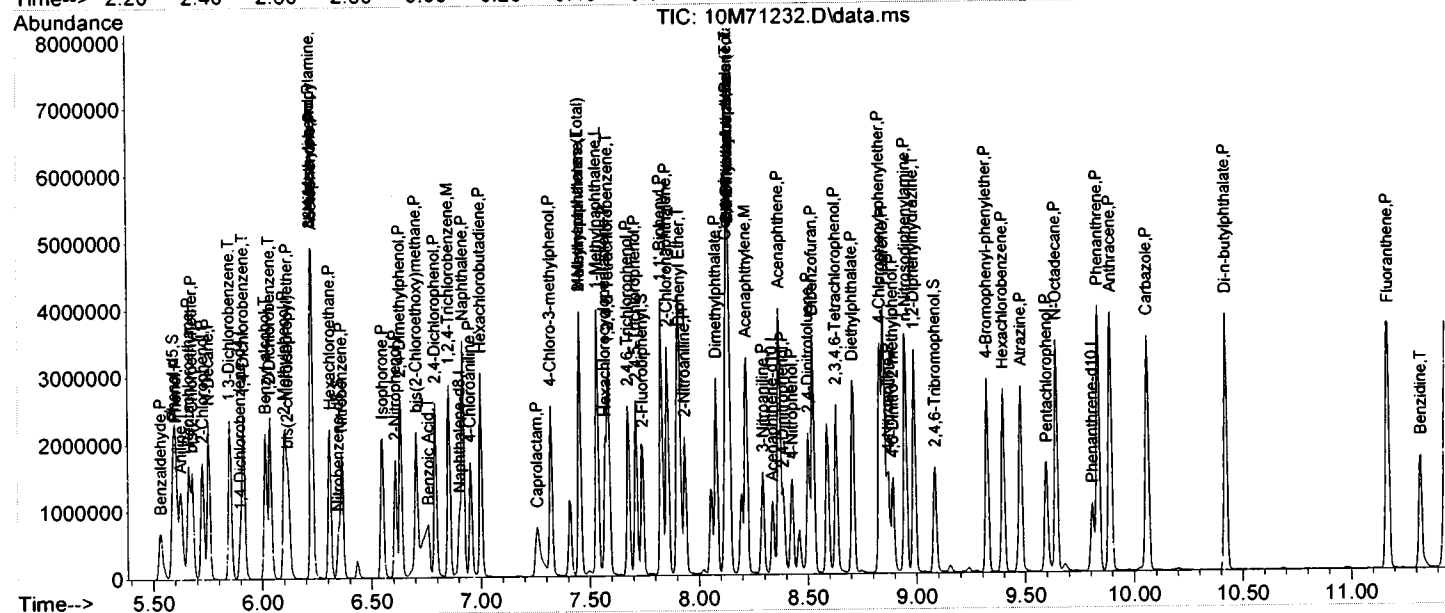
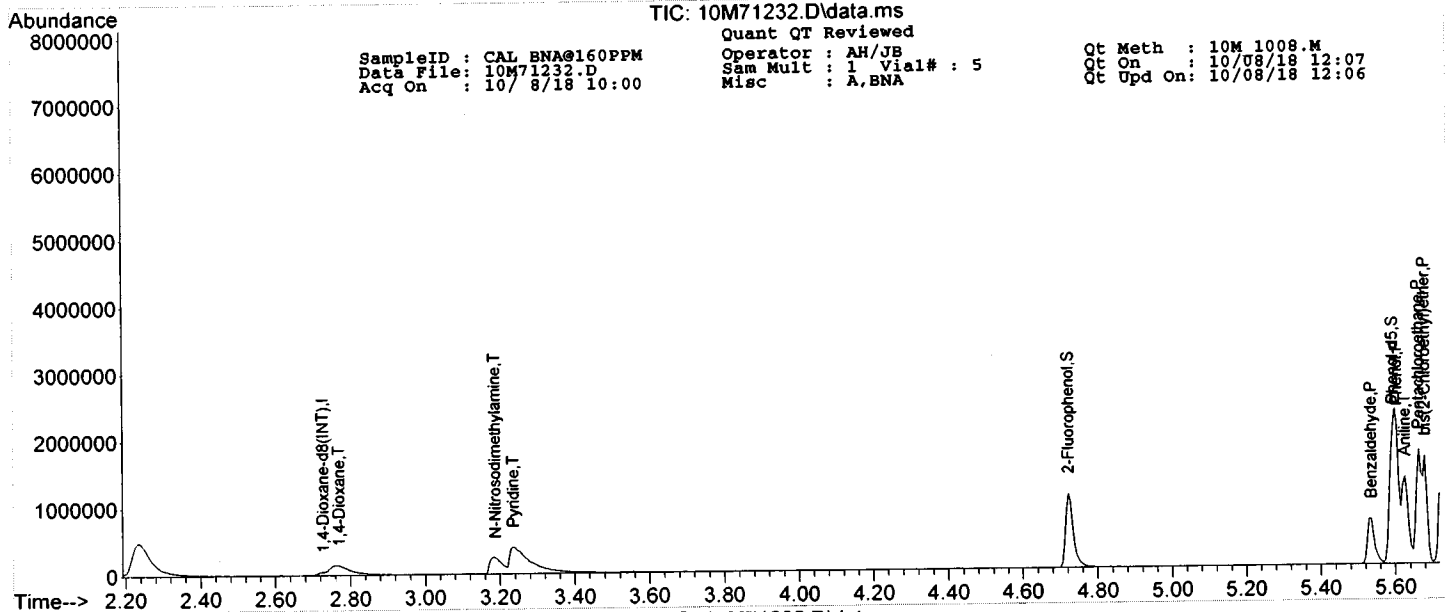
Operator : AH/JB

Sam Mult : 1 Vial# : 5

Misc : A, BNA

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Qt Meth   : 10M 1008.M
Qt On      : 10/08/18 12:07
Qt Upd On : 10/08/18 12:06
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SampleID : CAL BNA@160PPM
Data File: 10M71232.D
Acq On : 10/ 8/18 10:00



8101509 0309

SampleID : CAL BNA@196PPM
Data File: 10M71231.D
Acq On : 10/ 8/18 09:38

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 10M 1000.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	46558	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.899	152	95237	40.00	ng	0.00
31) Naphthalene-d8	6.904	136	358254	40.00	ng	0.00
50) Acenaphthene-d10	8.338	164	237684	40.00	ng	0.00
77) Phenanthrene-d10	9.809	188	438766	40.00	ng	0.00
91) Chrysene-d12	12.874	240	339080	40.00	ng	0.01
103) Perylene-d12	14.500	264	408006	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	556812	227.18	ng	0.00
Spiked Amount 100.000			Recovery	=	227.18%	
16) Phenol-d5	5.594	99	732223	204.01	ng	0.00
Spiked Amount 100.000			Recovery	=	204.01%	
32) Nitrobenzene-d5	6.354	128	120762	101.74	ng	0.00
Spiked Amount 50.000			Recovery	=	203.48%	
55) 2-Fluorobiphenyl	7.744	172	714699	93.13	ng	0.00
Spiked Amount 50.000			Recovery	=	186.26%	
80) 2,4,6-Tribromophenol	9.087	330	192882	185.95	ng	0.00
Spiked Amount 100.000			Recovery	=	185.95%	
94) Terphenyl-d14	11.611	244	738491	124.85	ng	0.00
Spiked Amount 50.000			Recovery	=	249.70%	
Target Compounds						
8) 1,4-Dioxane	2.759	88	221767	189.6103	ng	86
9) Pyridine	3.230	79	590920	192.6228	ng	70
10) N-Nitrosodimethylamine	3.182	74	340569	202.1989	ng	86
12) Benzaldehyde	5.530	77	198458	121.7876	ng	76
13) Aniline	5.626	93	760890	218.7926	ng	76
14) Pentachloroethane	5.664	117	202373	196.7329	ng	70
15) bis(2-Chloroethyl)ether	5.685	93	523855	187.1803	ng	75
17) Phenol	5.610	94	741355	190.1979	ng	91
18) 2-Chlorophenol	5.728	128	634062	217.5556	ng	73
19) N-Decane	5.755	57	459451	175.6886	ng	77
20) 1,3-Dichlorobenzene	5.851	146	664218	205.4471	ng	96
22) 1,4-Dichlorobenzene	5.915	146	676465	188.3162	ng	97
23) 1,2-Dichlorobenzene	6.038	146	645170	188.5829	ng	97
24) Benzyl alcohol	6.017	108	408228	205.9222	ng	75
25) bis(2-chloroisopropyl)...	6.118	45	616647	189.5485	ng	77
26) 2-Methylphenol	6.102	108	533772	180.0726	ng	96
27) Acetophenone	6.236	105	649437	153.6135	ng	75
28) Hexachloroethane	6.311	117	276470	196.0996	ng	88
29) N-Nitroso-di-n-propyla...	6.231	70	320717	148.7891	ng	91
30) 3&4-Methylphenol	6.231	108	428108	140.6713	ng	99
33) Nitrobenzene	6.370	77	634148	185.2902	ng	75
34) Isophorone	6.551	82	1080992	182.6566	ng	85
35) 2-Nitrophenol	6.610	139	355628	196.1711	ng	93
36) 2,4-Dimethylphenol	6.637	107	620465	187.1020	ng	96
37) Benzoic Acid	6.771	105	713779	233.6436	ng	85
38) bis(2-Chloroethoxy)met...	6.707	93	644756	170.9426	ng	96
39) 2,4-Dichlorophenol	6.798	162	543790	192.0541	ng	85
40) 1,2,4-Trichlorobenzene	6.856	180	588069	191.5430	ng	98
41) Naphthalene	6.921	128	1759855	178.9293	ng	100
42) 4-Chloroaniline	6.958	127	522350m	184.3630	ng	
43) Hexachlorobutadiene	7.001	225	326215	200.0163	ng	95
44) Caprolactam	7.274	113	244421	222.4796	ng	56
45) 4-Chloro-3-methylphenol	7.327	107	543122	192.8589	ng	82
46) 2-Methylnaphthalene	7.455	142	1170458	172.7994	ng	99
47) 1-Methylnaphthalene	7.536	142	1141341	172.8204	ng	93
48) Methylnaphthalenes (To...	7.455	142	2297970m	344.9762	ng	
49) 1,1'-Biphenyl	7.830	154	1465633	169.3715	ng	93
51) 1,2,4,5-Tetrachloroben...	7.589	216	575316	170.4305	ng	97
52) Hexachlorocyclopentadiene	7.573	237	292412	168.4937	ng	97
53) 2,4,6-Trichlorophenol	7.680	196	385051	189.7462	ng	99
54) 2,4,5-Trichlorophenol	7.712	196	414932m	187.2027	ng	
56) 2-Chloronaphthalene	7.857	162	1150433	175.5395	ng	94
57) 1,4-Dimethylnaphthalene	8.140	156	772001	138.5344	ng	97
58) Dimethylnaphthalenes (...)	8.140	156	772001	138.5344	ng	97
59) Diphenyl Ether	7.915	170	791516	157.1810	ng	83
60) 2-Nitroaniline	7.937	65	445404	189.9040	ng	52
61) Coumarin	8.135	146	355115	128.9452	ng	33
62) Acenaphthylene	8.220	152	1748257	171.2027	ng	99
63) Dimethylphthalate	8.087	163	1431435	190.3191	ng	99
64) 2,6-Dinitrotoluene	8.145	165	261204	153.0014	ng	79
65) Acenaphthene	8.370	153	1191791	171.8354	ng	96

SampleID : CAL BNA@196PPM
 Data File: 10M71231.D
 Acq On : 10/ 8/18 09:38

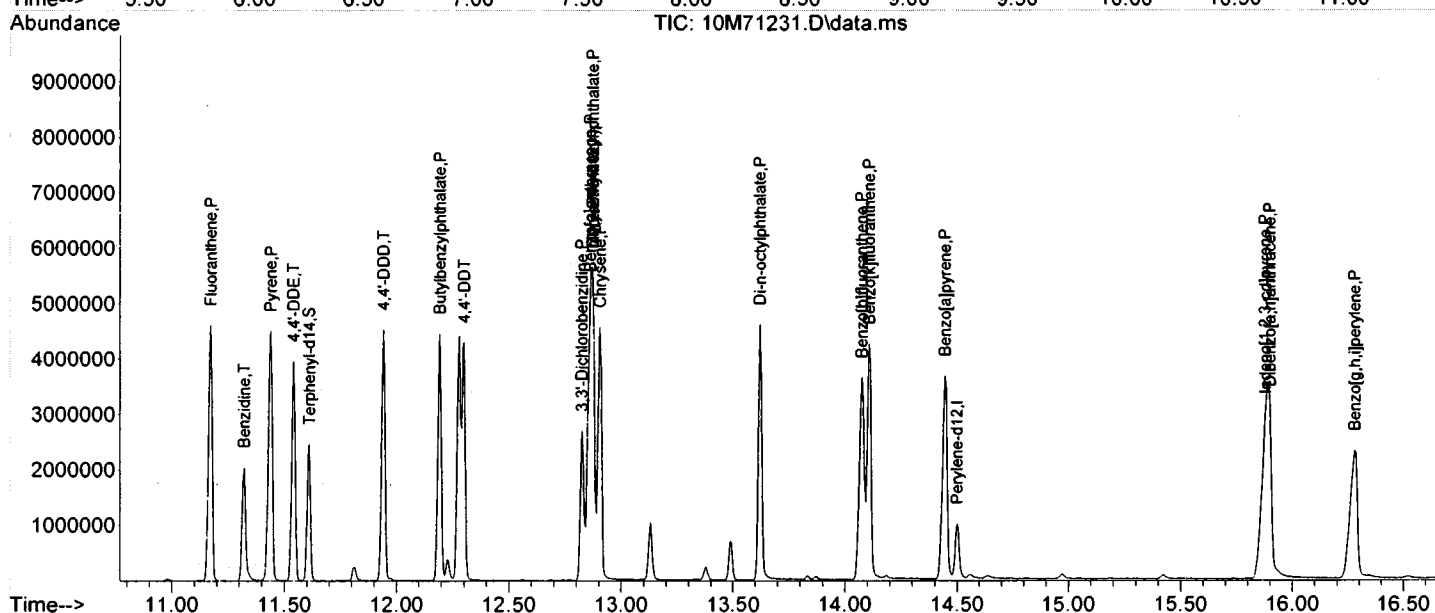
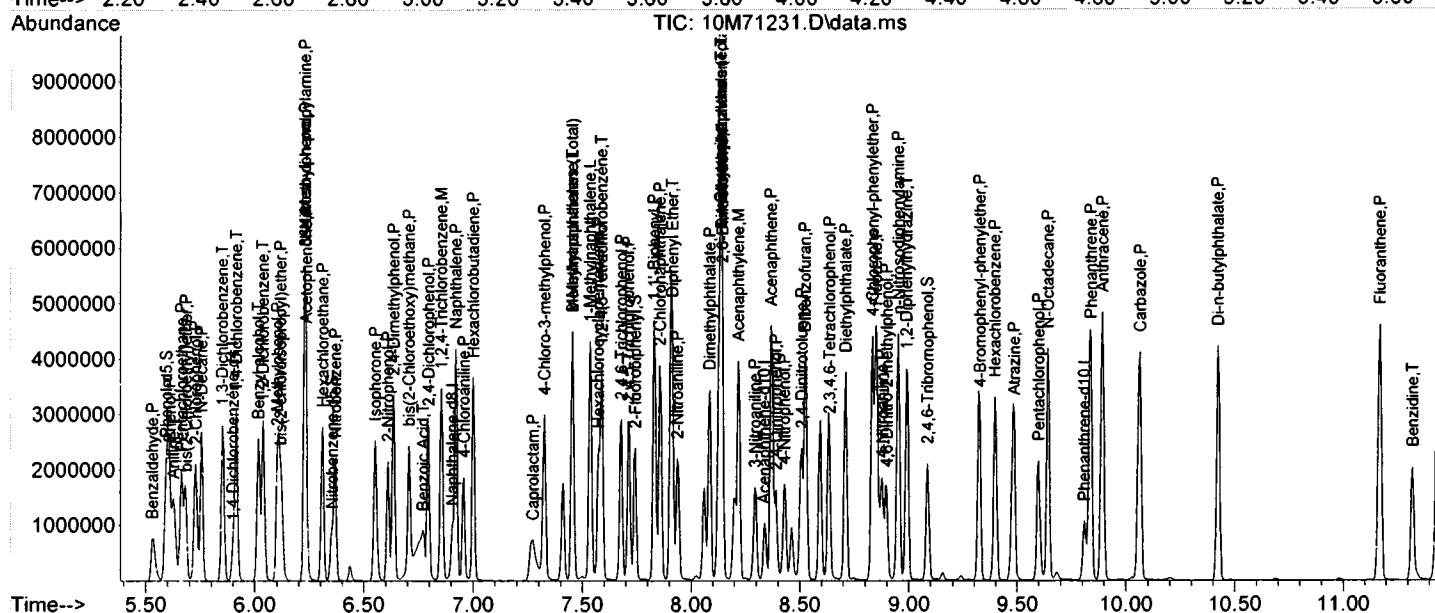
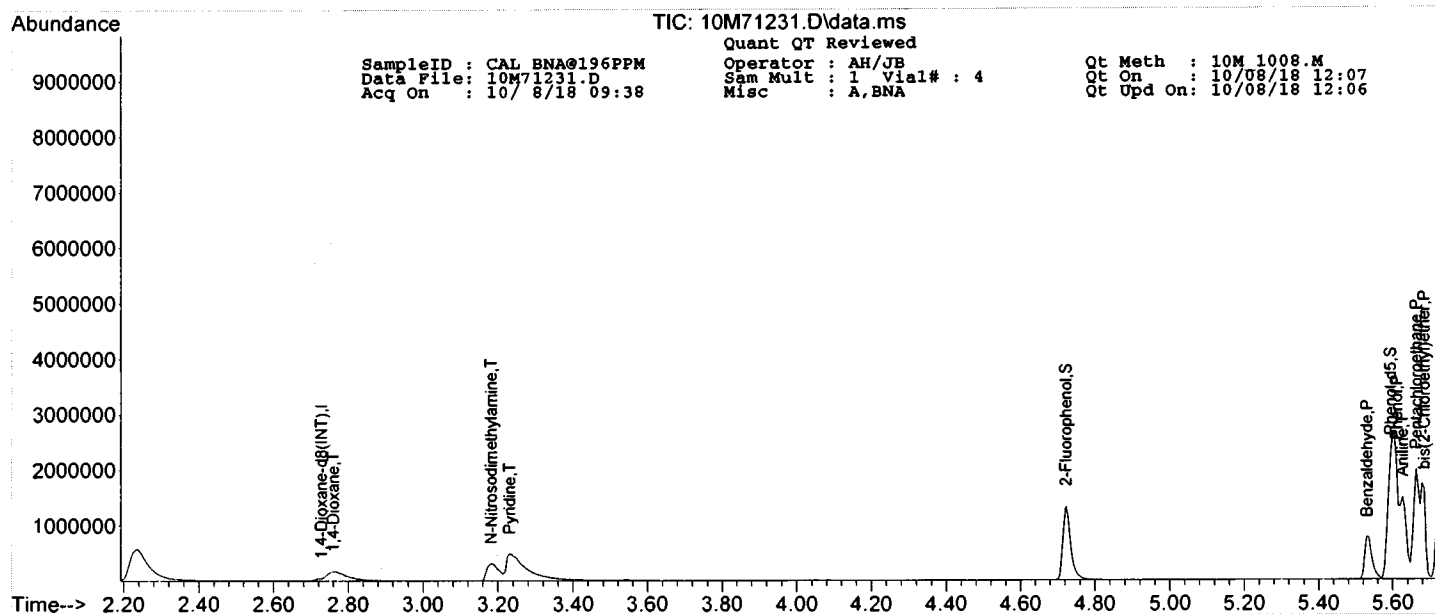
Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.295	138	307749	169.8558	ng	75
67)	2,4-Dinitrophenol	8.391	184	240705	190.5498	ng	35
68)	Dibenzofuran	8.525	168	1743000	187.3208	ng	91
69)	2,4-Dinitrotoluene	8.509	165	468982	203.1488	ng	63
70)	4-Nitrophenol	8.429	65	283725	188.2736	ng	61
71)	2,3,4,6-Tetrachlorophenol	8.637	232	367564	212.7486	ng	87
72)	Fluorene	8.851	166	1402376	181.2871	ng	100
73)	4-Chlorophenyl-phenyle...	8.835	204	685935	186.7651	ng	90
74)	Diethylphthalate	8.712	149	1421066	186.8797	ng	97
75)	4-Nitroaniline	8.878	138	426465	198.2563	ng	88
76)	Atrazine	9.488	200	491274	208.5779	ng	98
78)	4,6-Dinitro-2-methylph...	8.900	198	286960	186.5085	ng	60
79)	n-Nitrosodiphenylamine	8.953	169	1231051	172.7742	ng	99
81)	1,2-Diphenylhydrazine	8.990	77	1642597	200.5912	ng	86
82)	4-Bromophenyl-phenylether	9.327	248	391878	180.5246	ng	90
83)	Hexachlorobenzene	9.397	284	399721	173.6018	ng	81
84)	N-Octadecane	9.643	57	675625	147.6394	ng	74
85)	Pentachlorophenol	9.600	266	256888	192.0823	ng	98
86)	Phenanthrene	9.841	178	2086934	170.8273	ng	99
87)	Anthracene	9.894	178	2190228	175.8218	ng	99
88)	Carbazole	10.066	167	2027536	176.0949	ng	98
89)	Di-n-butylphthalate	10.424	149	2409706	178.1880	ng	98
90)	Fluoranthene	11.173	202	2289404	180.0203	ng	83
92)	Pyrene	11.440	202	2354962	227.0259	ng	80
93)	Benizidine	11.322	184	906983	218.5126	ng	83
95)	4,4'-DDE	11.542	246	482070	244.5656	ng	94
96)	4,4'-DDD	11.943	235	845933	245.6405	ng	89
97)	Butylbenzylphthalate	12.194	149	1149970	237.4368	ng	76
98)	4,4'-DDT	12.301	235	772245	250.1179	ng	91
99)	3,3'-Dichlorobenzidine	12.825	252	592165	226.3971	ng	96
100)	Benzo[a]anthracene	12.863	228	1996289	208.4490	ng	99
101)	Chrysene	12.906	228	2052808	225.0750	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.874	149	1439783	213.7151	ng	94
104)	Di-n-octylphthalate	13.622	149	2665071	189.8746	ng	99
105)	Benzo[b]fluoranthene	14.077	252	2157906m	185.7161	ng	
106)	Benzo[k]fluoranthene	14.109	252	1972412m	173.2411	ng	
107)	Benzo[a]pyrene	14.446	252	2056194	183.6933	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.879	276	2152490	177.4085	ng	82
109)	Dibenzo[a,h]anthracene	15.901	278	1780392	173.6486	ng	86
110)	Benzo[g,h,i]perylene	16.281	276	1998793	191.6250	ng	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@.5PPM
Data File: 10M71236.D
Acq On : 10/ 8/18 11:28

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/08/18 12:07
Qt Upd On: 10/08/18 12:06

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.732	96	45678	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.899	152	87007	40.00	ng	0.00	
31) Naphthalene-d8	6.899	136	329675	40.00	ng	0.00	
50) Acenaphthene-d10	8.332	164	208232	40.00	ng	0.00	
77) Phenanthrene-d10	9.803	188	382719	40.00	ng	0.00	
91) Chrysene-d12	12.863	240	376330	40.00	ng	0.00	
103) Perylene-d12	14.494	264	356360	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	0.000	112	0	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
Target Compounds							
8) 1,4-Dioxane	2.775	88	627m	0.5464	ng		Qvalue
9) Pyridine	0.000		0	N.D.			
10) N-Nitrosodimethylamine	0.000		0	N.D.			
12) Benzaldehyde	0.000		0	N.D.			
13) Aniline	5.626	93	927	0.2717	ng	58	
14) Pentachloroethane	0.000		0	N.D. d			
15) bis(2-Chloroethyl)ether	5.680	93	1626	0.5922	ng	71	
17) Phenol	0.000		0	N.D. d			
18) 2-Chlorophenol	0.000		0	N.D. d			
19) N-Decane	0.000		0	N.D. d			
20) 1,3-Dichlorobenzene	0.000		0	N.D. d			
22) 1,4-Dichlorobenzene	0.000		0	N.D. d			
23) 1,2-Dichlorobenzene	0.000		0	N.D. d			
24) Benzyl alcohol	0.000		0	N.D. d			
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d			
26) 2-Methylphenol	6.102	108	1159	0.4280	ng	99	
27) Acetophenone	0.000		0	N.D. d			
28) Hexachloroethane	0.000		0	N.D. d			
29) N-Nitroso-di-n-propyla...	6.220	70	755m	0.3834	ng		
30) 3&4-Methylphenol	6.230	108	1201	0.4467	ng	67	
33) Nitrobenzene	0.000		0	N.D. d			
34) Isophorone	0.000		0	N.D. d			
35) 2-Nitrophenol	0.000		0	N.D. d			
36) 2,4-Dimethylphenol	6.632	107	1459	0.5064	ng	90	
37) Benzoic Acid	0.000		0	N.D. d			
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d			
39) 2,4-Dichlorophenol	6.797	162	1281m	0.4916	ng		
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d			
41) Naphthalene	6.915	128	5210	0.5709	ng	83	
42) 4-Chloroaniline	6.958	127	1334	0.3464	ng	82	
43) Hexachlorobutadiene	0.000		0	N.D. d			
44) Caprolactam	0.000		0	N.D.			
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d			
46) 2-Methylnaphthalene	0.000		0	N.D. d			
47) 1-Methylnaphthalene	0.000		0	N.D. d			
48) Methylnaphthalenes (To...	0.000		0	N.D. d			
49) 1,1'-Biphenyl	0.000		0	N.D. d			
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d			
52) Hexachlorocyclopentadiene	0.000		0	N.D.			
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d			
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d			
56) 2-Chloronaphthalene	0.000		0	N.D. d			
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d			
58) Dimethylnaphthalenes (...)	0.000		0	N.D. d			
59) Diphenyl Ether	0.000		0	N.D. d			
60) 2-Nitroaniline	0.000		0	N.D. d			
61) Coumarin	0.000		0	N.D. d			
62) Acenaphthylene	0.000		0	N.D. d			
63) Dimethylphthalate	0.000		0	N.D. d			
64) 2,6-Dinitrotoluene	0.000		0	N.D. d			
65) Acenaphthene	0.000		0	N.D. d			

SampleID : CAL BNA@.5PPM
 Data File: 10M71236.D
 Acq On : 10/ 8/18 11:28

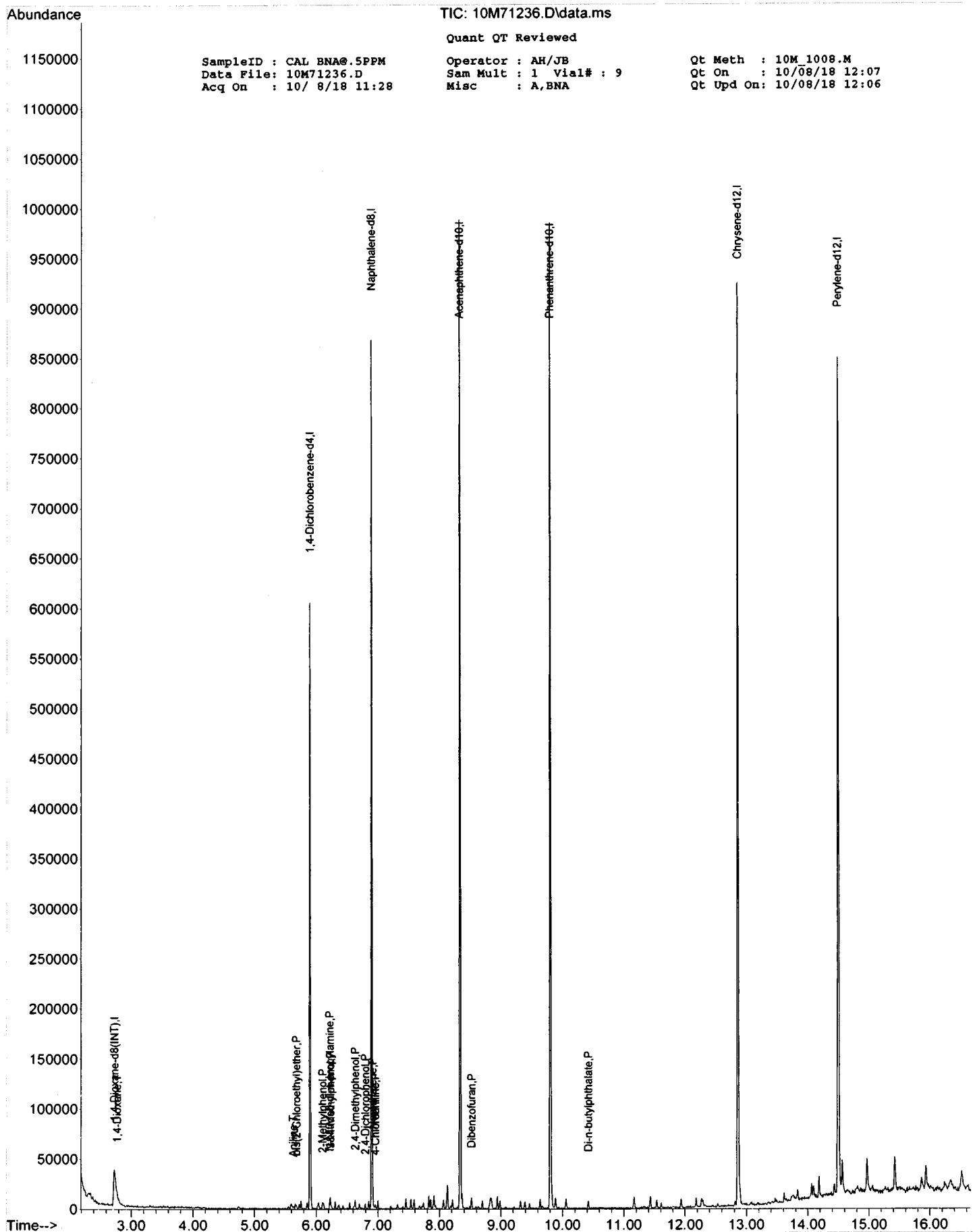
Operator : AH/JB
 Sam Mult : 1 Vial# : 9
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/08/18 12:07
 Qt Upd On: 10/08/18 12:06

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.		
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.520	168	4691	0.5679	ng	73
69) 2,4-Dinitrotoluene	0.000		0	N.D. d		
70) 4-Nitrophenol	0.000		0	N.D. d		
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D. d		
72) Fluorene	0.000		0	N.D. d		
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D. d		
74) Diethylphthalate	0.000		0	N.D. d		
75) 4-Nitroaniline	0.000		0	N.D. d		
76) Atrazine	0.000		0	N.D. d		
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D. d		
81) 1,2-Diphenylhydrazine	0.000		0	N.D. d		
82) 4-Bromophenyl-phenylether	0.000		0	N.D. d		
83) Hexachlorobenzene	0.000		0	N.D. d		
84) N-Octadecane	0.000		0	N.D. d		
85) Pentachlorophenol	0.000		0	N.D.		
86) Phenanthrene	0.000		0	N.D. d		
87) Anthracene	0.000		0	N.D. d		
88) Carbazole	0.000		0	N.D. d		
89) Di-n-butylphthalate	10.418	149	4791	0.3979	ng	95
90) Fluoranthene	0.000		0	N.D. d		
92) Pyrene	0.000		0	N.D. d		
93) Benzidine	0.000		0	N.D. d		
95) 4,4'-DDE	0.000		0	N.D. d		
96) 4,4'-DDD	0.000		0	N.D. d		
97) Butylbenzylphthalate	0.000		0	N.D. d		
98) 4,4'-DDT	0.000		0	N.D. d		
99) 3,3'-Dichlorobenzidine	0.000		0	N.D. d		
100) Benzo[a]anthracene	0.000		0	N.D. d		
101) Chrysene	0.000		0	N.D. d		
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D. d		
104) Di-n-octylphthalate	0.000		0	N.D. d		
105) Benzo[b]fluoranthene	0.000		0	N.D. d		
106) Benzo[k]fluoranthene	0.000		0	N.D. d		
107) Benzo[a]pyrene	0.000		0	N.D. d		
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D. d		
109) Dibenzo[a,h]anthracene	0.000		0	N.D. d		
110) Benzo[g,h,i]perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Level #	Data File	Cal Identifier	Analysis Date/Time									Level #	Data File	Cal Identifier	Analysis Date/Time											
			RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7
1	5M105695.D	CAL BNA@50PPM																								
3	5M105687.D	CAL BNA@10PPM																								
5	5M105692.D	CAL BNA@80PPM																								
7	5M105690.D	CAL BNA@160PPM																								
9	5M105694.D	CAL BNA@5PPM																								
Compound	Col	Mt	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9
1,4-Dioxane	1	0	Qua	1.0076	0.9828	0.8133	1.0490	1.0207	1.0417	1.0630	1.0633	0.7700	0.979	2.53	1.00	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	2.5767	2.1433	1.7254	2.5505	2.6914	2.7904	2.8987	2.8662	----	2.533	3.00	0.999	0.999	16	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitrosodimethylamin	1	0	Avg	1.4347	1.2012	1.0362	1.4300	1.5358	1.6079	1.6445	1.6350	----	1.442	2.94	0.999	1.00	15	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Fluorophenol	1	0	Avg	2.0556	1.7792	1.3657	1.9432	2.2156	2.4344	2.3971	2.4211	----	2.084	5.44	0.999	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzaldehyde	1	0	Avg	1.2535	1.1109	1.2867	1.6801	1.1410	1.0573	0.9454	----	----	1.215	5.37	0.974	0.995	20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Aniline	1	0	Qua	3.2739	2.0413	2.0805	3.2300	3.3463	3.6427	3.5239	3.5852	1.2862	2.895	5.46	0.999	0.999	30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7722	0.8188	0.6145	0.7567	0.8097	0.8712	0.8754	0.8684	----	0.798	5.50	0.999	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethyl)ether	1	0	Avg	2.3781	2.7620	2.0348	2.3736	2.4695	2.6693	2.5931	2.6819	2.6113	2.515	5.52	0.998	0.999	8.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.1966	2.9270	2.5366	3.1625	3.2801	3.5009	3.4742	3.5408	----	3.205	5.43	0.999	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol	1	0	Qua	3.3479	3.2539	2.8109	3.4708	3.4473	3.5696	3.3947	3.8082	----	3.395	5.44	0.997	0.998	8.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Chlorophenol	1	0	Avg	2.3531	2.2593	1.8773	2.2655	2.4421	2.6426	2.6008	2.6775	----	2.395	5.56	0.997	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Decane	1	0	Avg	2.6985	2.8142	2.2350	2.6857	2.7908	2.9501	2.8798	2.8956	----	2.745	6.00	0.999	0.999	8.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,3-Dichlorobenzene	1	0	Avg	2.6304	2.8562	2.2130	2.5581	2.7061	2.8379	2.8368	2.8234	----	2.685	6.69	1.00	1.00	8.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,4-Dichlorobenzene	1	0	Avg	1.4709	1.6685	1.2313	1.4393	1.5054	1.5603	1.5291	1.5510	----	1.495	5.75	1.00	1.00	8.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2-Dichlorobenzene	1	0	Avg	1.3739	1.5333	1.1426	1.3269	1.4089	1.4533	1.4316	1.4450	----	1.395	5.88	1.00	1.00	8.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzyl alcohol	1	0	Avg	0.8420	0.6203	0.5700	0.7968	0.9007	0.9382	0.9411	0.9402	----	0.819	5.86	1.00	1.00	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-chloroisopropyl)le	1	0	Avg	1.8398	2.0717	1.6047	1.7952	1.8866	1.9659	1.9385	1.9849	----	1.895	5.97	0.999	1.00	7.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylphenol	1	0	Avg	1.2021	1.2377	0.9700	1.1674	1.2489	1.3029	1.2884	1.2988	1.0936	1.205	5.95	1.00	1.00	9.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.8869	1.8584	1.4882	1.8173	1.8681	1.7831	1.6783	1.6253	----	1.756	6.07	0.996	0.999	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachloroethane	1	0	Avg	0.5542	0.5694	0.4472	0.5335	0.5616	0.5939	0.5846	0.5976	----	0.555	6.15	0.999	1.00	8.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitroso-di-n-propyla	1	0	Qua	0.9349	0.8620	0.6635	0.8964	0.9515	0.9097	0.8574	0.8374	0.7016	0.846	6.07	0.996	1.00	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3,8,4-Methylphenol	1	0	Qua	1.2993	1.1885	1.0292	1.2565	1.2935	1.2335	1.1449	1.1095	0.6817	1.146	6.07	0.995	1.00	17	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1151	0.1060	0.0872	0.1127	0.1255	0.1322	0.1302	0.1352	----	0.118	6.20	0.997	0.999	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene	1	0	Avg	0.3628	0.3667	0.2846	0.3601	0.3804	0.3963	0.3928	0.4072	----	0.369	6.21	0.999	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Isophorone	1	0	Avg	0.6446	0.5827	0.4715	0.6261	0.6752	0.7011	0.6897	0.7177	----	0.639	6.39	0.999	1.00	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Nitrophenol	1	0	Qua	0.1722	0.1197	0.1152	0.1660	0.1933	0.2007	0.2047	0.2065	----	0.172	6.46	0.996	0.998	21	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dimethylphenol	1	0	Qua	0.3511	0.3255	0.2687	0.3320	0.3737	0.3810	0.3767	0.3884	0.2437	0.338	6.48	0.999	1.00	15	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1955	-----	0.0256	0.1057	0.2985	0.3593	0.3767	0.3850	----	0.250	6.59	0.986	0.995	57	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethoxy)me	1	0	Avg	0.4156	0.4112	0.3228	0.4022	0.4337	0.4386	0.4414	0.4589	----	0.416	6.56	0.999	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dichlorophenol	1	0	Qua	0.2800	0.2257	0.1973	0.2718	0.2991	0.3123	0.3104	0.3062	0.1410	0.260	6.64	0.997	0.998	23	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.3010	0.3499	0.2498	0.2872	0.3202	0.3306	0.3242	0.3268	----	0.311	6.70	1.00	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Napthalene	1	0	Avg	1.0468	1.1945	0.8684	1.0368	1.1072	1.0951	1.0600	1.0716	1.1459	1.076	7.77	0.999	1.00	8.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3884	0.2899	0.2340	0.3910	0.3902	0.3613	0.3238	0.3005	0.2064	0.321	6.81	0.987	0.995	21	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1643	0.1798	0.1330	0.1618	0.1695	0.1756	0.1753	0.1739	----	0.167	6.85	1.00	1.00	8.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Caprolactam	1	0	Qua	0.1008	0.0536	0.0573	0.0998	0.1117	0.1243	0.1227	0.1283	----	0.099	9.7	0.997	0.999	29	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloro-3-methylphe	1	0	Qua	0.2831	0.2439	0.2015	0.2696	0.3069	0.3138	0.3105	0.3246	----	0.282	7.17	0.997	0.999	15	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylnapthalene	1	0	A																							

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Avg Rsd: 15.3

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Compound	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																			
									RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6
Hexachlorocyclopenta	1	0	Qua	0.1873	0.0491	0.0890	0.1470	0.2339	0.2602	0.2652	0.2760	----	0.1897	7.41	0.986	0.997	46	0.05	a	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Qua	0.3040	0.2320	0.2150	0.2773	0.3361	0.3558	0.3483	0.3613	----	0.3047	7.52	0.999	0.999	19	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Qua	0.3256	0.2637	0.2427	0.3153	0.3795	0.3783	0.3766	0.3992	----	0.3357	7.55	0.996	0.998	17	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2300	1.3503	1.0135	1.1918	1.3392	1.3394	1.3509	1.4198	----	1.2875	5.8	0.997	0.999	10			25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0222	1.1249	0.8667	1.0338	1.1459	1.1392	1.1275	1.1467	----	1.0876	9.99	0.999	0.999	9.1	0.80		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthalene	1	0	Avg	0.8927	1.0354	0.8014	0.9479	0.9935	0.9020	0.8130	0.8327	----	0.9027	7.96	0.993	0.997	9.5			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8927	1.0354	0.8014	0.9479	0.9935	0.9020	0.8130	0.8327	----	0.9027	7.96	0.993	0.997	9.5			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8058	0.8647	0.6820	0.7901	0.8825	0.8395	0.7616	0.7595	----	0.7987	7.75	0.994	0.998	8.2			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Qua	0.4091	0.3322	0.3059	0.3870	0.4612	0.4428	0.4577	0.4608	----	0.4077	7.77	0.999	0.999	15	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4332	0.4114	0.3433	0.4279	0.4772	0.4335	0.3890	0.3961	----	0.4147	7.95	0.991	0.997	9.5			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.5853	1.5611	1.2691	1.5540	1.7498	1.7416	1.7288	1.7505	----	1.62	8.04	1.00	1.00	10	0.90		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylbthalate	1	0	Avg	1.1419	1.2118	0.9303	1.1623	1.2847	1.2939	1.2870	1.3293	----	1.217	9.91	0.999	0.999	11	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Qua	0.2655	0.2320	0.2023	0.2699	0.2947	0.2815	0.2806	0.2890	----	0.2647	7.97	0.999	0.999	12	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0692	1.2201	0.8978	1.0883	1.1802	1.1599	1.1437	1.1486	----	1.11	8.19	0.999	0.999	8.9	0.90	a	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3041	0.2070	0.1996	0.2877	0.3126	0.2956	0.2880	0.2840	----	0.272	8.12	0.998	1.00	16	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1073	----	0.0296	0.0701	0.1412	0.1563	0.1761	0.1669	----	0.121	8.22	0.992	0.996	45	0.01		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.4974	1.7158	1.2619	1.5060	1.6545	1.6485	1.5950	1.6154	1.5605	----	1.56	8.35	0.999	0.999	8.5	0.80		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
2,4-Dinitrotoluene	1	0	Qua	0.3515	0.2487	0.2427	0.3258	0.3787	0.3985	0.4033	0.4086	----	0.345	8.33	0.999	1.00	19	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2182	0.1196	0.1198	0.1882	0.2500	0.2595	0.2806	0.2804	----	0.215	8.25	0.991	0.998	31	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Qua	0.2728	0.1662	0.1904	0.2533	0.3088	0.3195	0.3246	0.3230	----	0.270	8.46	0.999	0.999	23	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.1796	1.2483	0.9659	1.2012	1.3611	1.3100	1.2733	1.2944	----	1.23	8.66	0.999	0.999	9.9	0.90		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5240	0.5660	0.4384	0.5344	0.6085	0.6079	0.5860	0.5941	----	0.557	8.65	0.999	0.999	10	0.40		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylbthalate	1	0	Avg	1.1443	1.1328	0.9075	1.1536	1.2891	1.2991	1.2970	1.3184	----	1.19	8.54	0.999	0.999	12	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3080	0.1781	0.2047	0.3166	0.3665	0.3715	0.3816	0.3870	----	0.314	8.69	0.998	0.999	26	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Qua	0.3200	0.2752	0.2316	0.3166	0.3818	0.3869	0.3879	0.4011	----	0.338	9.29	0.995	0.998	18	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.0941	----	0.0421	0.0715	0.1119	0.1214	0.1308	0.1369	----	0.101	8.71	0.994	1.00	34	0.01		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6232	0.5554	0.4903	0.6066	0.6776	0.6870	0.6609	0.6866	----	0.625	8.77	0.998	0.999	12	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0698	0.0419	0.0441	0.0631	0.0773	0.0811	0.0856	0.0870	----	0.0688	8.90	0.998	1.00	26			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.8964	0.7740	0.7252	0.8686	0.9453	0.9509	0.9732	0.9937	----	0.891	8.81	0.998	1.00	11			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromobiphenyl-phenyl	1	0	Avg	0.1833	0.1898	0.1383	0.1753	0.2031	0.2022	0.2043	0.2083	----	0.188	9.14	0.999	1.00	12	0.10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.1750	0.1932	0.1441	0.1686	0.1909	0.1889	0.1909	0.1935	----	0.181	9.21	1.00	1.00	9.6	0.10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Qua	0.5106	0.4111	0.3690	0.4786	0.5465	0.5488	0.5361	0.5430	----	0.493	9.47	1.00	1.00	14	0.05		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.0765	----	0.0357	0.0586	0.0964	0.1054	0.1147	0.1181	----	0.0865	9.41	0.992	0.999	36	0.05	a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0558	1.2104	0.8516	1.0226	1.1537	1.1309	1.1358	1.1180	----	1.08	9.64	0.998	0.999	10	0.70		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0942	1.0515	0.8100	1.0351	1.1604	1.1932	1.1942	1.1691	----	1.09	9.70	0.999	0.999	12	0.70		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0005	0.9545	0.7580	0.9446	1.1001	1.0909	1.1153	1.1135	----	1.01	9.87	1.00	1.00	12	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Qua	1.1775	0.7260	0.6993	1.0613	1.3017	1.3296	1.3564	1.3548	0.5564	----	1.06	10.24	0.999	0.999	30	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Fluoranthene	1	0	Qua	1.1045	0.8720	0.7706	1.0069	1.2297	1.2356	1.2346	1.2392	----	1.09	10.97	0.997	0.998												

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criterion if applicable

Avg Rsd: 15.3

Note:
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M105695.D	CAL BNA@50PPM	10/08/18 12:12	2	5M105696.D	CAL BNA@2PPM	10/08/18 12:40
3	5M105687.D	CAL BNA@10PPM	10/08/18 08:57	4	5M105693.D	CAL BNA@20PPM	10/08/18 11:26
5	5M105692.D	CAL BNA@80PPM	10/08/18 10:57	6	5M105691.D	CAL BNA@120PPM	10/08/18 10:34
7	5M105690.D	CAL BNA@160PPM	10/08/18 10:11	8	5M105689.D	CAL BNA@196PPM	10/08/18 09:45
9	5M105694.D	CAL BNA@5PPM	10/08/18 11:49				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
4,4'-DDE	1	0	Avg	0.2307	0.2084	0.1697	0.2139	0.2519	0.2543	0.2613	0.2548	----	0.231	11.35	0.999	0.999	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3807	0.2707	0.2517	0.3459	0.4172	0.4273	0.4288	0.4361	----	0.370	11.75	0.997	0.998	20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzophthalate	1	0	Qua	0.4882	0.2450	0.2759	0.4325	0.5483	0.5888	0.5912	0.5900	----	0.470	12.00	0.994	0.997	30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3414	----	0.2348	0.2988	0.3672	0.3584	0.3559	0.3550	----	0.330	12.10	0.999	1.00	14	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.2869	0.1702	0.1659	0.2856	0.3223	0.3198	0.3054	0.2991	----	0.271	12.63	0.998	0.999	24	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolanthracene	1	0	Avg	1.0690	1.0390	0.8358	1.0230	1.1875	1.1557	1.1633	1.1792	----	1.08	12.66	0.999	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0575	1.1132	0.8530	1.0049	1.0716	1.0673	1.0555	1.0633	----	1.04	12.70	0.999	0.999	7.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.7334	0.3485	0.3873	0.6351	0.7948	0.8039	0.8066	0.8031	----	0.664	12.69	1.00	1.00	29	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.3895	0.5085	0.5528	1.0611	1.4679	1.6214	1.7293	1.8192	----	1.27	13.44	0.995	1.00	40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzobifluoranthene	1	0	Avg	1.1427	0.9535	0.7714	0.9902	1.1746	1.2500	1.3222	1.4032	----	1.13	13.87	0.992	0.999	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzokifluoranthene	1	0	Avg	1.1784	0.9919	0.8720	1.0336	1.1328	1.2344	1.2456	1.3749	----	1.13	13.90	0.994	0.999	14	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolaprene	1	0	Qua	1.1052	0.8759	0.7090	0.9771	1.1813	1.2247	1.2627	1.3437	----	1.09	14.22	0.994	0.999	20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl.2,3-cdipyrren	1	0	Qua	1.1884	1.0072	0.8392	0.9912	1.3043	1.3376	1.3789	1.4681	----	1.19	15.56	0.993	0.999	19	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzola,h,anthracen	1	0	Qua	1.0096	0.8676	0.7134	0.8380	1.1128	1.1387	1.1555	1.2507	----	1.01	15.57	0.996	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzola,h,ilberylene	1	0	Qua	0.9773	0.9357	0.7366	0.8422	1.0580	1.1317	1.1698	1.2469	----	1.01	15.92	0.996	1.00	17	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Avg Rsd: 15.3

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

SampleID : CAL BNA@50PPM
Data File: 5M105695.D
Acq On : 10/ 8/18 12:12

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 5M 100
Qt On : 10/08/18 12:30
Qt Upd On: 10/08/18 12:04

8101509 0318

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	61090	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	113641	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	421692	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	254335	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	393814	40.00	ng	0.00
91) Chrysene-d12	12.666	240	394665	40.00	ng	0.00
103) Perylene-d12	14.279	264	300723	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	156974	45.45	ng	0.00
Spiked Amount 100.000			Recovery	=	45.45%	
16) Phenol-d5	5.427	99	244100	46.68	ng	0.00
Spiked Amount 100.000			Recovery	=	46.68%	
32) Nitrobenzene-d5	6.196	128	30342	24.64	ng	0.00
Spiked Amount 50.000			Recovery	=	49.28%	
55) 2-Fluorobiphenyl	7.580	172	195524	23.70	ng	0.00
Spiked Amount 50.000			Recovery	=	47.40%	
80) 2,4,6-Tribromophenol	8.899	330	34381	39.61	ng	0.00
Spiked Amount 100.000			Recovery	=	39.61%	
94) Terphenyl-d14	11.410	244	147477	21.54	ng	0.00
Spiked Amount 50.000			Recovery	=	43.08%	
Target Compounds						
8) 1,4-Dioxane	2.532	88	76945	51.0990	ng	88
9) Pyridine	3.002	79	196766	43.6679	ng	75
10) N-Nitrosodimethylamine	2.938	74	109562	43.1331	ng	80
12) Benzaldehyde	5.368	77	95723	39.6416	ng	82
13) Aniline	5.464	93	250007m	43.1755	ng	
14) Pentachloroethane	5.497	117	58967	42.4338	ng	77
15) bis(2-Chloroethyl)ether	5.518	93	181603	43.3552	ng	85
17) Phenol	5.438	94	255659	41.8937	ng	87
18) 2-Chlorophenol	5.561	128	179692	40.6282	ng	81
19) N-Decane	5.598	57	206069	42.0822	ng	87
20) 1,3-Dichlorobenzene	5.689	146	200870	40.0437	ng	98
22) 1,4-Dichlorobenzene	5.753	146	208952	45.6441	ng	97
23) 1,2-Dichlorobenzene	5.881	146	195165	44.7293	ng	97
24) Benzyl alcohol	5.860	108	119615	45.9937	ng	74
25) bis(2-chloroisopropyl)...	5.967	45	261346	44.1663	ng	97
26) 2-Methylphenol	5.951	108	170769	44.0062	ng	98
27) Acetophenone	6.073	105	268045	49.5855	ng	79
28) Hexachloroethane	6.154	117	78730	45.6340	ng	88
29) N-Nitroso-di-n-propyla...	6.073	70	132807	45.1253	ng	77
30) 3&4-Methylphenol	6.073	108	184576	46.7400	ng	99
33) Nitrobenzene	6.212	77	191277	42.1200	ng	79
34) Isophorone	6.394	82	339823	43.7565	ng	91
35) 2-Nitrophenol	6.458	139	90780	43.8897	ng	90
36) 2,4-Dimethylphenol	6.485	107	185109	41.7498	ng	96
37) Benzoic Acid	6.586	105	103058	51.2601	ng	90
38) bis(2-Chloroethoxy)met...	6.560	93	219078	47.3862	ng	96
39) 2,4-Dichlorophenol	6.640	162	147626	43.8055	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	158660	41.6594	ng	97
41) Naphthalene	6.768	128	551809	47.8820	ng	100
42) 4-Chloroaniline	6.805	127	204779	44.1271	ng	92
43) Hexachlorobutadiene	6.853	225	86651	38.3071	ng	96
44) Caprolactam	7.083	113	53170	47.7752	ng	67
45) 4-Chloro-3-methylphenol	7.169	107	149228	41.6872	ng	81
46) 2-Methylnaphthalene	7.297	142	375271	44.9090	ng	98
47) 1-Methylnaphthalene	7.377	142	366211	44.6250	ng	93
48) Methylnaphthalenes (To...	7.297	142	736709m	89.1912	ng	
49) 1,1'-Biphenyl	7.665	154	438835	43.5490	ng	96
51) 1,2,4,5-Tetrachloroben...	7.425	216	167754	45.9784	ng	98
52) Hexachlorocyclopentadiene	7.414	237	59573	37.9556	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	96661	44.1434	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	103533	41.4292	ng	97
56) 2-Chloronaphthalene	7.692	162	324994	43.1844	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	283812	46.9296	ng	89
58) Dimethylnaphthalenes (...)	7.965	156	283812	46.9296	ng	89
59) Diphenyl Ether	7.751	170	256184	47.5980	ng	77
60) 2-Nitroaniline	7.772	65	130063	43.8062	ng	59
61) Coumarin	7.954	146	137744	46.4951	ng	74
62) Acenaphthylene	8.045	152	504010	44.7139	ng	99
63) Dimethylphthalate	7.911	163	363047	40.8290	ng	99
64) 2,6-Dinitrotoluene	7.970	165	84419	43.6770	ng	70
65) Acenaphthene	8.194	153	339936	43.8390	ng	96

SampleID : CAL BNA@50PPM
 Data File: 5M105695.D
 Acq On : 10/ 8/18 12:12

Operator : AH/JB
 Sam Mult : 1 Vial# : 10
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:30
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

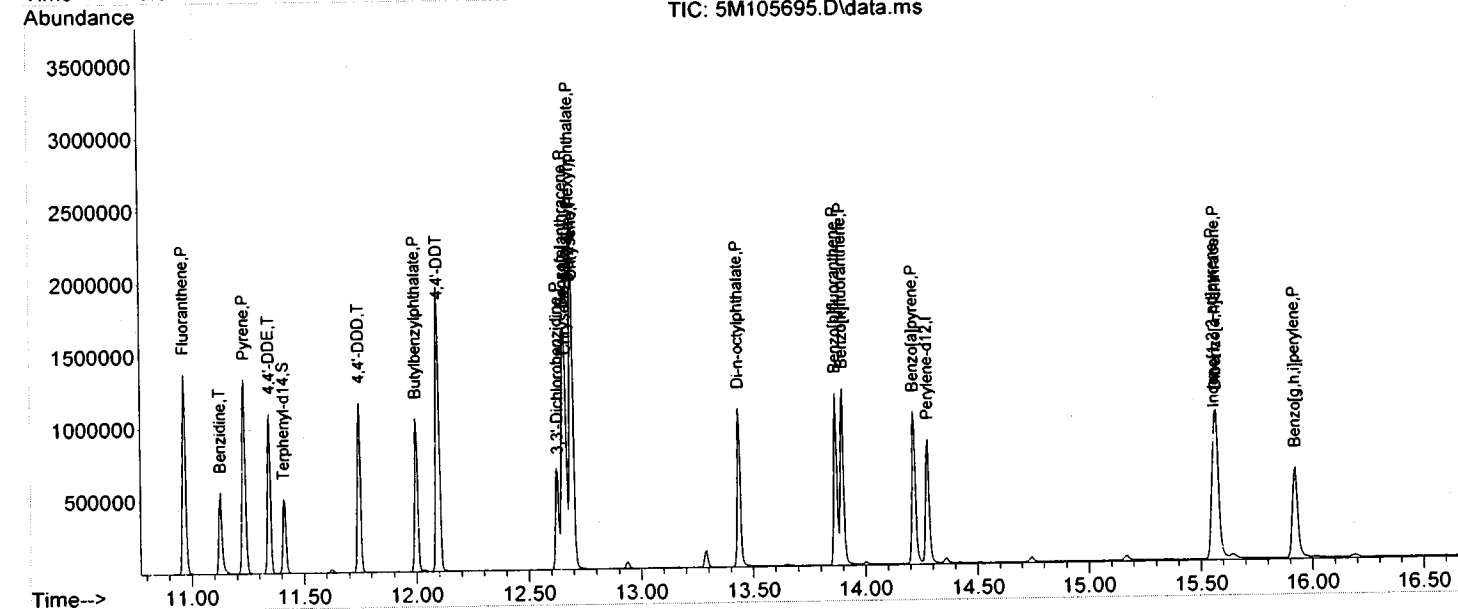
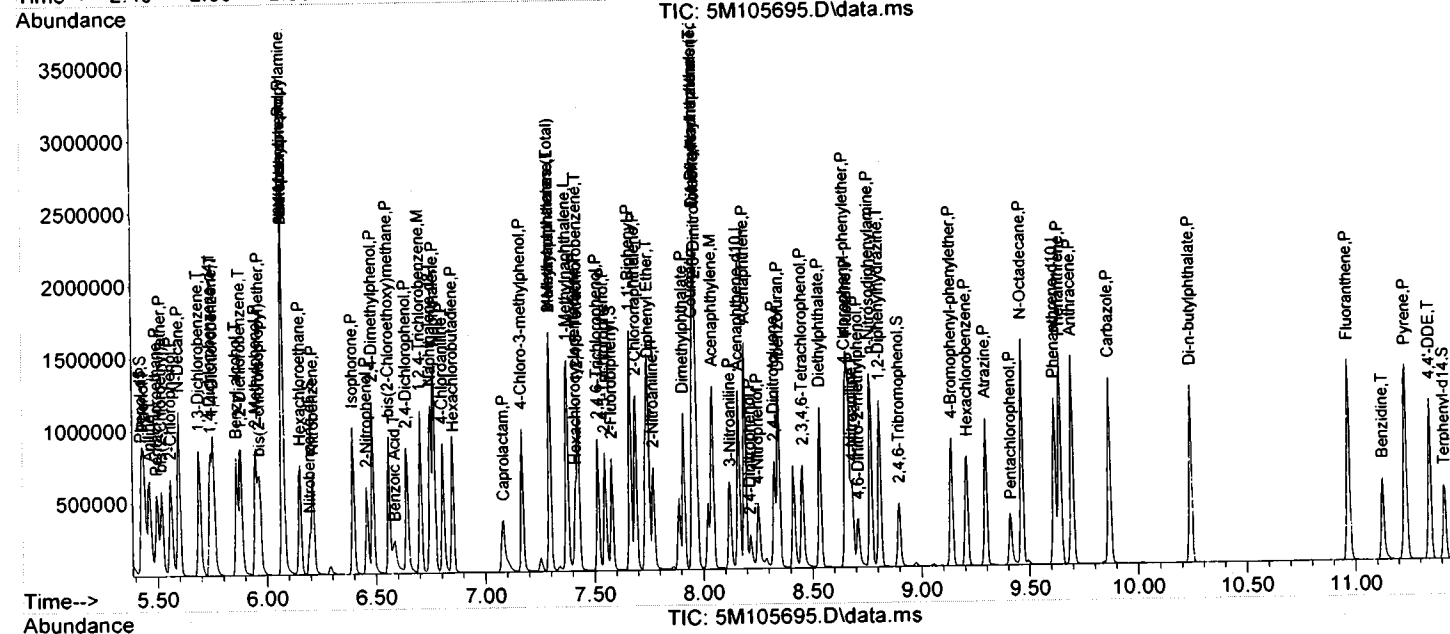
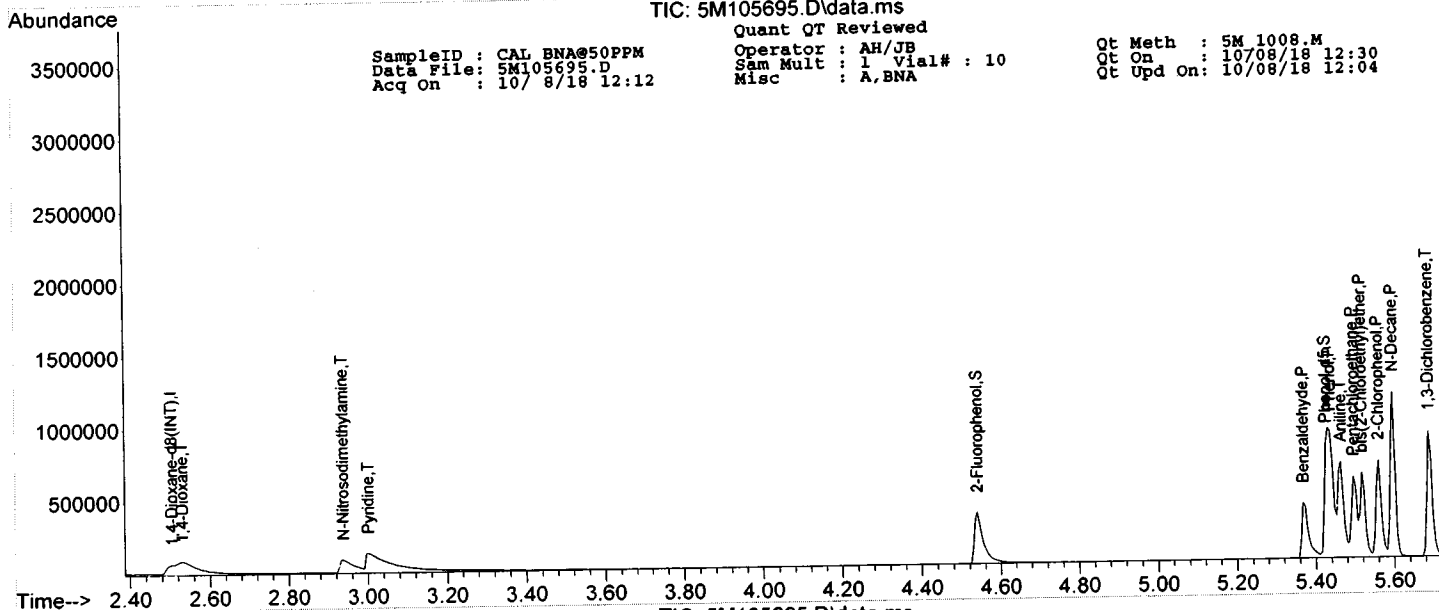
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	96699	47.6297	ng	72
67)	2,4-Dinitrophenol	8.216	184	34140	39.4860	ng	25
68)	Dibenzofuran	8.349	168	476071	45.8889	ng	85
69)	2,4-Dinitrotoluene	8.328	165	111769	44.7329	ng	69
70)	4-Nitrophenol	8.253	65	69399	41.1805	ng	86
71)	2,3,4,6-Tetrachlorophenol	8.456	232	86738	40.0648	ng	84
72)	Fluorene	8.664	166	375035	41.8617	ng	99
73)	4-Chlorophenyl-phenyle...	8.654	204	166600	39.0870	ng	88
74)	Diethylphthalate	8.536	149	363806	41.2877	ng	98
75)	4-Nitroaniline	8.686	138	97919	43.5263	ng	82
76)	Atrazine	9.295	200	101757	40.6905	ng	99
78)	4,6-Dinitro-2-methylph...	8.713	198	46352	41.2523	ng	62
79)	n-Nitrosodiphenylamine	8.766	169	306819	45.8299	ng	99
81)	1,2-Diphenylhydrazine	8.809	77	441298	49.5724	ng	91
82)	4-Bromophenyl-phenylether	9.140	248	90241	39.8892	ng	83
83)	Hexachlorobenzene	9.209	284	86168	38.1982	ng	74
84)	N-Octadecane	9.466	57	251387	49.3370	ng	84
85)	Pentachlorophenol	9.412	266	37660	38.5453	ng	97
86)	Phenanthrene	9.642	178	519749	44.6441	ng	99
87)	Anthracene	9.695	178	538672	45.8051	ng	100
88)	Carbazole	9.866	167	492545	46.1632	ng	98
89)	Di-n-butylphthalate	10.240	149	579681	47.1695	ng	97
90)	Fluoranthene	10.967	202	543727	42.5135	ng	95
92)	Pyrene	11.234	202	562158	46.1490	ng	88
93)	Benzidine	11.127	184	210795	50.7328	ng	87
95)	4,4'-DDE	11.346	246	114355	46.7931	ng	91
96)	4,4'-DDD	11.747	235	187833	49.5248	ng	90
97)	Butylbenzylphthalate	11.998	149	240842	46.1337	ng	81
98)	4,4'-DDT	12.100	235	168421	52.2811	ng	93
99)	3,3'-Dichlorobenzidine	12.628	252	146478	42.7191	ng	96
100)	Benzo[a]anthracene	12.655	228	527400	44.8138	ng	99
101)	Chrysene	12.698	228	521724	46.1959	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.687	149	361840	49.2186	ng	97
104)	Di-n-octylphthalate	13.435	149	522342	50.0817	ng	100
105)	Benzo[b]fluoranthene	13.868	252	429574m	46.0602	ng	
106)	Benzo[k]fluoranthene	13.900	252	442988	48.0748	ng	94
107)	Benzo[a]pyrene	14.215	252	415483	46.7962	ng	97
108)	Indeno[1,2,3-cd]pyrene	15.561	276	446759	44.6023	ng	96
109)	Dibenzo[a,h]anthracene	15.572	278	379548	44.7464	ng	93
110)	Benzo[g,h,i]perylene	15.925	276	367399	43.3177	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@50PPM
Data File: 5M105695.D
Acq On : 10/ 8/18 12:12

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

```
Qt Meth   : 5M 1008.M
Qt On      : 10/08/18 12:30
Qt Upd On : 10/08/18 12:04
```



8101509 0321

SampleID : CAL BNA@2PPM
 Data File: 5M105696.D
 Acq On : 10/ 8/18 12:40

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:59
 Qt Upd On: 10/08/18 12:34

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	61353	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	112107	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	414944	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	238255	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	425886	40.00	ng	0.00
91) Chrysene-d12	12.666	240	369346	40.00	ng	0.00
103) Perylene-d12	14.279	264	306476	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.572	112	5458m	1.77	ng	0.03
Spiked Amount 100.000			Recovery =	1.77%		
16) Phenol-d5	5.443	99	8979	1.84	ng	0.02
Spiked Amount 100.000			Recovery =	1.84%		
32) Nitrobenzene-d5	6.207	128	1100	0.90	ng	0.01
Spiked Amount 50.000			Recovery =	1.80%		
55) 2-Fluorobiphenyl	7.585	172	8043	1.06	ng	0.00
Spiked Amount 50.000			Recovery =	2.12%		
80) 2,4,6-Tribromophenol	8.905	330	894	1.23	ng	0.00
Spiked Amount 100.000			Recovery =	1.23%		
94) Terphenyl-d14	11.416	244	5711	0.97	ng	0.00
Spiked Amount 50.000			Recovery =	1.94%		
Target Compounds						
8) 1,4-Dioxane	2.548	88	3015m	1.9653	ng	88
9) Pyridine	3.231	79	6575m	1.7252	ng	
10) N-Nitrosodimethylamine	3.055	74	3685m	1.6952	ng	82
12) Benzaldehyde	5.406	77	3408	1.9217	ng	
13) Aniline	5.486	93	6262m	1.2279	ng	78
14) Pentachloroethane	5.497	117	2512	2.0293	ng	
15) bis(2-Chloroethyl)ether	5.529	93	8473	2.3669	ng	84
17) Phenol	5.454	94	9982	1.9312	ng	
18) 2-Chlorophenol	5.571	128	6931	1.8938	ng	79
19) N-Decane	5.598	57	8633	2.0594	ng	
20) 1,3-Dichlorobenzene	5.694	146	8762	2.1148	ng	97
22) 1,4-Dichlorobenzene	5.753	146	9353	2.2290	ng	
23) 1,2-Dichlorobenzene	5.887	146	8595	2.2176	ng	98
24) Benzyl alcohol	5.881	108	3477	1.5200	ng	
25) bis(2-chloroisopropyl)...	5.967	45	11613	2.1948	ng	95
26) 2-Methylphenol	5.956	108	6938	2.0709	ng	
27) Acetophenone	6.084	105	10417	2.1422	ng	70
28) Hexachloroethane	6.148	117	3192	2.0439	ng	
29) N-Nitroso-di-n-propyla...	6.074	70	4832	2.0614	ng	74
30) 3&4-Methylphenol	6.090	108	6662	2.0902	ng	
33) Nitrobenzene	6.218	77	7608	1.9847	ng	87
34) Isophorone	6.399	82	12090	1.8441	ng	
35) 2-Nitrophenol	6.469	139	2485	1.3968	ng	92
36) 2,4-Dimethylphenol	6.490	107	6755	1.9330	ng	
37) Benzoic Acid	0.000		0	N.D. d		93
38) bis(2-Chloroethoxy)met...	6.560	93	8533	1.9762	ng	
39) 2,4-Dichlorophenol	6.656	162	4683	1.7389	ng	86
40) 1,2,4-Trichlorobenzene	6.709	180	7261	2.2760	ng	
41) Naphthalene	6.768	128	24784	2.1839	ng	99
42) 4-Chloroaniline	6.821	127	6015	1.3262	ng	
43) Hexachlorobutadiene	6.853	225	3732	2.1619	ng	99
44) Caprolactam	7.067	113	1112	1.0468	ng	
45) 4-Chloro-3-methylphenol	7.174	107	5061	1.7402	ng	84
46) 2-Methylnaphthalene	7.302	142	14780	2.0614	ng	
47) 1-Methylnaphthalene	7.377	142	14580	2.0690	ng	90
48) Methylnaphthalenes (To...	7.377	142	29357m	4.1554	ng	
49) 1,1'-Biphenyl	7.671	154	17748	2.1152	ng	94
51) 1,2,4,5-Tetrachloroben...	7.430	216	7272	2.2221	ng	
52) Hexachlorocyclopentadiene	7.414	237	586	0.4985	ng	89
53) 2,4,6-Trichlorophenol	7.527	196	2764	1.4810	ng	
54) 2,4,5-Trichlorophenol	7.559	196	3142	1.5903	ng	99
56) 2-Chloronaphthalene	7.692	162	13401	2.0993	ng	
57) 1,4-Dimethylnaphthalene	7.965	156	12335	2.3183	ng	88
58) Dimethylnaphthalenes (...)	7.965	156	12335	2.3183	ng	
59) Diphenyl Ether	7.751	170	10301	2.1651	ng	85
60) 2-Nitroaniline	7.778	65	3958	1.5682	ng	
61) Coumarin	7.965	146	4901	2.0023	ng	60
62) Acenaphthylene	8.045	152	18598	1.9420	ng	
63) Dimethylphthalate	7.911	163	14437	2.0272	ng	99
64) 2,6-Dinitrotoluene	7.975	165	2764	1.7829	ng	
65) Acenaphthene	8.194	153	14535	2.2024	ng	92

SampleID : CAL BNA@2PPM
 Data File: 5M105696.D
 Acq On : 10/ 8/18 12:40

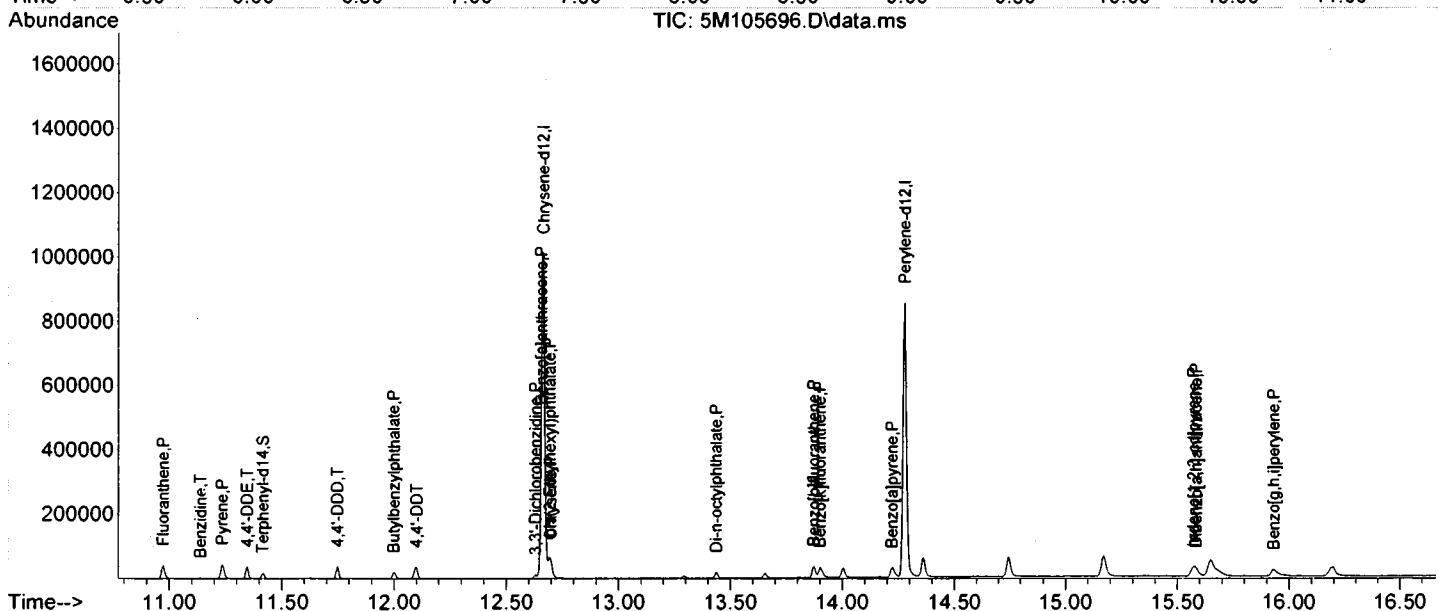
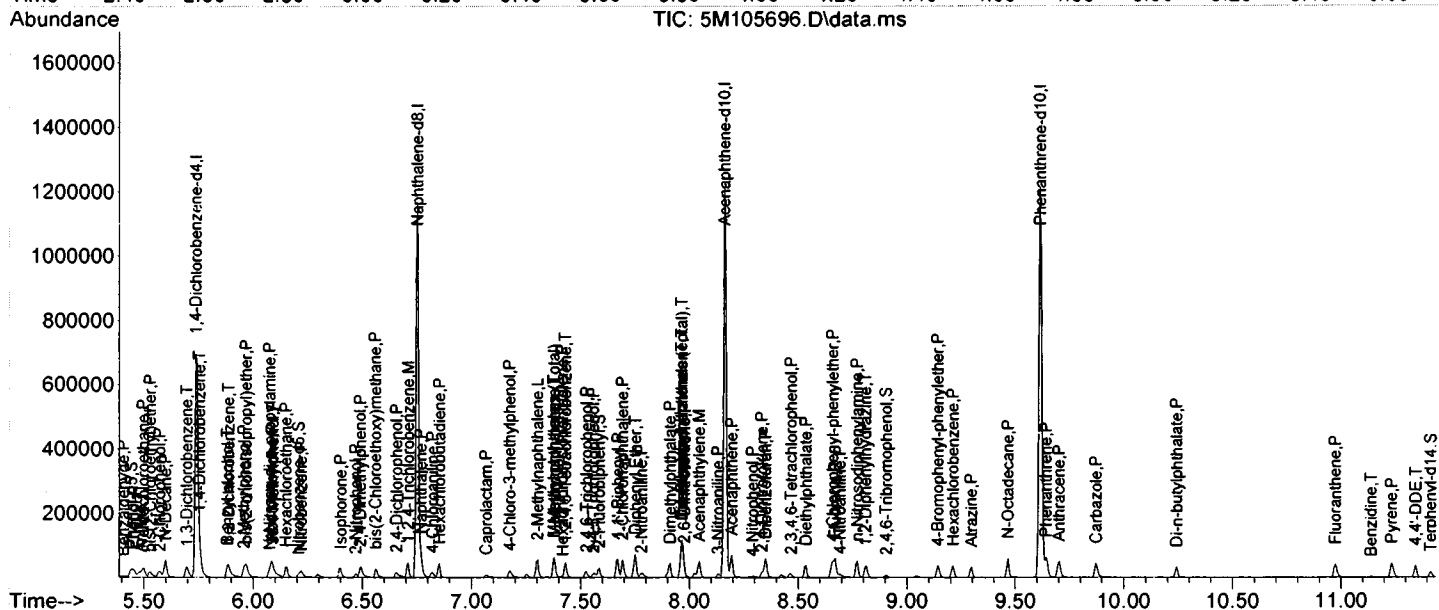
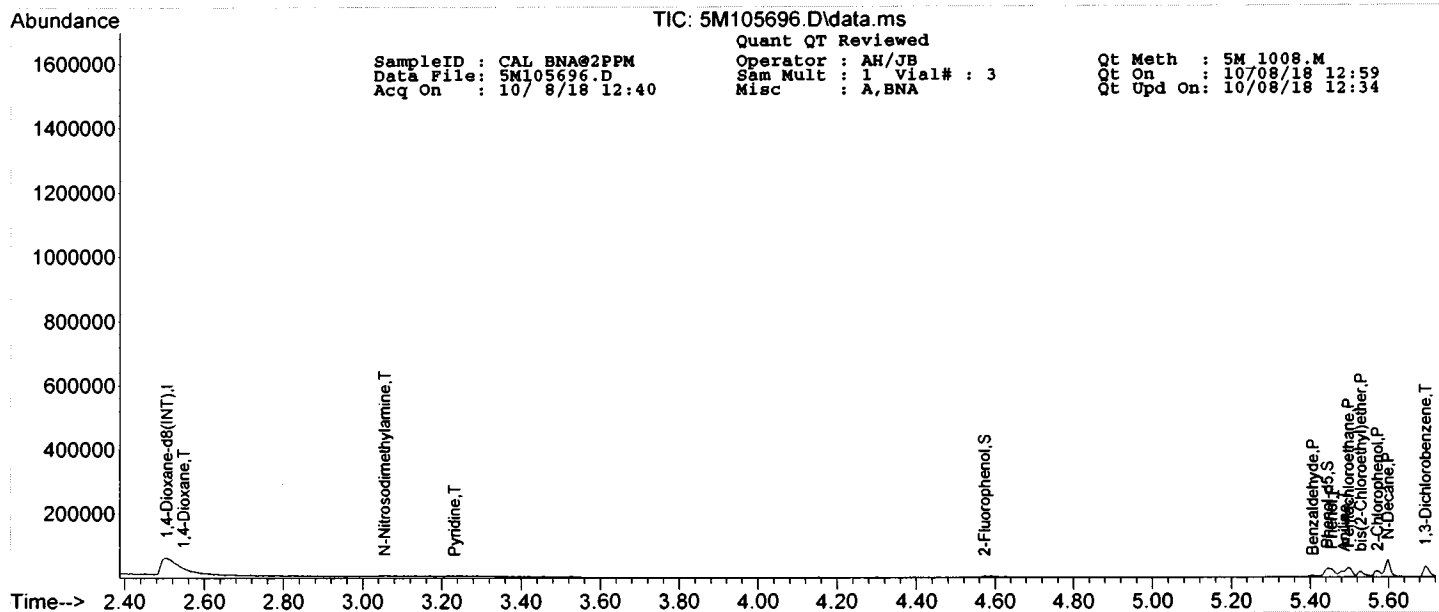
Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:59
 Qt Upd On: 10/08/18 12:34

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.130	138	2467	1.3118	ng	79
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.349	168	20440	2.1330	ng	94
69) 2,4-Dinitrotoluene	8.333	165	2963	1.3961	ng	76
70) 4-Nitrophenol	8.291	65	1425	1.0919	ng	75
71) 2,3,4,6-Tetrachlorophenol	8.467	232	1981	1.2331	ng	88
72) Fluorene	8.670	166	14871	2.0528	ng	96
73) 4-Chlorophenyl-phenyle...	8.659	204	6743	2.0523	ng	88
74) Diethylphthalate	8.536	149	13495	1.9235	ng	97
75) 4-Nitroaniline	8.691	138	2122	1.0800	ng	95
76) Atrazine	9.295	200	3279	1.6662	ng	93
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	8.771	169	11828	1.7723	ng	97
81) 1,2-Diphenylhydrazine	8.809	77	16482	1.7354	ng	91
82) 4-Bromophenyl-phenylether	9.140	248	4042	2.0404	ng	90
83) Hexachlorobenzene	9.209	284	4114	2.1512	ng	72
84) N-Octadecane	9.466	57	8754	1.6819	ng	86
85) Pentachlorophenol	0.000		0	N.D.		
86) Phenanthrene	9.642	178	25776	2.2533	ng	98
87) Anthracene	9.701	178	22391	1.9549	ng	97
88) Carbazole	9.872	167	20327	1.9142	ng	98
89) Di-n-butylphthalate	10.240	149	15460	1.1895	ng	98
90) Fluoranthene	10.972	202	18569	1.6032	ng	91
92) Pyrene	11.234	202	19881	1.9025	ng	92
93) Benzidine	11.138	184	2032	0.5081	ng	64
95) 4,4'-DDE	11.346	246	3850	1.8189	ng	92
96) 4,4'-DDD	11.747	235	5000	1.4863	ng	85
97) Butylbenzylphthalate	11.998	149	4525	0.9462	ng	87
98) 4,4'-DDT	12.100	235	3732	1.3016	ng	92
99) 3,3'-Dichlorobenzidine	12.628	252	3144	1.0433	ng	87
100) Benzo[a]anthracene	12.655	228	19189	1.9436	ng	96
101) Chrysene	12.698	228	20558	2.1600	ng	98
102) bis(2-Ethylhexyl)phtha...	12.693	149	6436	0.9165	ng	95
104) Di-n-octylphthalate	13.435	149	7793	0.8233	ng	95
105) Benzo[b]fluoranthene	13.873	252	14612m	1.7010	ng	
106) Benzo[k]fluoranthene	13.900	252	15200	1.7599	ng	94
107) Benzo[a]pyrene	14.220	252	13423	1.6463	ng	97
108) Indeno[1,2,3-cd]pyrene	15.572	276	15435	1.6963	ng	92
109) Dibenzo[a,h]anthracene	15.583	278	13296	1.7231	ng	89
110) Benzo[g,h,i]perylene	15.930	276	14339	1.8654	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@10PPM
Data File: 5M105687.D
Acq On : 10/ 8/18 08:57

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M 1000
Qt On : 10/08/18 12:05
Qt Upd On: 08/21/18 13:22

8101509 0324

Data Path : G:\GcMsData\2018\GCMS 5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS 5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.500	96	59151	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	109412	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	409237	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	230363	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	375941	40.00	ng	0.00
91) Chrysene-d12	12.666	240	354389	40.00	ng	0.00
103) Perylene-d12	14.279	264	280783	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.551	112	20197	6.04	ng	0.02
Spiked Amount 100.000			Recovery	=	6.04%	
16) Phenol-d5	5.432	99	37511	7.41	ng	0.00
Spiked Amount 100.000			Recovery	=	7.41%	
32) Nitrobenzene-d5	6.202	128	4464	3.73	ng	0.00
Spiked Amount 50.000			Recovery	=	7.46%	
55) 2-Fluorobiphenyl	7.580	172	29185	3.91	ng	0.00
Spiked Amount 50.000			Recovery	=	7.82%	
80) 2,4,6-Tribromophenol	8.900	330	4145	5.00	ng	0.00
Spiked Amount 100.000			Recovery	=	5.00%	
94) Terphenyl-d14	11.416	244	22311	3.63	ng	0.00
Spiked Amount 50.000			Recovery	=	7.26%	
Target Compounds						
8) 1,4-Dioxane	2.537	88	12027	8.5421	ng	95
9) Pyridine	3.087	79	25515	5.8481	ng	69
10) N-Nitrosodimethylamine	2.980	74	15323	6.2302	ng	86
12) Benzaldehyde	5.379	77	19028	8.1383	ng	79
13) Aniline	5.470	93	30767	5.5785	ng	61
14) Pentachloroethane	5.497	117	9087	6.7535	ng	72
15) bis(2-Chloroethyl)ether	5.523	93	30091	7.5944	ng	82
17) Phenol	5.443	94	41567	7.0347	ng	86
18) 2-Chlorophenol	5.561	128	27762	6.4827	ng	81
19) N-Decane	5.598	57	33051	6.9707	ng	86
20) 1,3-Dichlorobenzene	5.694	146	32726	6.7378	ng	98
22) 1,4-Dichlorobenzene	5.753	146	33681	7.6418	ng	100
23) 1,2-Dichlorobenzene	5.881	146	31255	7.4401	ng	98
24) Benzyl alcohol	5.865	108	15592	6.2271	ng	77
25) bis(2-chloroisopropyl)...	5.967	45	43895	7.7048	ng	90
26) 2-Methylphenol	5.951	108	26535	7.1022	ng	97
27) Acetophenone	6.074	105	40707	7.8214	ng	79
28) Hexachloroethane	6.148	117	12233	7.3646	ng	80
29) N-Nitroso-di-n-propyla...	6.074	70	18151	6.4058	ng	81
30) 3&4-Methylphenol	6.079	108	28153	7.4047	ng	97
33) Nitrobenzene	6.212	77	29124	6.6084	ng	85
34) Isophorone	6.394	82	48247	6.4015	ng	91
35) 2-Nitrophenol	6.463	139	11787	5.8721	ng	89
36) 2,4-Dimethylphenol	6.485	107	27495	6.3900	ng	99
37) Benzoic Acid	6.592	105	2627	1.7684	ng	82
38) bis(2-Chloroethoxy)met...	6.560	93	33032	7.3622	ng	97
39) 2,4-Dichlorophenol	6.645	162	20194	6.1746	ng	90
40) 1,2,4-Trichlorobenzene	6.704	180	25563	6.9164	ng	98
41) Naphthalene	6.768	128	88850	8.2110	ng	99
42) 4-Chloroaniline	6.811	127	23940	4.9850	ng	90
43) Hexachlorobutadiene	6.848	225	13608	6.1990	ng	96
44) Caprolactam	7.067	113	5867	5.8017	ng	70
45) 4-Chloro-3-methylphenol	7.169	107	20621	5.9358	ng	77
46) 2-Methylnaphthalene	7.297	142	56552	6.9736	ng	99
47) 1-Methylnaphthalene	7.377	142	56660	7.1145	ng	95
48) Methylnaphthalenes (To...	7.297	142	112326m	14.0129	ng	
49) 1,1'-Biphenyl	7.665	154	65693	6.7176	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	26759	8.0974	ng	96
52) Hexachlorocyclopentadiene	7.414	237	5127	3.9350	ng	98
53) 2,4,6-Trichlorophenol	7.521	196	12386	6.5411	ng	97
54) 2,4,5-Trichlorophenol	7.553	196	13981	6.1767	ng	100
56) 2-Chloronaphthalene	7.692	162	49916	7.3229	ng	91
57) 1,4-Dimethylnaphthalene	7.965	156	46158	8.4267	ng	86
58) Dimethylnaphthalenes (...)	7.965	156	46158	8.4267	ng	86
59) Diphenyl Ether	7.751	170	39281	8.0577	ng	80
60) 2-Nitroaniline	7.772	65	17617	6.7418	ng	71
61) Coumarin	7.954	146	19775	7.3696	ng	64
62) Acenaphthylene	8.045	152	73093	7.1593	ng	99
63) Dimethylphthalate	7.906	163	53582	6.6530	ng	98
64) 2,6-Dinitrotoluene	7.970	165	11654	6.6570	ng	84
65) Acenaphthene	8.194	153	51707	7.3622	ng	96

SampleID : CAL_BNA@10PPM
 Data File: 5M105687.D
 Acq On : 10/ 8/18 08:57

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 08/21/18 13:22

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	11495	6.1354	ng	79
67)	2,4-Dinitrophenol	8.226	184	1705	2.5331	ng	5
68)	Dibenzofuran	8.349	168	72675	7.9564	ng	87
69)	2,4-Dinitrotoluene	8.328	165	13980	6.4563	ng	74
70)	4-Nitrophenol	8.258	65	6904	4.8662	ng	89
71)	2,3,4,6-Tetrachlorophenol	8.456	232	10968	5.5934	ng	82
72)	Fluorene	8.664	166	55631	6.8558	ng	99
73)	4-Chlorophenyl-phenyle...	8.654	204	25252	6.5410	ng	90
74)	Diethylphthalate	8.531	149	52266	6.5488	ng	100
75)	4-Nitroaniline	8.681	138	11790	6.0204	ng	88
76)	Atrazine	9.295	200	13342	5.8904	ng	95
78)	4,6-Dinitro-2-methylph...	8.713	198	3958	3.9892	ng	43
79)	n-Nitrosodiphenylamine	8.766	169	46081	7.2104	ng	96
81)	1,2-Diphenylhydrazine	8.809	77	68160	8.0206	ng	90
82)	4-Bromophenyl-phenylether	9.140	248	12999	6.0191	ng	83
83)	Hexachlorobenzene	9.209	284	13550	6.2923	ng	71
84)	N-Octadecane	9.466	57	34688	7.1315	ng	86
85)	Pentachlorophenol	9.412	266	3355	4.0713	ng	92
86)	Phenanthrene	9.642	178	80039	7.2018	ng	99
87)	Anthracene	9.696	178	76132	6.7815	ng	99
88)	Carbazole	9.866	167	71245	6.9948	ng	97
89)	Di-n-butylphthalate	10.240	149	65727	5.8884	ng	98
90)	Fluoranthene	10.972	202	72427	5.9322	ng	92
92)	Pyrene	11.234	202	78432	7.1704	ng	89
93)	Benzidine	11.133	184	15686	4.1622	ng	86
95)	4,4'-DDE	11.346	246	15039	6.8532	ng	91
96)	4,4'-DDD	11.747	235	22306	6.5497	ng	88
97)	Butylbenzylphthalate	11.998	149	24446	5.4980	ng	84
98)	4,4'-DDT	12.100	235	20803	7.1916	ng	93
99)	3,3'-Dichlorobenzidine	12.628	252	14705	4.6241	ng	99
100)	Benzo[a]anthracene	12.655	228	74055	7.0077	ng	99
101)	Chrysene	12.698	228	75578	7.4526	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.693	149	34316	5.5401	ng	96
104)	Di-n-octylphthalate	13.435	149	38806	4.2685	ng	100
105)	Benzo[b]fluoranthene	13.868	252	54149m	6.2183	ng	
106)	Benzo[k]fluoranthene	13.900	252	61215	7.1151	ng	95
107)	Benzo[a]pyrene	14.220	252	49773	6.0041	ng	95
108)	Indeno[1,2,3-cd]pyrene	15.561	276	58909	6.2989	ng	94
109)	Dibenzo[a,h]anthracene	15.577	278	50083	6.3238	ng	93
110)	Benzo[g,h,i]perylene	15.925	276	51709	6.5296	ng	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@20PPM
Data File: SM105693.D
Acq On : 10/ 8/18 11:26

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 5M 100
Qt On : 10/08/18 12:05
Qt Upd On: 10/08/18 12:04

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Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	60709	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	113420	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	410542	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	235917	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	387384	40.00	ng	0.00
91) Chrysene-d12	12.666	240	383384	40.00	ng	0.00
103) Perylene-d12	14.290	264	328284	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	58985	17.18	ng	0.00
Spiked Amount 100.000			Recovery =	17.18%		
16) Phenol-d5	5.427	99	95997	18.47	ng	0.00
Spiked Amount 100.000			Recovery =	18.47%		
32) Nitrobenzene-d5	6.197	128	11568	9.65	ng	0.00
Spiked Amount 50.000			Recovery =	19.30%		
55) 2-Fluorobiphenyl	7.580	172	70295	9.19	ng	0.00
Spiked Amount 50.000			Recovery =	18.38%		
80) 2,4,6-Tribromophenol	8.900	330	12223	14.32	ng	0.00
Spiked Amount 100.000			Recovery =	14.32%		
94) Terphenyl-d14	11.416	244	54887	8.25	ng	0.00
Spiked Amount 50.000			Recovery =	16.50%		
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.548	88	31842m	21.7939	ng	
9) Pyridine	3.039	79	77421	17.2897	ng	75
10) N-Nitrosodimethylamine	2.959	74	43407	17.1960	ng	81
12) Benzaldehyde	5.374	77	50999	21.2527	ng	82
13) Aniline	5.465	93	98045	17.2323	ng	64
14) Pentachloroethane	5.497	117	22971	16.6341	ng	78
15) bis(2-Chloroethyl)ether	5.518	93	72051	17.6014	ng	87
17) Phenol	5.443	94	105356	17.3726	ng	84
18) 2-Chlorophenol	5.561	128	68768	15.6460	ng	83
19) N-Decane	5.598	57	81525	16.7531	ng	85
20) 1,3-Dichlorobenzene	5.689	146	77651	15.5770	ng	96
22) 1,4-Dichlorobenzene	5.753	146	81623	17.8647	ng	98
23) 1,2-Dichlorobenzene	5.881	146	75250	17.2799	ng	98
24) Benzyl alcohol	5.860	108	45187	17.4089	ng	75
25) bis(2-chloroisopropyl)...	5.967	45	101810	17.2390	ng	97
26) 2-Methylphenol	5.951	108	66203	17.0934	ng	99
27) Acetophenone	6.074	105	103060	19.1021	ng	80
28) Hexachloroethane	6.148	117	30259	17.5731	ng	82
29) N-Nitroso-di-n-propyla...	6.068	70	50836	17.3068	ng	84
30) 3&4-Methylphenol	6.074	108	71260	18.0803	ng	98
33) Nitrobenzene	6.213	77	73928	16.7214	ng	81
34) Isophorone	6.394	82	128527	16.9989	ng	90
35) 2-Nitrophenol	6.458	139	34083	16.9257	ng	89
36) 2,4-Dimethylphenol	6.485	107	68158	15.7900	ng	95
37) Benzoic Acid	6.565	105	21700	13.5503	ng	90
38) bis(2-Chloroethoxy)met...	6.560	93	82579	18.3468	ng	98
39) 2,4-Dichlorophenol	6.645	162	55797	17.0065	ng	86
40) 1,2,4-Trichlorobenzene	6.704	180	58956	15.9005	ng	99
41) Naphthalene	6.768	128	212843	19.4230	ng	99
42) 4-Chloroaniline	6.806	127	80266	16.9846	ng	90
43) Hexachlorobutadiene	6.854	225	33228	15.0886	ng	97
44) Caprolactam	7.073	113	20503	19.7633	ng	69
45) 4-Chloro-3-methylphenol	7.169	107	55343	15.8801	ng	82
46) 2-Methylnaphthalene	7.297	142	136430	16.7701	ng	98
47) 1-Methylnaphthalene	7.377	142	137693	17.2344	ng	95
48) Methylnaphthalenes (To...	7.297	142	272182m	33.8472	ng	
49) 1,1'-Biphenyl	7.666	154	160413	16.3514	ng	94
51) 1,2,4,5-Tetrachloroben...	7.425	216	61987	18.3159	ng	97
52) Hexachlorocyclopentadiene	7.415	237	17351	12.7051	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	32720	16.6602	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	37199	16.0474	ng	99
56) 2-Chloronaphthalene	7.692	162	121948	17.4692	ng	90
57) 1,4-Dimethylnaphthalene	7.965	156	111820	19.9335	ng	89
58) Dimethylnaphthalenes (...)	7.965	156	111820	19.9335	ng	89
59) Diphenyl Ether	7.751	170	93203	18.6687	ng	79
60) 2-Nitroaniline	7.772	65	45654	16.9245	ng	63
61) Coumarin	7.954	146	50474	18.3674	ng	69
62) Acenaphthylene	8.045	152	183308	17.5320	ng	99
63) Dimethylphthalate	7.911	163	137109	16.6234	ng	99
64) 2,6-Dinitrotoluene	7.970	165	31845	17.7624	ng	73
65) Acenaphthene	8.195	153	128384	17.8493	ng	96

SampleID : CAL BNA@20PPM
 Data File: 5M105693.D
 Acq On : 10/ 8/18 11:26

Operator : AH/JB
 Sam Mult : 1 Vial# : 8
 Misc : A,BNA

Qt Meth : 5M 1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.120	138	33944	17.7833	ng	80
67) 2,4-Dinitrophenol	8.221	184	8278	11.5485	ng	5
68) Dibenzofuran	8.349	168	177652	18.8361	ng	85
69) 2,4-Dinitrotoluene	8.328	165	38432	17.1158	ng	72
70) 4-Nitrophenol	8.253	65	22206	14.9674	ng	94
71) 2,3,4,6-Tetrachlorophenol	8.456	232	29890	14.8842	ng	83
72) Fluorene	8.665	166	141698	17.0512	ng	97
73) 4-Chlorophenyl-phenyle...	8.654	204	63043	15.9456	ng	90
74) Diethylphthalate	8.536	149	136081	16.6493	ng	99
75) 4-Nitroaniline	8.681	138	37348	18.3772	ng	84
76) Atrazine	9.295	200	37346	16.0998	ng	96
78) 4,6-Dinitro-2-methylph...	8.713	198	13867	13.2943	ng	57
79) n-Nitrosodiphenylamine	8.766	169	117498	17.8421	ng	98
81) 1,2-Diphenylhydrazine	8.809	77	168257	19.2146	ng	92
82) 4-Bromophenyl-phenylether	9.140	248	33967	15.2636	ng	84
83) Hexachlorobenzene	9.210	284	32674	14.7248	ng	74
84) N-Octadecane	9.466	57	92715	18.4982	ng	83
85) Pentachlorophenol	9.413	266	11365	12.9449	ng	90
86) Phenanthrene	9.642	178	198071	17.2958	ng	100
87) Anthracene	9.696	178	200499	17.3321	ng	99
88) Carbazole	9.867	167	182976	17.4339	ng	98
89) Di-n-butylphthalate	10.241	149	205574	17.6178	ng	98
90) Fluoranthene	10.967	202	195037	15.5029	ng	94
92) Pyrene	11.234	202	205398	17.3578	ng	88
93) Benzidine	11.127	184	84102	20.7019	ng	87
95) 4,4'-DDE	11.346	246	41006	17.2730	ng	90
96) 4,4'-DDD	11.747	235	66317	17.9999	ng	88
97) Butylbenzylphthalate	12.004	149	82918	16.9779	ng	76
98) 4,4'-DDT	12.100	235	57293	18.3081	ng	92
99) 3,3'-Dichlorobenzidine	12.629	252	54756	16.0698	ng	96
100) Benzo[a]anthracene	12.655	228	196104	17.1535	ng	99
101) Chrysene	12.698	228	192645	17.5596	ng	98
102) bis(2-Ethylhexyl)phtha...	12.693	149	121743	17.8380	ng	97
104) Di-n-octylphthalate	13.441	149	174178	16.0913	ng	99
105) Benzo[b]fluoranthene	13.879	252	162538	15.9647	ng	95
106) Benzo[k]fluoranthene	13.905	252	169668	16.8672	ng	95
107) Benzo[a]pyrene	14.231	252	160397	16.5490	ng	93
108) Indeno[1,2,3-cd]pyrene	15.578	276	162702	14.8797	ng	93
109) Dibenzo[a,h]anthracene	15.588	278	137553	14.8552	ng	92
110) Benzo[g,h,i]perylene	15.935	276	138243	14.9309	ng	79

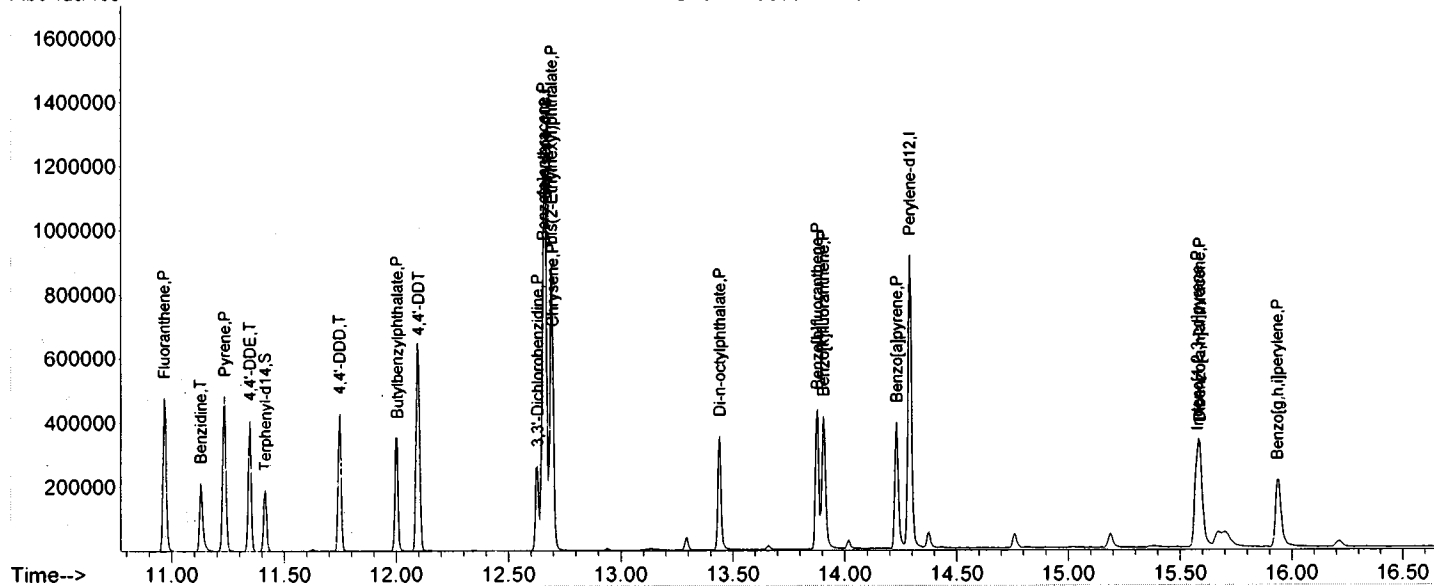
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant QT Reviewed

SampleID : CAL_BNA@20PPM
Data File: 5M105693.D
Acq On : 10/ 8/18 11:26

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

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Qt Meth   : 5M 1008.M
Qt On      : 10708/18 12:05
Qt Upd On : 10/08/18 12:04
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8101509 0330

SampleID : CAL BNA@80PPM
 Data File: SM105692.D
 Acq On : 10/ 8/18 10:57

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : SM_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.499	96	60107	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	111004	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	404566	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	226711	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	373703	40.00	ng	0.00
91) Chrysene-d12	12.666	240	385959	40.00	ng	0.00
103) Perylene-d12	14.279	264	325878	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.535	112	266346	78.37	ng	0.00
Spiked Amount 100.000			Recovery	=	78.37%	
16) Phenol-d5	5.432	99	394317	76.65	ng	0.00
Spiked Amount 100.000			Recovery	=	76.65%	
32) Nitrobenzene-d5	6.196	128	50778	42.98	ng	0.00
Spiked Amount 50.000			Recovery	=	85.96%	
55) 2-Fluorobiphenyl	7.580	172	303615	41.29	ng	0.00
Spiked Amount 50.000			Recovery	=	82.58%	
80) 2,4,6-Tribromophenol	8.899	330	57793	70.17	ng	0.00
Spiked Amount 100.000			Recovery	=	70.17%	
94) Terphenyl-d14	11.416	244	251836	37.62	ng	0.00
Spiked Amount 50.000			Recovery	=	75.24%	
Target Compounds						
8) 1,4-Dioxane	2.532	88	122713	80.8836	ng	85
9) Pyridine	2.986	79	323554	72.9800	ng	76
10) N-Nitrosodimethylamine	2.927	74	184628	73.8743	ng	78
12) Benzaldehyde	5.368	77	137168	57.7341	ng	78
13) Aniline	5.464	93	402282m	69.8029	ng	
14) Pentachloroethane	5.496	117	97343	71.1956	ng	79
15) bis(2-Chloroethyl)ether	5.518	93	296872	70.7818	ng	85
17) Phenol	5.443	94	414421	69.0199	ng	84
18) 2-Chlorophenol	5.561	128	293580	67.4637	ng	82
19) N-Decane	5.598	57	335494	69.6331	ng	87
20) 1,3-Dichlorobenzene	5.689	146	325318	65.9132	ng	97
22) 1,4-Dichlorobenzene	5.753	146	334227	74.7439	ng	97
23) 1,2-Dichlorobenzene	5.881	146	312805	73.3940	ng	98
24) Benzyl alcohol	5.860	108	199970	78.7179	ng	73
25) bis(2-chloroisopropyl)...	5.967	45	419299	72.5430	ng	100
26) 2-Methylphenol	5.951	108	277267	73.1476	ng	96
27) Acetophenone	6.073	105	414747	78.5464	ng	79
28) Hexachloroethane	6.154	117	124693	73.9924	ng	88
29) N-Nitroso-di-n-propyla...	6.073	70	211249	73.4836	ng	73
30) 3&4-Methylphenol	6.073	108	287184	74.4509	ng	93
33) Nitrobenzene	6.212	77	307849	70.6592	ng	80
34) Isophorone	6.394	82	546344	73.3266	ng	92
35) 2-Nitrophenol	6.458	139	156469	78.8508	ng	90
36) 2,4-Dimethylphenol	6.485	107	302413	71.0940	ng	96
37) Benzoic Acid	6.602	105	241578	101.0130	ng	88
38) bis(2-Chloroethoxy)met...	6.560	93	350932	79.1192	ng	97
39) 2,4-Dichlorophenol	6.645	162	242079	74.8736	ng	85
40) 1,2,4-Trichlorobenzene	6.704	180	259159	70.9280	ng	98
41) Naphthalene	6.768	128	895877	79.0150	ng	99
42) 4-Chloroaniline	6.805	127	315740	74.8080	ng	92
43) Hexachlorobutadiene	6.853	225	137146	63.1968	ng	97
44) Caprolactam	7.094	113	90401	80.6442	ng	68
45) 4-Chloro-3-methylphenol	7.169	107	248399	72.3283	ng	81
46) 2-Methylnaphthalene	7.297	142	588812	73.4465	ng	99
47) 1-Methylnaphthalene	7.377	142	577825	73.3921	ng	94
48) Methylnaphthalenes (To...	7.297	142	1159300m	146.2945	ng	
49) 1,1'-Biphenyl	7.665	154	689066	71.2761	ng	96
51) 1,2,4,5-Tetrachloroben...	7.430	216	266734	82.0149	ng	98
52) Hexachlorocyclopentadiene	7.414	237	106094	70.2616	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	152437	75.2774	ng	100
54) 2,4,5-Trichlorophenol	7.553	196	172091	77.2537	ng	98
56) 2-Chloronaphthalene	7.692	162	519592	77.4546	ng	91
57) 1,4-Dimethylnaphthalene	7.970	156	450486	83.5663	ng	87
58) Dimethylnaphthalenes (...)	7.970	156	450486	83.5663	ng	87
59) Diphenyl Ether	7.751	170	400166	83.4085	ng	81
60) 2-Nitroaniline	7.772	65	209157	77.0712	ng	61
61) Coumarin	7.959	146	216408	81.9485	ng	72
62) Acenaphthylene	8.045	152	793420	78.9661	ng	100
63) Dimethylphthalate	7.917	163	582526	73.4946	ng	99
64) 2,6-Dinitrotoluene	7.975	165	133661	77.5803	ng	62
65) Acenaphthene	8.194	153	535150	77.4235	ng	97

SampleID : CAL_BNA@80PPM
 Data File: 5M105692.D
 Acq On : 10/ 8/18 10:57

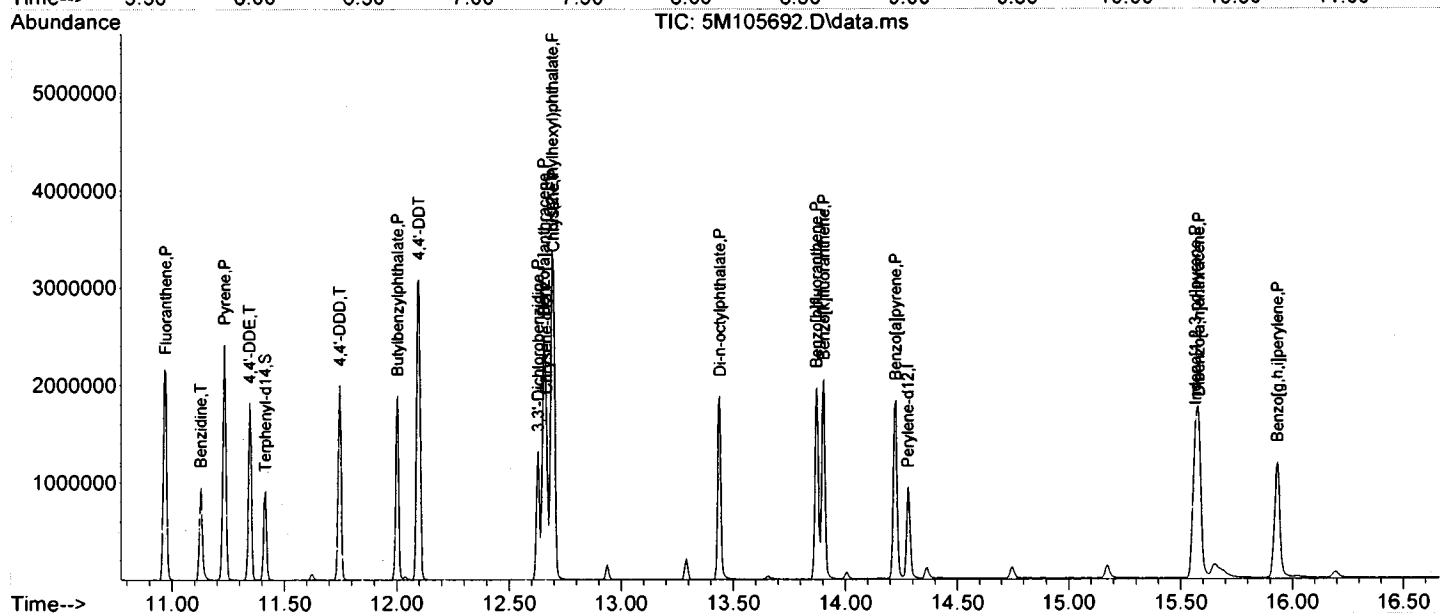
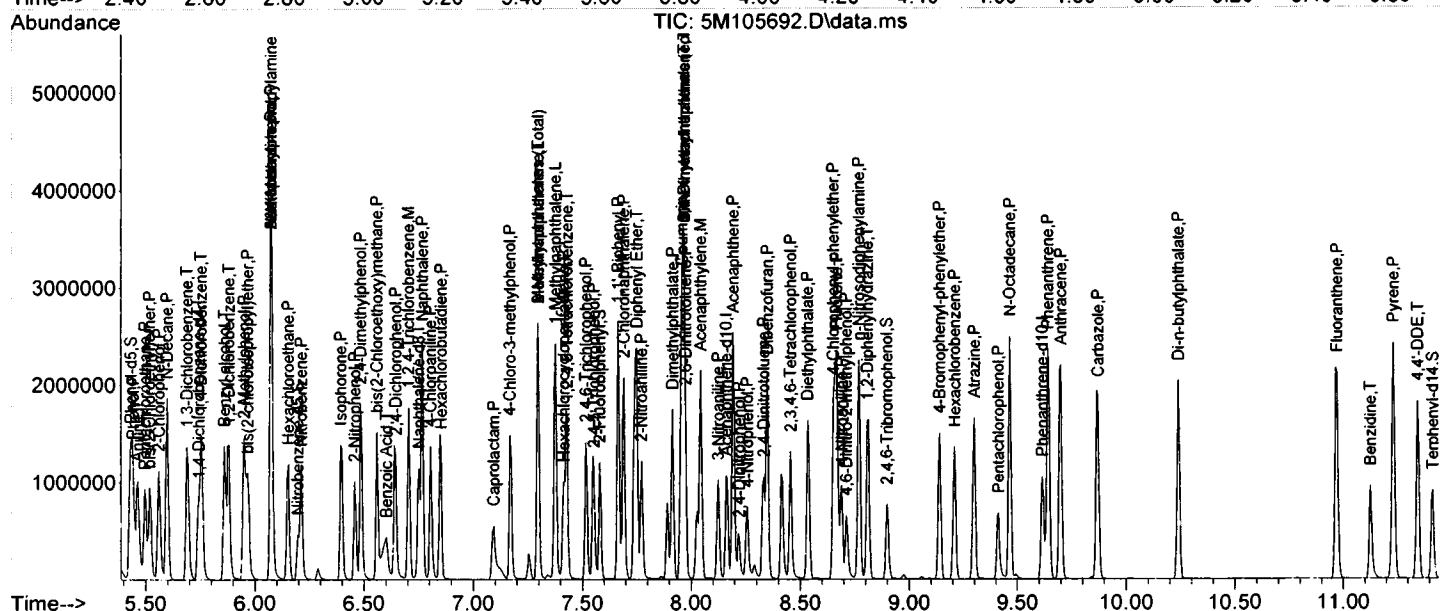
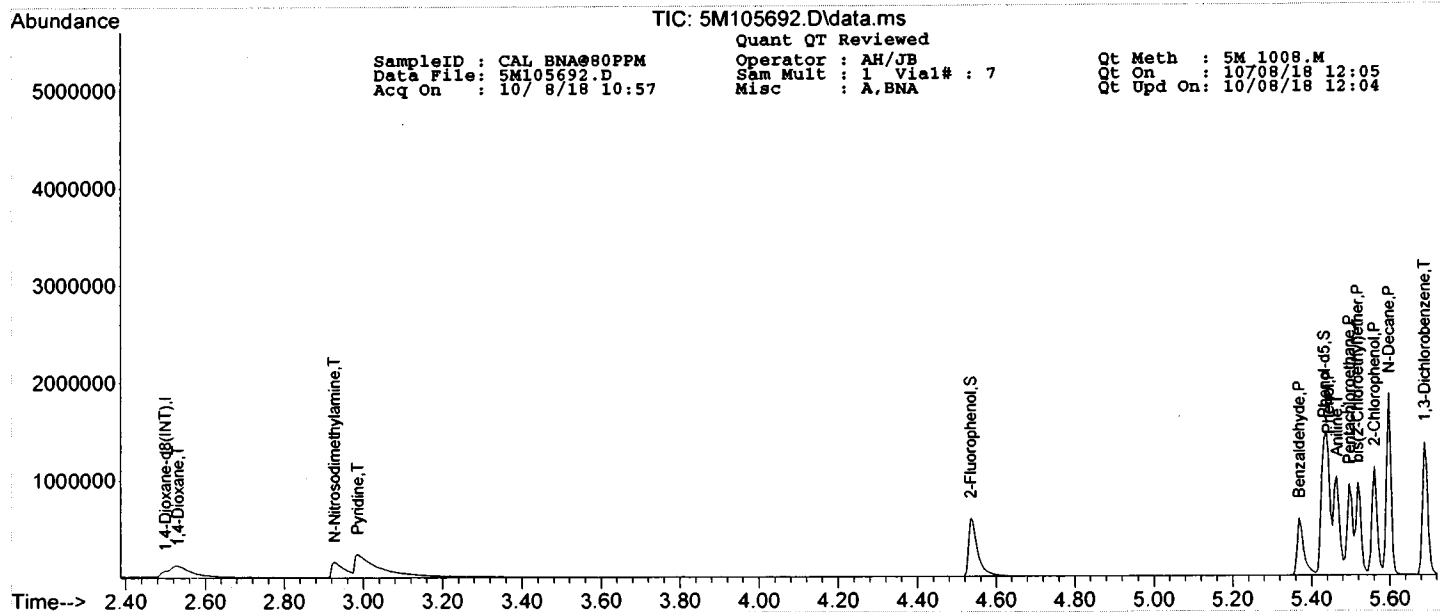
Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.125	138	141753	79.4796	ng	77
67) 2,4-Dinitrophenol	8.221	184	64051	73.5720	ng	36
68) Dibenzofuran	8.349	168	750229	79.1855	ng	87
69) 2,4-Dinitrotoluene	8.333	165	171752	74.6008	ng	67
70) 4-Nitrophenol	8.258	65	113370	71.2990	ng	86
71) 2,3,4,6-Tetrachlorophenol	8.456	232	140017	72.5552	ng	84
72) Fluorene	8.670	166	617153	77.2809	ng	99
73) 4-Chlorophenyl-phenyle...	8.654	204	275935	72.6269	ng	89
74) Diethylphthalate	8.536	149	584527	74.4199	ng	99
75) 4-Nitroaniline	8.691	138	166214	79.8750	ng	80
76) Atrazine	9.300	200	173121	77.6627	ng	97
78) 4,6-Dinitro-2-methylph...	8.713	198	83642	73.6443	ng	47
79) n-Nitrosodiphenylamine	8.771	169	506460	79.7217	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	706578	83.6436	ng	92
82) 4-Bromophenyl-phenylether	9.140	248	151817	70.7191	ng	87
83) Hexachlorobenzene	9.209	284	142714	66.6696	ng	76
84) N-Octadecane	9.466	57	408486	84.4834	ng	83
85) Pentachlorophenol	9.412	266	72071	70.2203	ng	98
86) Phenanthrene	9.642	178	862318	78.0553	ng	99
87) Anthracene	9.701	178	867349	77.7227	ng	100
88) Carbazole	9.872	167	822291	81.2157	ng	97
89) Di-n-butylphthalate	10.240	149	972924	80.3000	ng	97
90) Fluoranthene	10.972	202	919100	75.7309	ng	92
92) Pyrene	11.234	202	944727	79.3044	ng	90
93) Benzidine	11.127	184	337163	83.5721	ng	89
95) 4,4'-DDE	11.346	246	194502	81.3838	ng	90
96) 4,4'-DDD	11.747	235	322063	86.8318	ng	89
97) Butylbenzylphthalate	12.003	149	423283	79.5412	ng	74
98) 4,4'-DDT	12.100	235	283463	89.9771	ng	93
99) 3,3'-Dichlorobenzidine	12.628	252	248821	76.4243	ng	97
100) Benzo[a]anthracene	12.655	228	916693	79.6494	ng	100
101) Chrysene	12.698	228	827243	74.9002	ng	99
102) bis(2-Ethylhexyl)phtha...	12.692	149	613520	81.6018	ng	96
104) Di-n-octylphthalate	13.440	149	956766	81.0177	ng	99
105) Benzo[b]fluoranthene	13.873	252	765584	75.7517	ng	97
106) Benzo[k]fluoranthene	13.905	252	738360m	73.9444	ng	
107) Benzo[a]pyrene	14.226	252	769957	80.0268	ng	94
108) Indeno[1,2,3-cd]pyrene	15.567	276	850136	78.3221	ng	95
109) Dibenzo[a,h]anthracene	15.583	278	725286	78.9065	ng	94
110) Benzo[g,h,i]perylene	15.935	276	689584	75.0284	ng	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed



8101509 0333

SampleID : CAL BNA@120PPM
Data File: 5M105691.D
Acq On : 10/ 8/18 10:34

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 5M 1000
Qt On : 10/08/18 12:05
Qt Upd On: 10/08/18 12:04

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	59301	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	111021	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	404863	40.00	ng	0.00
50) Acenaphthene-d10	8.168	164	233227	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	385060	40.00	ng	0.00
91) Chrysene-d12	12.671	240	391944	40.00	ng	0.00
103) Perylene-d12	14.279	264	327733	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	433098	129.17	ng	0.00
Spiked Amount 100.000			Recovery	=	129.17%	
16) Phenol-d5	5.432	99	622832	122.71	ng	0.00
Spiked Amount 100.000			Recovery	=	122.71%	
32) Nitrobenzene-d5	6.196	128	80310	67.92	ng	0.00
Spiked Amount 50.000			Recovery	=	135.84%	
55) 2-Fluorobiphenyl	7.580	172	468592	61.95	ng	0.00
Spiked Amount 50.000			Recovery	=	123.90%	
80) 2,4,6-Tribromophenol	8.905	330	93774	110.50	ng	0.00
Spiked Amount 100.000			Recovery	=	110.50%	
94) Terphenyl-d14	11.416	244	417456	61.40	ng	0.00
Spiked Amount 50.000			Recovery	=	122.80%	
Target Compounds						
8) 1,4-Dioxane	2.537	88	185321	120.1015	ng	89
9) Pyridine	2.986	79	496436	113.4968	ng	74
10) N-Nitrosodimethylamine	2.932	74	286057	116.0142	ng	80
12) Benzaldehyde	5.368	77	188098	80.2466	ng	83
13) Aniline	5.464	93	648049	111.9525	ng	46
14) Pentachloroethane	5.502	117	155005	114.9098	ng	80
15) bis(2-Chloroethyl)ether	5.523	93	474881	111.8525	ng	83
17) Phenol	5.448	94	635051	107.2023	ng	85
18) 2-Chlorophenol	5.566	128	470137	109.5044	ng	80
19) N-Decane	5.598	57	524842	110.4137	ng	88
20) 1,3-Dichlorobenzene	5.694	146	504887	103.6864	ng	98
22) 1,4-Dichlorobenzene	5.758	146	519709	116.2059	ng	98
23) 1,2-Dichlorobenzene	5.881	146	484048	113.5557	ng	98
24) Benzyl alcohol	5.865	108	312505	122.9984	ng	71
25) bis(2-chloroisopropyl)...	5.967	45	654780	113.2663	ng	100
26) 2-Methylphenol	5.951	108	433950	114.4656	ng	99
27) Acetophenone	6.079	105	593894	112.4567	ng	80
28) Hexachloroethane	6.154	117	197833	117.3754	ng	85
29) N-Nitroso-di-n-propyla...	6.079	70	302992	105.3806	ng	69
30) 3&4-Methylphenol	6.079	108	410839	106.4915	ng	99
33) Nitrobenzene	6.212	77	481355	110.4022	ng	83
34) Isophorone	6.399	82	851554	114.2061	ng	89
35) 2-Nitrophenol	6.458	139	243866	122.8034	ng	92
36) 2,4-Dimethylphenol	6.490	107	462845	108.7300	ng	94
37) Benzoic Acid	6.618	105	436411	152.1162	ng	89
38) bis(2-Chloroethoxy)met...	6.560	93	532607	119.9905	ng	98
39) 2,4-Dichlorophenol	6.645	162	379367	117.2499	ng	86
40) 1,2,4-Trichlorobenzene	6.704	180	401604	109.8325	ng	99
41) Naphthalene	6.768	128	1330124	114.0407	ng	99
42) 4-Chloroaniline	6.805	127	438848	111.1117	ng	91
43) Hexachlorobutadiene	6.853	225	213364	98.2459	ng	97
44) Caprolactam	7.104	113	151071	126.3253	ng	70
45) 4-Chloro-3-methylphenol	7.174	107	381163	110.9048	ng	80
46) 2-Methylnaphthalene	7.297	142	876990	109.3126	ng	99
47) 1-Methylnaphthalene	7.377	142	863188	109.5569	ng	93
48) Methylnaphthalenes (To...	7.297	142	1727823m	217.8777	ng	
49) 1,1'-Biphenyl	7.665	154	1040003	107.4976	ng	96
51) 1,2,4,5-Tetrachloroben...	7.430	216	409183	122.2997	ng	97
52) Hexachlorocyclopentadiene	7.414	237	182102	107.9717	ng	100
53) 2,4,6-Trichlorophenol	7.521	196	248975	114.3354	ng	98
54) 2,4,5-Trichlorophenol	7.553	196	264686	115.5010	ng	98
56) 2-Chloronaphthalene	7.692	162	797130	115.5068	ng	93
57) 1,4-Dimethylnaphthalene	7.970	156	631164	113.8114	ng	93
58) Dimethylnaphthalenes (...)	7.970	156	631164	113.8114	ng	93
59) Diphenyl Ether	7.751	170	587433	119.0206	ng	81
60) 2-Nitroaniline	7.772	65	309869	108.4567	ng	67
61) Coumarin	7.965	146	303331	111.6550	ng	65
62) Acenaphthylene	8.045	152	1218567	117.8909	ng	100
63) Dimethylphthalate	7.922	163	905331	111.0302	ng	99
64) 2,6-Dinitrotoluene	7.975	165	197023	111.1622	ng	73
65) Acenaphthene	8.194	153	811576	114.1354	ng	98

SampleID : CAL BNA@120PPM
 Data File: 5M105691.D
 Acq On : 10/ 8/18 10:34

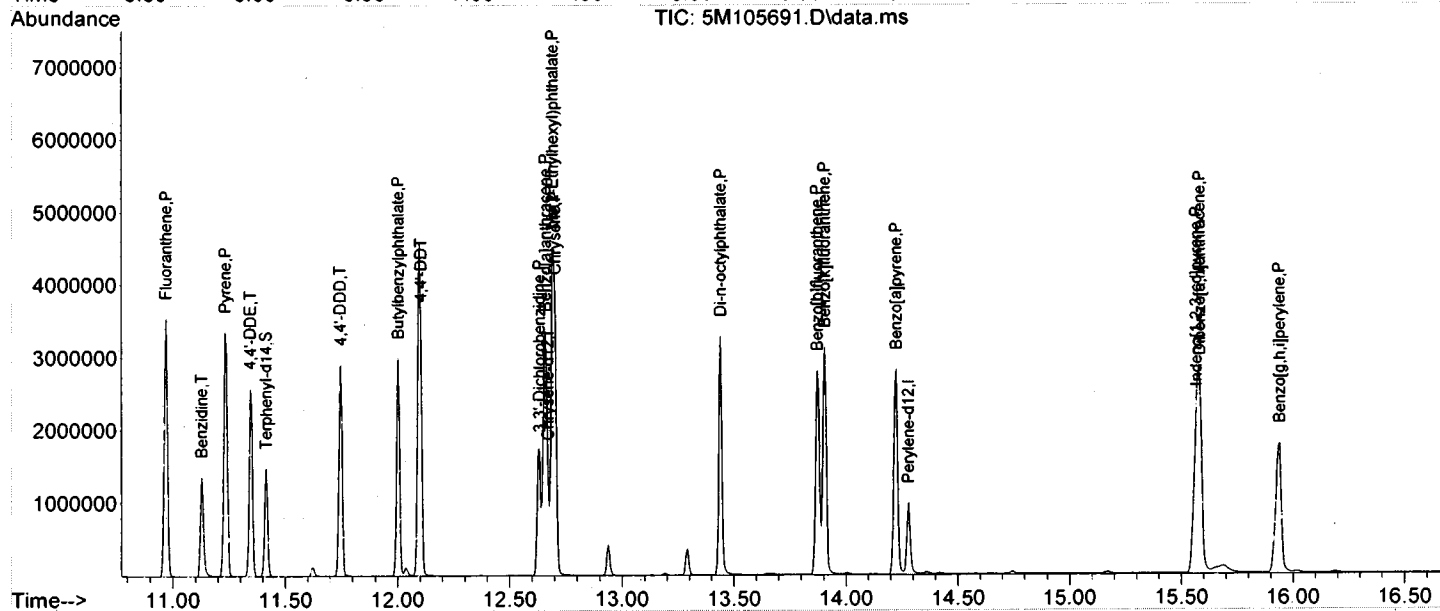
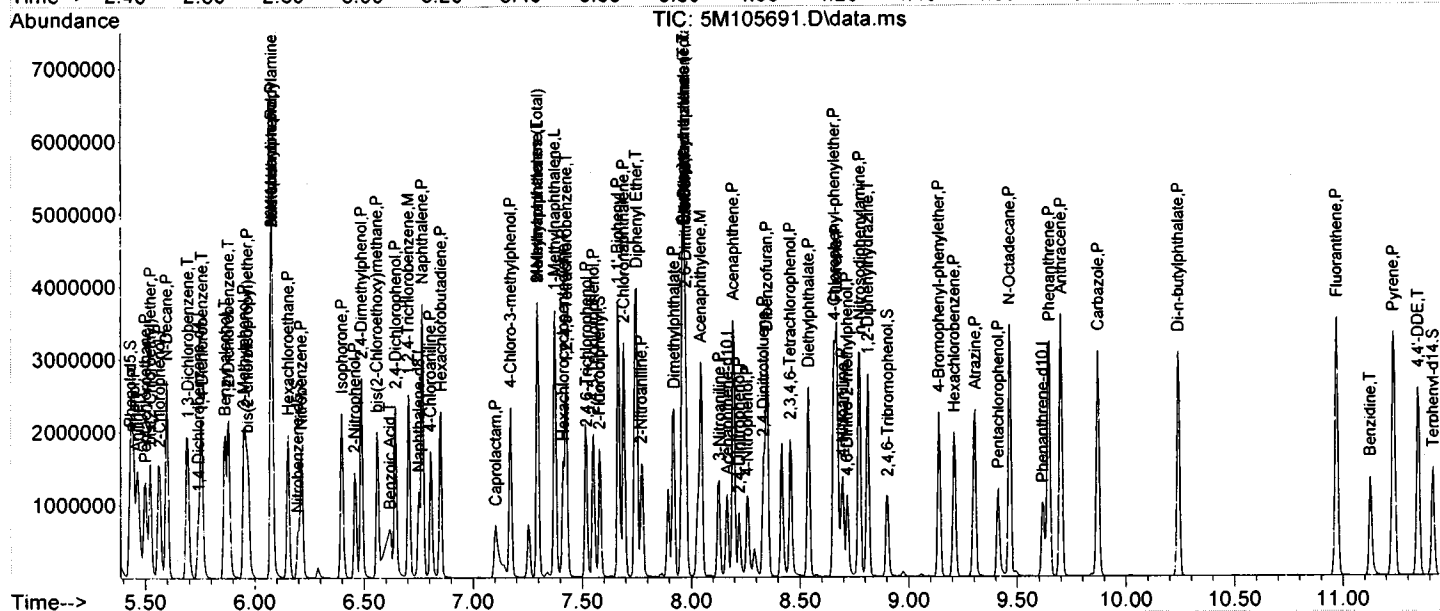
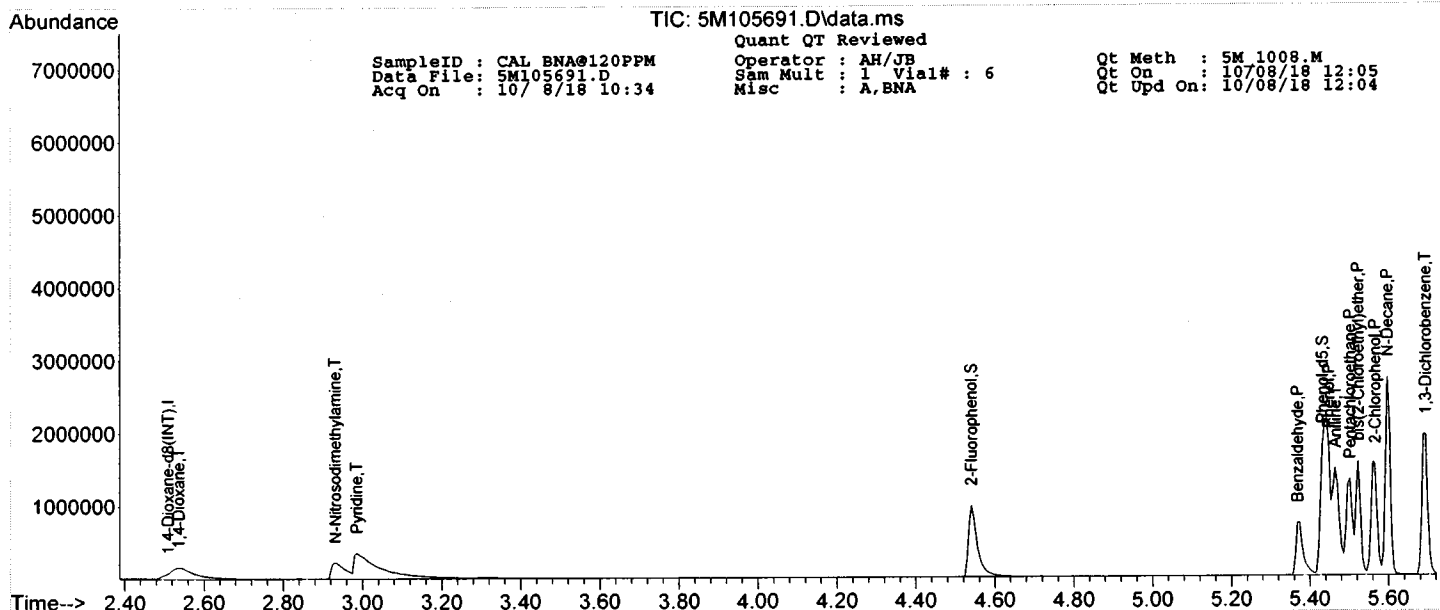
Operator : AH/JB
 Sam Mult : 1 Vial# : 6
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.130	138	206856	114.5985	ng	73
67)	2,4-Dinitrophenol	8.221	184	109387	109.0929	ng	37
68)	Dibenzofuran	8.349	168	1153490	115.3500	ng	88
69)	2,4-Dinitrotoluene	8.333	165	278851	112.9986	ng	73
70)	4-Nitrophenol	8.258	65	181626	104.6349	ng	90
71)	2,3,4,6-Tetrachlorophenol	8.456	232	223574	112.6166	ng	85
72)	Fluorene	8.670	166	916626	111.5745	ng	99
73)	4-Chlorophenyl-phenyle...	8.659	204	425368	108.8301	ng	85
74)	Diethylphthalate	8.542	149	909002	112.4975	ng	98
75)	4-Nitroaniline	8.696	138	259974	117.0858	ng	80
76)	Atrazine	9.305	200	270752	118.0669	ng	95
78)	4,6-Dinitro-2-methylph...	8.718	198	140345	111.8505	ng	53
79)	n-Nitrosodiphenylamine	8.777	169	793704	121.2518	ng	99
81)	1,2-Diphenylhydrazine	8.814	77	1098563	126.2106	ng	87
82)	4-Bromophenyl-phenylether	9.140	248	233645	105.6260	ng	88
83)	Hexachlorobenzene	9.209	284	218242	98.9459	ng	82
84)	N-Octadecane	9.466	57	634037	127.2645	ng	84
85)	Pentachlorophenol	9.412	266	121821	104.3307	ng	96
86)	Phenanthrene	9.647	178	1306407	114.7655	ng	100
87)	Anthracene	9.701	178	1378456	119.8796	ng	98
88)	Carbazole	9.872	167	1260268	120.8024	ng	98
89)	Di-n-butylphthalate	10.240	149	1535960	117.9963	ng	98
90)	Fluoranthene	10.972	202	1427335	114.1392	ng	96
92)	Pyrene	11.234	202	1470638	121.5665	ng	93
93)	Benzidine	11.127	184	504521	124.2496	ng	89
95)	4,4'-DDE	11.346	246	299099	123.2383	ng	92
96)	4,4'-DDD	11.747	235	502521	133.4165	ng	89
97)	Butylbenzylphthalate	12.003	149	692327	121.8441	ng	77
98)	4,4'-DDT	12.105	235	421440	131.7312	ng	92
99)	3,3'-Dichlorobenzidine	12.634	252	376142	118.1426	ng	97
100)	Benzo[a]anthracene	12.660	228	1358980	116.2757	ng	99
101)	Chrysene	12.703	228	1255017	111.8966	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.692	149	945255	118.0016	ng	96
104)	Di-n-octylphthalate	13.440	149	1594223	126.2951	ng	99
105)	Benzo[b]fluoranthene	13.873	252	1229084	120.9250	ng	97
106)	Benzo[k]fluoranthene	13.905	252	1213747m	120.8648	ng	
107)	Benzo[a]pyrene	14.226	252	1204141	124.4461	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.567	276	1315164	120.4788	ng	97
109)	Dibenzo[a,h]anthracene	15.583	278	1119605	121.1164	ng	94
110)	Benzo[g,h,i]perylene	15.941	276	1112738	120.3833	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed



8101509 0336

SampleID : CAL BNA@160PPM
 Data File: 5M105690.D
 Acq On : 10/ 8/18 10:11

Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.494	96	58983	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	111440	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	407314	40.00	ng	0.00
50) Acenaphthene-d10	8.168	164	230779	40.00	ng	0.00
77) Phenanthrene-d10	9.621	188	375774	40.00	ng	0.00
91) Chrysene-d12	12.671	240	383131	40.00	ng	0.00
103) Perylene-d12	14.285	264	309368	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.535	112	565555	169.58	ng	0.00
Spiked Amount 100.000			Recovery	=	169.58%	
16) Phenol-d5	5.438	99	819686	162.37	ng	0.00
Spiked Amount 100.000			Recovery	=	162.37%	
32) Nitrobenzene-d5	6.202	128	106077	89.17	ng	0.00
Spiked Amount 50.000			Recovery	=	178.34%	
55) 2-Fluorobiphenyl	7.585	172	623521	83.30	ng	0.00
Spiked Amount 50.000			Recovery	=	166.60%	
80) 2,4,6-Tribromophenol	8.905	330	128801	155.52	ng	0.00
Spiked Amount 100.000			Recovery	=	155.52%	
94) Terphenyl-d14	11.421	244	546394	82.22	ng	0.00
Spiked Amount 50.000			Recovery	=	164.44%	
Target Compounds						
8) 1,4-Dioxane	2.526	88	250801m	158.7300	ng	
9) Pyridine	2.970	79	683906	157.1997	ng	75
10) N-Nitrosodimethylamine	2.916	74	388010	158.2110	ng	80
12) Benzaldehyde	5.368	77	223050	95.6709	ng	80
13) Aniline	5.465	93	831406	142.5641	ng	46
14) Pentachloroethane	5.497	117	206544	153.9427	ng	81
15) bis(2-Chloroethyl)ether	5.523	93	611809	142.2153	ng	83
17) Phenol	5.449	94	800934	135.9337	ng	85
18) 2-Chlorophenol	5.566	128	613630	143.6974	ng	81
19) N-Decane	5.598	57	679448	143.7096	ng	87
20) 1,3-Dichlorobenzene	5.689	146	669310	138.1943	ng	98
22) 1,4-Dichlorobenzene	5.753	146	681613	151.8342	ng	97
23) 1,2-Dichlorobenzene	5.881	146	638186	149.1529	ng	98
24) Benzyl alcohol	5.865	108	419516	164.4958	ng	69
25) bis(2-chloroisopropyl)...	5.967	45	864120	148.9167	ng	99
26) 2-Methylphenol	5.951	108	574329	150.9246	ng	98
27) Acetophenone	6.079	105	748152	141.1336	ng	77
28) Hexachloroethane	6.154	117	260600	154.0341	ng	86
29) N-Nitroso-di-n-propyla...	6.079	70	382209	132.4325	ng	68
30) 3&4-Methylphenol	6.084	108	510367	131.7922	ng	98
33) Nitrobenzene	6.212	77	640121	145.9329	ng	84
34) Isophorone	6.399	82	1123712	149.7996	ng	91
35) 2-Nitrophenol	6.464	139	333648	167.0039	ng	84
36) 2,4-Dimethylphenol	6.490	107	613816	143.3279	ng	97
37) Benzoic Acid	6.635	105	613831	189.6086	ng	89
38) bis(2-Chloroethoxy)met...	6.565	93	719258	161.0659	ng	97
39) 2,4-Dichlorophenol	6.645	162	505746	155.3689	ng	87
40) 1,2,4-Trichlorobenzene	6.709	180	528306	143.6141	ng	98
41) Naphthalene	6.768	128	1727135	143.8575	ng	98
42) 4-Chloroaniline	6.811	127	527701	140.7952	ng	94
43) Hexachlorobutadiene	6.854	225	285693	130.7590	ng	96
44) Caprolactam	7.121	113	199920	159.0967	ng	69
45) 4-Chloro-3-methylphenol	7.179	107	505999	146.3417	ng	79
46) 2-Methylnaphthalene	7.297	142	1143178	141.6342	ng	98
47) 1-Methylnaphthalene	7.377	142	1091155	137.6574	ng	92
48) Methylnaphthalenes (To...	7.297	142	2218277m	278.0404	ng	
49) 1,1'-Biphenyl	7.671	154	1303957	133.9696	ng	95
51) 1,2,4,5-Tetrachloroben...	7.431	216	518364	156.5760	ng	98
52) Hexachlorocyclopentadiene	7.414	237	244825	138.0173	ng	100
53) 2,4,6-Trichlorophenol	7.521	196	321592	144.4268	ng	100
54) 2,4,5-Trichlorophenol	7.553	196	346789	152.9335	ng	95
56) 2-Chloronaphthalene	7.698	162	1040811	152.4168	ng	91
57) 1,4-Dimethylnaphthalene	7.970	156	750556	136.7758	ng	96
58) Dimethylnaphthalenes (...)	7.970	156	750556	136.7758	ng	96
59) Diphenyl Ether	7.751	170	703113	143.9698	ng	89
60) 2-Nitroaniline	7.778	65	422591	145.5499	ng	64
61) Coumarin	7.970	146	359163	133.6089	ng	57
62) Acenaphthylene	8.050	152	1595938	156.0377	ng	99
63) Dimethylphthalate	7.927	163	1188114	147.2565	ng	99
64) 2,6-Dinitrotoluene	7.981	165	259107	147.7413	ng	72
65) Acenaphthene	8.200	153	1055786	150.0547	ng	96

SampleID : CAL_BNA@160PPM
 Data File: 5M105690.D
 Acq On : 10/ 8/18 10:11

Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.130	138	265882	151.4812	ng	80
67) 2,4-Dinitrophenol	8.226	184	162564	147.0597	ng	42
68) Dibenzofuran	8.355	168	1472395	145.7048	ng	90
69) 2,4-Dinitrotoluene	8.339	165	372353	147.2114	ng	73
70) 4-Nitrophenol	8.264	65	259056	141.7343	ng	88
71) 2,3,4,6-Tetrachlorophenol	8.462	232	299675	152.5508	ng	85
72) Fluorene	8.675	166	1175429	144.5945	ng	98
73) 4-Chlorophenyl-phenyle...	8.659	204	541018	139.8874	ng	89
74) Diethylphthalate	8.547	149	1197352	149.7554	ng	97
75) 4-Nitroaniline	8.702	138	352321	154.7433	ng	81
76) Atrazine	9.311	200	358150	157.8353	ng	96
78) 4,6-Dinitro-2-methylph...	8.723	198	196681	150.4034	ng	51
79) n-Nitrosodiphenylamine	8.777	169	993480	155.5215	ng	99
81) 1,2-Diphenylhydrazine	8.814	77	1462836	172.2139	ng	91
82) 4-Bromophenyl-phenylether	9.145	248	307208	142.3143	ng	86
83) Hexachlorobenzene	9.215	284	287081	133.3722	ng	80
84) N-Octadecane	9.471	57	805884	165.7551	ng	80
85) Pentachlorophenol	9.412	266	172458	138.3414	ng	97
86) Phenanthrene	9.648	178	1707338	153.6930	ng	99
87) Anthracene	9.706	178	1795002	159.9628	ng	99
88) Carbazole	9.877	167	1676427	164.6641	ng	98
89) Di-n-butylphthalate	10.246	149	2038935	154.4041	ng	98
90) Fluoranthene	10.978	202	1855766	152.0665	ng	93
92) Pyrene	11.240	202	1892644	160.0493	ng	93
93) Benzidine	11.133	184	641080	162.9000	ng	89
95) 4,4'-DDE	11.352	246	400486	168.8087	ng	91
96) 4,4'-DDD	11.752	235	657247	178.5092	ng	89
97) Butylbenzylphthalate	12.009	149	906067	156.7915	ng	75
98) 4,4'-DDT	12.105	235	545497	174.4303	ng	91
99) 3,3'-Dichlorobenzidine	12.634	252	468065	155.8079	ng	98
100) Benzo[a]anthracene	12.661	228	1782828	156.0493	ng	98
101) Chrysene	12.709	228	1617705	147.5514	ng	99
102) bis(2-Ethylhexyl)phtha...	12.693	149	1236139	151.3617	ng	97
104) Di-n-octylphthalate	13.446	149	2140020	169.9172	ng	100
105) Benzo[b]fluoranthene	13.879	252	1636220	170.5380	ng	97
106) Benzo[k]fluoranthene	13.911	252	1541402m	162.6045	ng	
107) Benzo[a]pyrene	14.231	252	1562557	171.0742	ng	95
108) Indeno[1,2,3-cd]pyrene	15.577	276	1706410	165.5995	ng	96
109) Dibenzo[a,h]anthracene	15.593	278	1429917	163.8679	ng	93
110) Benzo[g,h,i]perylene	15.951	276	1447609	165.9088	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

8101509 0339

SampleID : CAL BNA@196PPM
Data File: 5M105689.D
Acq On : 10/ 8/18 09:45

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/08/18 12:05
Qt Upd On: 10/08/18 12:04

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.499	96	57836	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	107987	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	391665	40.00	ng	0.00
50) Acenaphthene-d10	8.168	164	223278	40.00	ng	0.00
77) Phenanthrene-d10	9.621	188	364137	40.00	ng	0.00
91) Chrysene-d12	12.676	240	375589	40.00	ng	0.01
103) Perylene-d12	14.284	264	282895	40.00	ng	0.00

System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	686151	209.83	ng	0.00
Spiked Amount 100.000			Recovery	=	209.83%	
16) Phenol-d5	5.438	99	1003472	202.71	ng	0.00
Spiked Amount 100.000			Recovery	=	202.71%	
32) Nitrobenzene-d5	6.202	128	129743	113.42	ng	0.00
Spiked Amount 50.000			Recovery	=	226.84%	
55) 2-Fluorobiphenyl	7.585	172	776705	107.25	ng	0.00
Spiked Amount 50.000			Recovery	=	214.50%	
80) 2,4,6-Tribromophenol	8.910	330	155355	193.58	ng	0.01
Spiked Amount 100.000			Recovery	=	193.58%	
94) Terphenyl-d14	11.421	244	676261	103.80	ng	0.00
Spiked Amount 50.000			Recovery	=	207.60%	

Target Compounds						Qvalue
8) 1,4-Dioxane	2.526	88	301356	190.0860	ng	88
9) Pyridine	2.970	79	812292	190.4128	ng	76
10) N-Nitrosodimethylamine	2.922	74	463358	192.6811	ng	82
12) Benzaldehyde	5.368	77	251964	110.2160	ng	80
13) Aniline	5.464	93	1016059	175.2963	ng	46
14) Pentachloroethane	5.502	117	246112	187.0716	ng	79
15) bis(2-Chloroethyl)ether	5.523	93	760049	176.5091	ng	85
17) Phenol	5.454	94	1079250	186.8019	ng	90
18) 2-Chlorophenol	5.566	128	758801	181.2169	ng	82
19) N-Decane	5.598	57	820629	177.0129	ng	88
20) 1,3-Dichlorobenzene	5.694	146	800163	168.4884	ng	97
22) 1,4-Dichlorobenzene	5.758	146	820701	188.6629	ng	98
23) 1,2-Dichlorobenzene	5.881	146	764628	184.4184	ng	97
24) Benzyl alcohol	5.865	108	497509	201.3154	ng	73
25) bis(2-chloroisopropyl)...	5.972	45	1050288	186.7873	ng	98
26) 2-Methylphenol	5.956	108	687289	186.3838	ng	98
27) Acetophenone	6.079	105	860037	167.4277	ng	75
28) Hexachloroethane	6.154	117	316247	192.9028	ng	84
29) N-Nitroso-di-n-propyla...	6.079	70	443115	158.4454	ng	69
30) 3&4-Methylphenol	6.084	108	587122	156.4607	ng	99
33) Nitrobenzene	6.218	77	781628	185.3130	ng	81
34) Isophorone	6.405	82	1377435	190.9595	ng	89
35) 2-Nitrophenol	6.463	139	396443	206.3637	ng	88
36) 2,4-Dimethylphenol	6.495	107	745552	181.0444	ng	95
37) Benzoic Acid	6.645	105	738904	218.8518	ng	88
38) bis(2-Chloroethoxy)met...	6.565	93	880807	205.1229	ng	97
39) 2,4-Dichlorophenol	6.650	162	587681	187.7534	ng	87
40) 1,2,4-Trichlorobenzene	6.709	180	627238	177.3203	ng	98
41) Naphthalene	6.773	128	2056610	174.1424	ng	99
42) 4-Chloroaniline	6.811	127	576724	170.1461	ng	93
43) Hexachlorobutadiene	6.853	225	333739	158.8523	ng	96
44) Caprolactam	7.131	113	246400	194.8694	ng	69
45) 4-Chloro-3-methylphenol	7.179	107	622994	187.3772	ng	83
46) 2-Methylnaphthalene	7.302	142	1356349	174.7593	ng	99
47) 1-Methylnaphthalene	7.377	142	1330528	174.5629	ng	93
48) Methylnaphthalenes (To...	7.302	142	2665562m	347.4526	ng	
49) 1,1'-Biphenyl	7.671	154	1598438	170.7864	ng	97
51) 1,2,4,5-Tetrachloroben...	7.430	216	625799	195.3780	ng	98
52) Hexachlorocyclopentadiene	7.420	237	302010	166.5948	ng	100
53) 2,4,6-Trichlorophenol	7.521	196	395369	177.2727	ng	100
54) 2,4,5-Trichlorophenol	7.559	196	436779	199.0900	ng	98
56) 2-Chloronaphthalene	7.697	162	1254647	189.9035	ng	93
57) 1,4-Dimethylnaphthalene	7.975	156	911075	171.6052	ng	91
58) Dimethylnaphthalenes (...)	7.975	156	911075	171.6052	ng	91
59) Diphenyl Ether	7.751	170	830978	175.8677	ng	87
60) 2-Nitroaniline	7.778	65	504139	175.7140	ng	63
61) Coumarin	7.975	146	433427	166.6519	ng	55
62) Acenaphthylene	8.050	152	1915253	193.5486	ng	99
63) Dimethylphthalate	7.927	163	1454338	186.3082	ng	99
64) 2,6-Dinitrotoluene	7.986	165	316199	186.3518	ng	62
65) Acenaphthene	8.200	153	1256681	184.6074	ng	97

SampleID : CAL_BNA@196PPM

Operator : AH/JB

Qt Meth : 5M_1008.M

Data File: 5M105689.D

Sam Mult : 1 Vial# : 4

Qt On : 10/08/18 12:05

Acq On : 10/ 8/18 09:45

Misc : A,BNA

Qt Upd On: 10/08/18 12:04

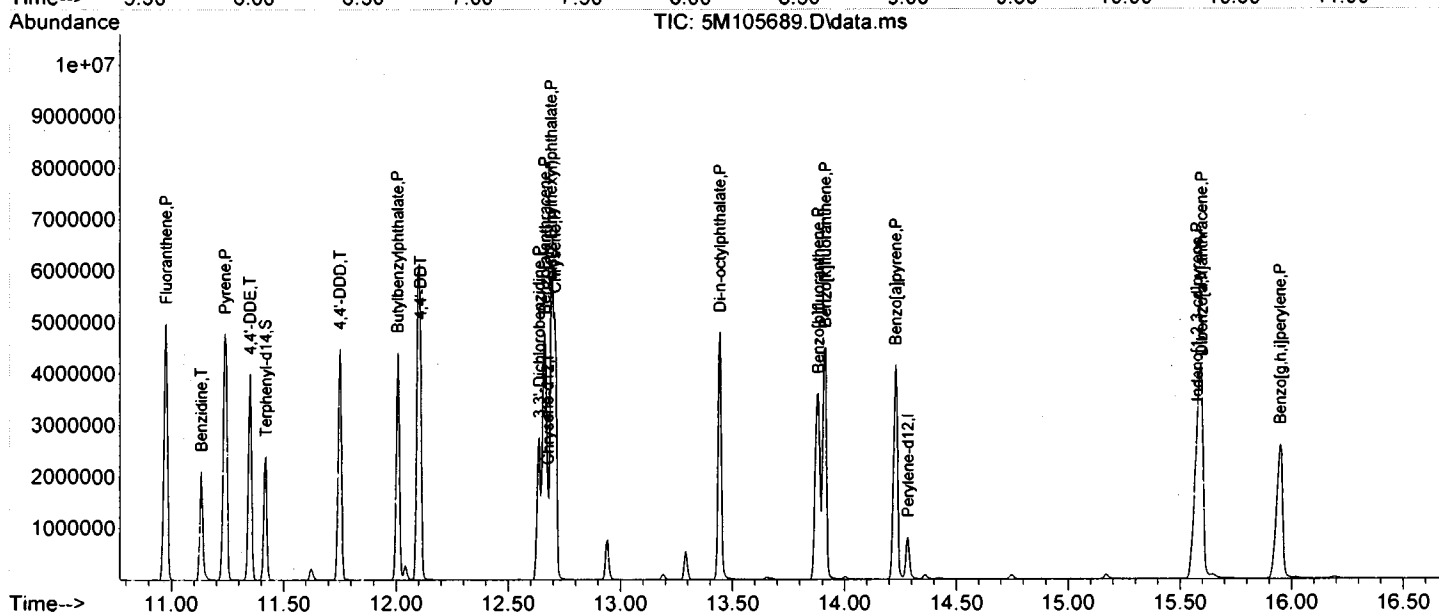
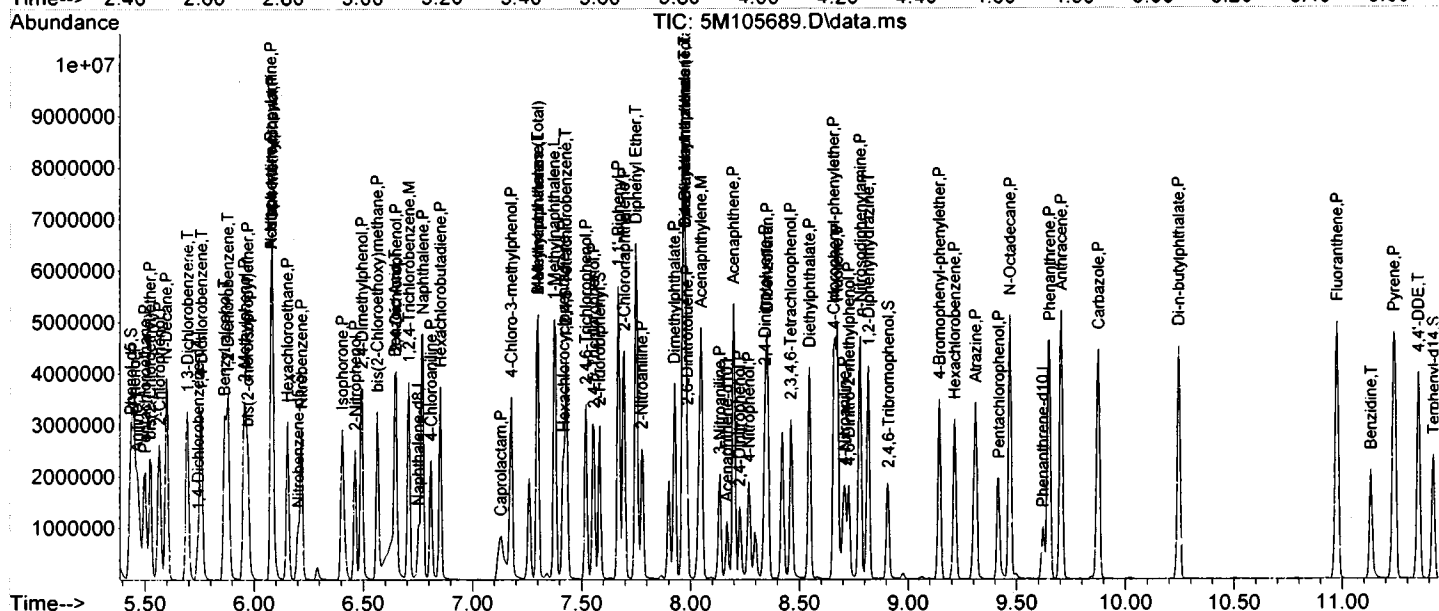
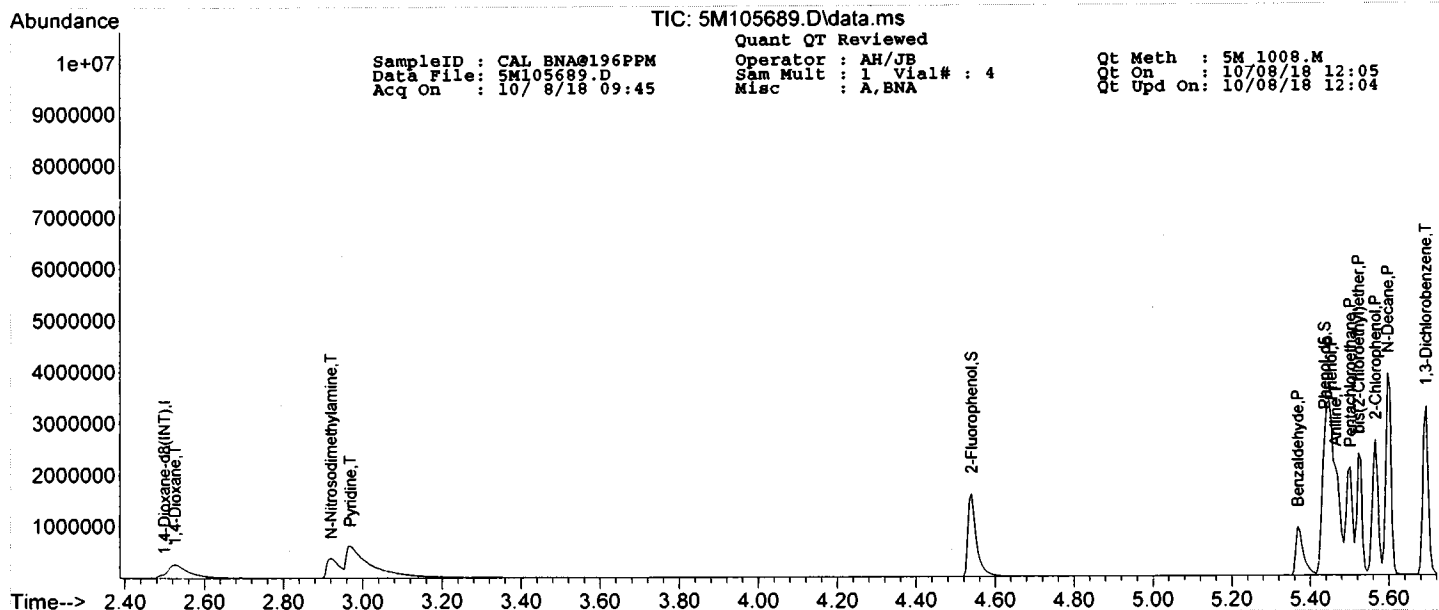
Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\

Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\

Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.136	138	310797	186.0927	ng	75
67)	2,4-Dinitrophenol	8.226	184	182628	163.5045	ng	52
68)	Dibenzofuran	8.355	168	1767362	176.9744	ng	91
69)	2,4-Dinitrotoluene	8.344	165	447109	177.3071	ng	73
70)	4-Nitrophenol	8.269	65	306824	166.7358	ng	88
71)	2,3,4,6-Tetrachlorophenol	8.461	232	353405	185.9460	ng	86
72)	Fluorene	8.675	166	1416158	180.0601	ng	98
73)	4-Chlorophenyl-phenyle...	8.659	204	650000	173.7123	ng	90
74)	Diethylphthalate	8.547	149	1442445	186.4706	ng	98
75)	4-Nitroaniline	8.707	138	423427	186.6770	ng	80
76)	Atrazine	9.311	200	438861	199.9017	ng	98
78)	4,6-Dinitro-2-methylph...	8.729	198	244327	182.9750	ng	58
79)	n-Nitrosodiphenylamine	8.782	169	1243082	200.8135	ng	99
81)	1,2-Diphenylhydrazine	8.819	77	1773120	215.4133	ng	86
82)	4-Bromophenyl-phenylether	9.145	248	371817	177.7490	ng	91
83)	Hexachlorobenzene	9.215	284	345346	165.5683	ng	81
84)	N-Octadecane	9.471	57	968954	205.6645	ng	79
85)	Pentachlorophenol	9.418	266	210848	163.9390	ng	98
86)	Phenanthrene	9.653	178	1994974	185.3249	ng	99
87)	Anthracene	9.706	178	2085999	191.8359	ng	98
88)	Carbazole	9.877	167	1986937	201.4004	ng	98
89)	Di-n-butylphthalate	10.246	149	2417419	183.3695	ng	98
90)	Fluoranthene	10.978	202	2211088	186.9728	ng	98
92)	Pyrene	11.239	202	2285147	197.1212	ng	95
93)	Benzidine	11.133	184	777338	203.3171	ng	88
95)	4,4'-DDE	11.352	246	469093	201.6977	ng	92
96)	4,4'-DDD	11.752	235	802687	222.3887	ng	89
97)	Butylbenzylphthalate	12.009	149	1085829	185.7034	ng	79
98)	4,4'-DDT	12.110	235	653416	213.1345	ng	91
99)	3,3'-Dichlorobenzidine	12.639	252	550528	194.0201	ng	97
100)	Benzo[a]anthracene	12.666	228	2170315	193.7803	ng	98
101)	Chrysene	12.709	228	1957035	182.0861	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.692	149	1478096	178.6132	ng	97
104)	Di-n-octylphthalate	13.446	149	2521801	208.9043	ng	100
105)	Benzo[b]fluoranthene	13.884	252	1945134	221.7068	ng	96
106)	Benzo[k]fluoranthene	13.916	252	1905992m	219.8810	ng	
107)	Benzo[a]pyrene	14.231	252	1862637	223.0114	ng	95
108)	Indeno[1,2,3-cd]pyrene	15.577	276	2035149	215.9841	ng	98
109)	Dibenzo[a,h]anthracene	15.599	278	1733736	217.2782	ng	92
110)	Benzo[g,h,i]perylene	15.951	276	1728444	216.6325	ng	81

(#)=qualifier out of range (m)=manual integration (+)=signals summed



SampleID : CAL BNA@.5PPM
Data File: 5M105694.D
Acq On : 10/ 8/18 11:49

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 5M 1000
Qt On : 10/08/18 12:05
Qt Upd On: 10/08/18 12:04

8101509 0342

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	

Internal Standards							
7) 1,4-Dioxane-d8 (INT)	2.499	96	57656	40.00	ng	0.00	
21) 1,4-Dichlorobenzene-d4	5.742	152	108772	40.00	ng	0.00	
31) Naphthalene-d8	6.747	136	398826	40.00	ng	0.00	
50) Acenaphthene-d10	8.162	164	234276	40.00	ng	0.00	
77) Phenanthrene-d10	9.615	188	407895	40.00	ng	0.00	
91) Chrysene-d12	12.660	240	351887	40.00	ng	0.00	
103) Perylene-d12	14.274	264	294290	40.00	ng	0.00	
System Monitoring Compounds							
11) 2-Fluorophenol	0.000	112	0	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng		
Spiked Amount 100.000			Recovery	=	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng		
Spiked Amount 50.000			Recovery	=	0.00%		
Target Compounds							
8) 1,4-Dioxane	2.558	88	555m	0.4072	ng		Qvalue
9) Pyridine	0.000		0	N.D.			
10) N-Nitrosodimethylamine	0.000		0	N.D.			
12) Benzaldehyde	0.000		0	N.D.			
13) Aniline	5.512	93	927m	0.1728	ng		
14) Pentachloroethane	0.000		0	N.D. d			
15) bis(2-Chloroethyl)ether	5.550	93	1882	0.4896	ng	67	
17) Phenol	0.000		0	N.D. d			
18) 2-Chlorophenol	0.000		0	N.D. d			
19) N-Decane	0.000		0	N.D. d			
20) 1,3-Dichlorobenzene	0.000		0	N.D. d			
22) 1,4-Dichlorobenzene	0.000		0	N.D. d			
23) 1,2-Dichlorobenzene	0.000		0	N.D. d			
24) Benzyl alcohol	0.000		0	N.D. d			
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d			
26) 2-Methylphenol	5.972	108	1487m	0.4003	ng		
27) Acetophenone	0.000		0	N.D. d			
28) Hexachloroethane	0.000		0	N.D. d			
29) N-Nitroso-di-n-propyla...	6.079	70	954	0.3387	ng	70	
30) 3&4-Methylphenol	6.121	108	927	0.2453	ng	69	
33) Nitrobenzene	0.000		0	N.D. d			
34) Isophorone	0.000		0	N.D. d			
35) 2-Nitrophenol	0.000		0	N.D.			
36) 2,4-Dimethylphenol	6.501	107	1215	0.2897	ng	73	
37) Benzoic Acid	0.000		0	N.D. d			
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d			
39) 2,4-Dichlorophenol	6.677	162	703m	0.2206	ng		
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d			
41) Naphthalene	6.768	128	5713	0.5453	ng	97	
42) 4-Chloroaniline	6.837	127	1029	0.2182	ng	68	
43) Hexachlorobutadiene	0.000		0	N.D. d			
44) Caprolactam	0.000		0	N.D.			
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d			
46) 2-Methylnaphthalene	0.000		0	N.D. d			
47) 1-Methylnaphthalene	0.000		0	N.D. d			
48) Methylnaphthalenes (To...	0.000		0	N.D. d			
49) 1,1'-Biphenyl	0.000		0	N.D. d			
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d			
52) Hexachlorocyclopentadiene	0.000		0	N.D.			
53) 2,4,6-Trichlorophenol	0.000		0	N.D.			
54) 2,4,5-Trichlorophenol	0.000		0	N.D.			
56) 2-Chloronaphthalene	0.000		0	N.D. d			
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d			
58) Dimethylnaphthalenes (...)	0.000		0	N.D. d			
59) Diphenyl Ether	0.000		0	N.D. d			
60) 2-Nitroaniline	0.000		0	N.D.			
61) Coumarin	0.000		0	N.D. d			
62) Acenaphthylene	0.000		0	N.D. d			
63) Dimethylphthalate	0.000		0	N.D. d			
64) 2,6-Dinitrotoluene	0.000		0	N.D. d			
65) Acenaphthene	0.000		0	N.D. d			

SampleID : CAL BNA@.5PPM
 Data File: 5M105694.D
 Acq On : 10/ 8/18 11:49

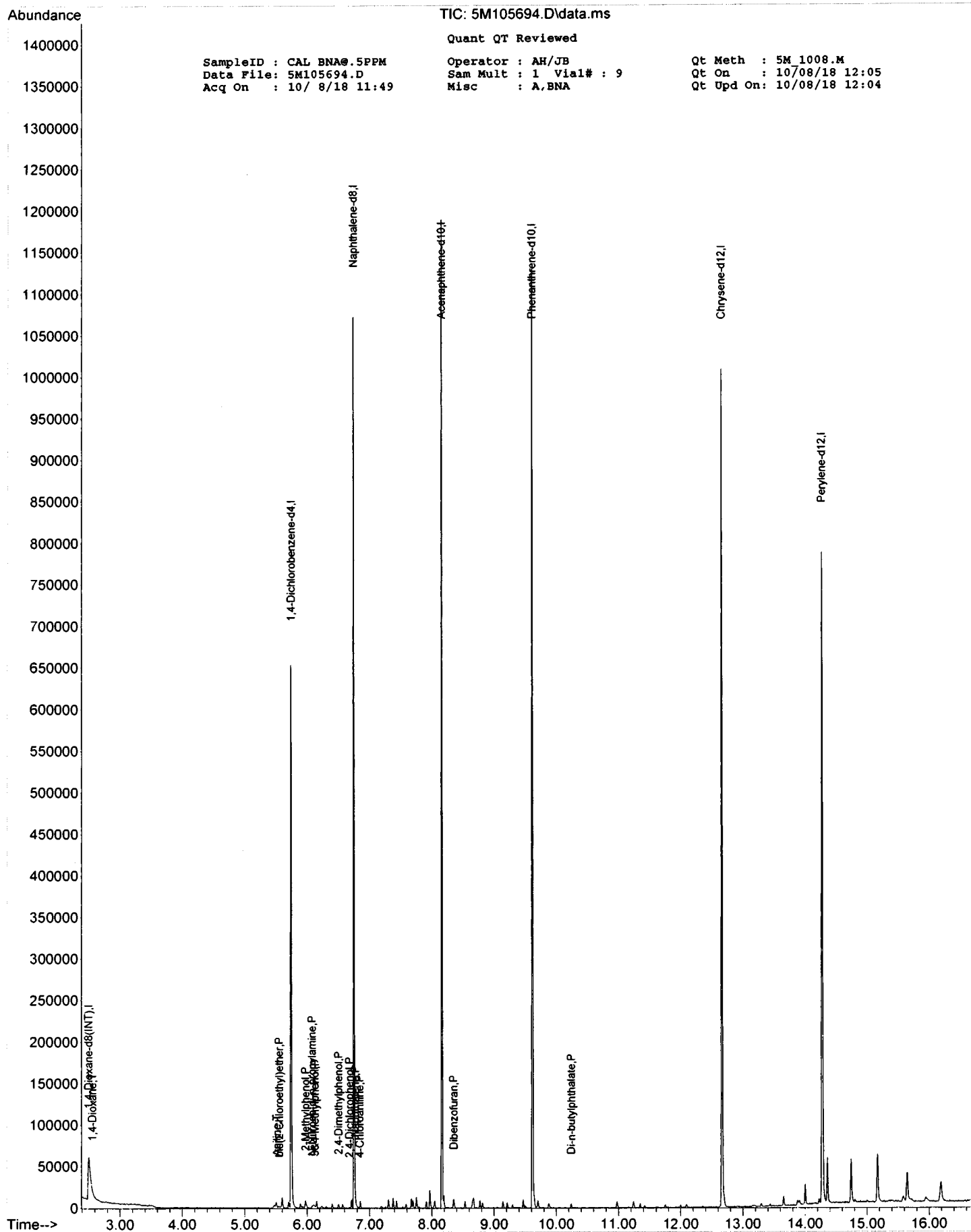
Operator : AH/JB
 Sam Mult : 1 Vial# : 9
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/08/18 12:05
 Qt Upd On: 10/08/18 12:04

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.		
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.349	168	4570	0.4948	ng	95
69) 2,4-Dinitrotoluene	0.000		0	N.D. d		
70) 4-Nitrophenol	0.000		0	N.D. d		
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
72) Fluorene	0.000		0	N.D. d		
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D. d		
74) Diethylphthalate	0.000		0	N.D. d		
75) 4-Nitroaniline	0.000		0	N.D.		
76) Atrazine	0.000		0	N.D. d		
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D. d		
81) 1,2-Diphenylhydrazine	0.000		0	N.D. d		
82) 4-Bromophenyl-phenylether	0.000		0	N.D. d		
83) Hexachlorobenzene	0.000		0	N.D. d		
84) N-Octadecane	0.000		0	N.D. d		
85) Pentachlorophenol	0.000		0	N.D.		
86) Phenanthrene	0.000		0	N.D. d		
87) Anthracene	0.000		0	N.D. d		
88) Carbazole	0.000		0	N.D. d		
89) Di-n-butylphthalate	10.240	149	2837	0.2359	ng	91
90) Fluoranthene	0.000		0	N.D. d		
92) Pyrene	0.000		0	N.D. d		
93) Benzidine	0.000		0	N.D.		
95) 4,4'-DDE	0.000		0	N.D. d		
96) 4,4'-DDD	0.000		0	N.D. d		
97) Butylbenzylphthalate	0.000		0	N.D. d		
98) 4,4'-DDT	0.000		0	N.D.		
99) 3,3'-Dichlorobenzidine	0.000		0	N.D. d		
100) Benzo[a]anthracene	0.000		0	N.D. d		
101) Chrysene	0.000		0	N.D. d		
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D. d		
104) Di-n-octylphthalate	0.000		0	N.D. d		
105) Benzo[b]fluoranthene	0.000		0	N.D. d		
106) Benzo[k]fluoranthene	0.000		0	N.D. d		
107) Benzo[a]pyrene	0.000		0	N.D. d		
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D. d		
109) Dibenzo[a,h]anthracene	0.000		0	N.D. d		
110) Benzo[g,h,i]perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Level #:	Data File:			Cal Identifier:			Analysis Date/Time			Level #:	Data File:			Cal Identifier:			Analysis Date/Time																		
	1	2	3	4	5	6	7	8	9		10	11	12	13	14	15	16	17	18																
1	9M88309.D	CAL BNA@50PPM	10/08/18 13:26	2	9M88302.D	CAL BNA@20PPM	10/08/18 10:42	3	9M88301.D	CAL BNA@10PPM	10/08/18 10:20	4	9M88307.D	CAL BNA@20PPM	10/08/18 12:38	5	9M88305.D	CAL BNA@120PPM	10/08/18 11:52	6	9M88304.D	CAL BNA@160PPM	10/08/18 11:05	7	9M88308.D	CAL BNA@5PPM	10/08/18 13:02	8	9M88303.D	CAL BNA@196PPM	10/08/18 11:05				
9	9M88308.D	CAL BNA@5PPM	10/08/18 13:02	8	9M88303.D	CAL BNA@196PPM	10/08/18 11:05	7	9M88304.D	CAL BNA@160PPM	10/08/18 11:29	6	9M88305.D	CAL BNA@120PPM	10/08/18 12:38	5	9M88307.D	CAL BNA@20PPM	10/08/18 12:38	4	9M88302.D	CAL BNA@20PPM	10/08/18 10:42	3	9M88301.D	CAL BNA@10PPM	10/08/18 10:20	2	9M88309.D	CAL BNA@50PPM	10/08/18 13:26	1	9M88309.D	CAL BNA@50PPM	10/08/18 13:26
Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9									
1.4-Dioxane	1	0	Avg	0.9748	1.2117	0.8572	0.9560	0.9532	1.0014	0.9543	0.9636	0.9703	0.9832	5.58	0.999	0.999	9.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50									
Pyridine	1	0	Avg	2.4508	2.8616	2.2303	2.2067	2.5385	2.6743	2.6013	2.6253	---	2.52	3.04	0.999	0.999	8.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50									
N-Nitrosodimethylamin	1	0	Avg	1.4400	1.4299	1.2359	1.3483	1.4883	1.5713	1.5430	1.5246	---	1.45	2.96	0.999	0.999	7.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50									
2-Fluorophenol	1	0	Avg	2.2853	2.6384	1.9057	2.2042	2.3740	2.4546	2.4571	2.4509	---	2.35	4.59	1.00	1.00	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50									
Benzaldehyde	1	0	Avg	1.3443	1.5231	1.4567	1.6189	1.2284	1.0646	0.9356	---	---	1.31	5.41	0.973	0.999	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	0.50									
Aniline	1	0	Avg	3.2196	2.7666	2.2127	3.2256	3.2861	3.2517	3.2631	3.3036	2.6338	3.02	5.51	1.00	1.00	13	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Pentachloroethane	1	0	Avg	0.8362	0.9017	0.7409	0.8148	0.8738	0.8986	0.8920	0.9030	---	0.85	5.55	1.00	1.00	6.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
bis(2-Chloroethyl)ether	1	0	Qua	2.3362	2.7616	2.0092	2.2355	2.3855	2.4273	2.4729	2.5180	2.8711	2.45	5.57	0.999	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Phenol-d5	1	0	Avg	3.3025	3.6218	2.7492	3.1946	3.4131	3.5046	3.4947	3.5250	3.5873	3.38	5.48	1.00	1.00	8.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Phenol	1	0	Avg	3.2107	3.6167	2.6889	3.1324	3.3537	3.4666	3.4573	3.4890	---	3.30	5.49	1.00	1.00	8.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2-Chlorophenol	1	0	Avg	2.5358	2.9142	2.1341	2.4720	2.6294	2.7155	2.7637	2.7746	---	2.62	5.61	0.999	1.00	9.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
N-Decane	1	0	Avg	2.8929	3.5725	2.5253	2.8444	2.9869	3.0343	2.9744	2.9249	---	2.97	5.66	0.999	1.00	9.8	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
1,3-Dichlorobenzene	1	0	Avg	2.7655	3.2030	2.3146	2.7330	2.8921	2.9539	2.9979	3.0479	---	2.86	5.74	0.999	1.00	9.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
1,4-Dichlorobenzene	1	0	Avg	1.4214	1.7008	1.2635	1.4309	1.4615	1.5146	1.5432	1.5885	---	1.49	5.81	0.999	1.00	8.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
1,2-Dichlorobenzene	1	0	Avg	1.3450	1.6212	1.1649	1.3313	1.3679	1.4475	1.4530	1.4931	---	1.40	5.93	0.999	1.00	9.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Benzyl alcohol	1	0	Avg	0.8370	0.8545	0.7300	0.8167	0.8472	0.8858	0.8929	0.9053	---	0.84	5.91	0.999	1.00	6.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
bis(2-chloroisopropyl)eth	1	0	Avg	1.7995	2.1614	1.6312	1.8301	1.8078	1.8337	1.8095	1.7714	---	1.83	6.02	1.00	1.00	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2-Methylphenol	1	0	Qua	1.1380	1.2612	1.0294	1.1390	1.1541	1.2052	1.2159	1.2547	1.5177	1.21	6.00	0.999	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Acetophenone	1	0	Avg	1.8474	2.0539	1.5107	1.8309	1.8785	1.9749	1.9956	2.0610	---	1.91	6.12	0.998	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Hexachloroethane	1	0	Avg	0.5474	0.6500	0.4831	0.5486	0.5678	0.5844	0.5892	0.6040	---	0.57	6.21	0.999	1.00	8.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
N-Nitroso-di-n-propyl	1	0	Avg	0.9457	1.1639	0.8236	0.9449	0.9478	0.9693	0.9796	0.9822	0.9826	0.97	6.12	0.999	1.00	9.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
3,8,4-Methylphenol	1	0	Avg	1.2358	1.3209	1.0632	1.1949	1.2660	1.3321	1.3642	1.4041	1.2955	1.28	6.12	0.998	1.00	8.0	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Nitrobenzene-d5	1	0	Avg	0.1256	0.1457	0.1073	0.1280	0.1255	0.1281	0.1285	0.1300	---	0.12	6.24	1.00	1.00	8.1	0.05	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	0.50								
Nitrobenzene	1	0	Avg	0.3569	0.4118	0.3057	0.3530	0.3635	0.3656	0.3729	0.3702	---	0.36	6.26	1.00	1.00	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Isophenone	1	0	Avg	0.6198	0.6881	0.5440	0.6199	0.6286	0.6431	0.6470	0.6497	---	0.63	6.44	1.00	1.00	6.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2-Nitrophenol	1	0	Avg	0.1948	0.2086	0.1652	0.1888	0.1966	0.2038	0.2109	0.2101	---	0.19	6.51	0.998	1.00	7.7	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2,4-Dimethylphenol	1	0	Qua	0.3513	0.3969	0.2951	0.3472	0.3532	0.3630	0.3674	0.3700	0.3618	0.35	6.54	1.00	1.00	7.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Benzoic Acid	1	0	Qua	0.3746	0.0823	0.2359	0.3101	0.4157	0.4424	0.4535	0.4520	---	0.36	6.62	0.999	0.999	38	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
bis(2-Chloroethoxy)m	1	0	Avg	0.3858	0.4296	0.3215	0.3821	0.3913	0.3943	0.4023	0.4042	---	0.38	6.61	1.00	1.00	8.0	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2,4-Dichlorophenol	1	0	Avg	0.2929	0.3147	0.2512	0.2883	0.2982	0.3074	0.3194	0.3280	0.2464	0.29	6.70	0.998	1.00	9.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
1,2,4-Trichlorobenzen	1	0	Avg	0.3141	0.3609	0.2667	0.3098	0.3238	0.3354	0.3461	0.3521	---	0.32	6.76	0.999	1.00	9.2	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Naphtalene	1	0	Qua	0.9841	1.1457	0.8555	0.9673	1.0176	1.0469	1.0752	1.1021	1.1871	1.04	6.82	0.999	1.00	9.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
4-Chloroaniline	1	0	Qua	0.3924	0.3446	0.2802	0.3852	0.3933	0.3734	0.3451	---	0.3264	0.35	6.85	0.995	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Hexachlorobutadiene	1	0	Qua	0.1847	0.2292	0.1562	0.1818	0.1926	0.1963	0.2055	0.2068	---	0.19	6.91	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
Caprolactam	1	0	Avg	0.1113	0.1238	0.0936	0.1111	0.1165	0.1189	0.1197	0.1177	---	0.11	7.13	1.00	1.00	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
4-Chloro-3-methylphe	1	0	Avg	0.2966	0.3444	0.2530	0.2955	0.3016	0.3074	0.3116	0.3179	---	0.30	7.22	0.999	1.00	8.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50								
2-Methylnaphtalene	1	0	Avg	0.7013	0.7908	0.6042	0.6874	0.7230	0.7457	0.7673	0.7914	---	0.72	7.35	0.998	1.00																			

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria (if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 9.82

Level #:	Data File:				Cal Identifier:		Analysis Date/Time				Level #:	Data File:				Cal Identifier:		Analysis Date/Time										
	1	3	5	7	9	2	4	6	8	10/08/18 13:26		10/08/18 10:20	10/08/18 12:15	10/08/18 11:29	10/08/18 13:02	9M88302.D	9M88307.D	9M88305.D	9M88303.D	CAL BNA@20PPM	CAL BNA@120PPM	CAL BNA@196PPM						
1	9M88309.D	CAL BNA@50PPM				2	9M88302.D	CAL BNA@2PPM			10/08/18 10:42																	
3	9M88301.D	CAL BNA@10PPM				4	9M88307.D	CAL BNA@20PPM			10/08/18 12:38																	
5	9M88306.D	CAL BNA@80PPM				6	9M88305.D	CAL BNA@120PPM			10/08/18 11:52																	
7	9M88304.D	CAL BNA@160PPM				8	9M88303.D	CAL BNA@196PPM			10/08/18 11:05																	
9	9M88308.D	CAL BNA@5PPM																										
Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9		
Hexachlorocyclopenta	1	0	Qua	0.2037	0.0456	0.0990	0.1551	0.2420	0.2682	0.2867	0.2946		0.1997	7.48	0.985	0.998	46	0.05	a	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3463	0.3870	0.3025	0.3523	0.3649	0.3781	0.3911	0.3974		0.3657	7.58	0.999	1.00	8.5	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3762	0.4177	0.3195	0.3785	0.3895	0.4046	0.4205	0.4204		0.3917	7.61	0.998	1.00	8.7	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2177	1.4608	1.1224	1.2455	1.2807	1.2974	1.3373	1.3636		1.2977	7.64	0.998	1.00	7.9			25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0412	1.2579	0.9341	1.0727	1.1144	1.1440	1.1830	1.2190		1.1277	7.75	0.997	1.00	9.3	0.80		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthalene	1	0	Avg	0.9011	1.0270	0.7873	0.9256	0.9659	1.0228	1.0589	1.1048		0.9748	8.03	0.995	1.00	10			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9011	1.0270	0.7873	0.9256	0.9659	1.0228	1.0589	1.1048		0.9748	8.03	0.995	1.00	10			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzyl Ether	1	0	Avg	0.7980	0.9593	0.6844	0.8148	0.8468	0.8840	0.9146	0.9530		0.8577	7.81	0.997	1.00	11			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3994	0.4293	0.3527	0.4166	0.4176	0.4186	0.4195	0.4123		0.4087	7.83	0.999	0.999	5.9	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4148	0.5039	0.3755	0.4202	0.4373	0.4582	0.4699	0.4877		0.4468	8.01	0.998	1.00	9.5			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.5371	1.7940	1.3521	1.5611	1.6197	1.6825	1.7212	1.7688		1.6381	8.11	0.997	1.00	8.9	0.90		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2271	1.4071	1.0828	1.2551	1.2852	1.3272	1.3544	1.3848		1.2977	9.97	0.999	1.00	8.1	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2895	0.3289	0.2496	0.2927	0.3130	0.3298	0.3409	0.3540		0.3128	8.03	0.997	1.00	11	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0827	1.2681	0.9368	1.0832	1.1530	1.1863	1.2147	1.2558		1.1588	8.26	0.998	1.00	9.6	0.90		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.2997	0.3313	0.2440	0.3054	0.2947	0.2777	0.2687	0.2610		0.2858	8.18	0.997	1.00	9.8	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1582	0.0954	0.1289	0.1844	0.1983	0.2082	0.2154			0.1708	8.27	0.996	1.00	26	0.01		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.5318	1.6969	1.3132	1.5528	1.6078	1.6618	1.7209	1.7612	1.8060		1.6384	4.42	0.998	1.00	9.2	0.80		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
2,4-Dinitrotoluene	1	0	Qua	0.3848	0.4258	0.3247	0.3874	0.4136	0.4175	0.4296	0.4372		0.4038	8.39	0.999	1.00	9.1	0.20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2265	0.1957	0.1956	0.2315	0.2443	0.2460	0.2476	0.2505		0.2308	8.32	1.00	1.00	9.8	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophenol	1	0	Avg	0.3307	0.3454	0.2824	0.3160	0.3418	0.3532	0.3697	0.3859		0.3418	8.52	0.997	1.00	9.4	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2908	1.4274	1.0794	1.2669	1.3452	1.4117	1.4590	1.5036		1.3587	8.74	0.998	1.00	10	0.90		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Qua	0.6247	0.7061	0.5327	0.6362	0.6510	0.6906	0.7092	0.7371		0.6618	8.73	0.996	1.00	9.8	0.40		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2405	1.4815	1.0707	1.2487	1.2744	1.3294	1.3496	1.3777		1.3086	8.61	0.999	1.00	9.3	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3480	0.3884	0.2922	0.3487	0.3600	0.3745	0.3753	0.3813		0.3598	8.74	0.999	1.00	8.5	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Qua	0.4087	0.4734	0.3630	0.4299	0.4268	0.4366	0.4498	0.4553		0.4309	9.37	0.998	1.00	7.8	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylphenol	1	0	Qua	0.1251	0.0868	0.1178	0.1418	0.1492	0.1517	0.1558			0.1338	8.77	0.998	1.00	19	0.01		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.6224	0.7153	0.5414	0.6261	0.6658	0.6854	0.7070	0.7226		0.6618	8.84	0.997	1.00	9.3	0.01		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0979	0.1056	0.0835	0.1001	0.1078	0.1129	0.1165	0.1219		0.1068	8.97	0.997	1.00	11			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7011	0.7774	0.5875	0.7018	0.7294	0.7335	0.7382	0.7536		0.7158	8.88	0.999	1.00	8.0			50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2011	0.2279	0.1743	0.2050	0.2139	0.2213	0.2294	0.2377		0.2149	9.21	0.998	1.00	9.5	0.10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2114	0.2557	0.1830	0.2166	0.2270	0.2374	0.2440	0.2544		0.2299	9.29	0.996	1.00	11	0.10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
n-Octadecane	1	0	Avg	0.5008	0.6029	0.4435	0.4967	0.5066	0.5078	0.5036	0.5039		0.5089	9.56	1.00	1.00	8.6	0.05		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1297	0.1086	0.1209	0.1453	0.1528																				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
																		Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9
4.4'-DDE	1	0	Avg	0.2338	0.2837	0.2045	0.2314	0.2509	0.2591	0.2540	0.2632	----	0.248	11.43	0.999	0.999	9.7	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDD	1	0	Avg	0.4162	0.4551	0.3513	0.4060	0.4423	0.4605	0.4584	0.4694	----	0.432	11.83	0.998	0.999	9.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzophthalate	1	0	Avg	0.4953	0.5795	0.4475	0.4965	0.5125	0.5309	0.5241	0.5290	----	0.514	12.09	1.00	1.00	7.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDT	1	0	Avg	0.3858	0.3534	0.3045	0.3628	0.4071	0.4301	0.4358	0.4512	----	0.391	12.19	0.998	1.00	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3641	0.3677	0.2758	0.3795	0.3687	0.3462	0.3215	0.3065	----	0.341	12.70	0.992	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolanthracene	1	0	Avg	1.0361	1.2589	0.9145	1.0441	1.0984	1.1369	1.1388	1.1672	----	1.10	12.73	0.999	1.00	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Qua	0.9903	1.1500	0.8398	0.9716	1.0698	1.1252	1.1465	1.1835	----	1.06	12.78	0.998	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7033	0.8382	0.6196	0.6878	0.7461	0.7682	0.7820	0.8042	----	0.744	12.79	0.999	1.00	9.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.3031	1.5665	1.1478	1.2824	1.3748	1.4327	1.4769	1.5072	----	1.39	13.54	0.998	1.00	9.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzobifluoranthene	1	0	Avg	1.0812	1.2132	0.9209	1.0269	1.1662	1.1582	1.2169	1.2504	----	1.13	13.96	0.998	1.00	9.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzokilfluoranthene	1	0	Avg	1.0789	1.2017	0.8862	1.1189	1.1305	1.2478	1.2244	1.2986	----	1.15	13.99	0.997	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzolaprene	1	0	Avg	1.0465	1.2107	0.8874	1.0246	1.1213	1.1681	1.2027	1.2323	----	1.11	14.31	0.998	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indenofl,2,3-cdipyr	1	0	Avg	1.1462	1.2973	0.9837	1.1324	1.2213	1.2738	1.3129	1.3338	----	1.21	15.69	0.999	1.00	9.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofl,anthracen	1	0	Avg	0.9539	1.0792	0.8265	0.9531	1.0306	1.0818	1.1279	1.1571	----	1.03	15.71	0.998	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofl,h,liberylene	1	0	Avg	0.9397	1.1100	0.8305	0.9513	1.0123	1.0433	1.0671	1.0725	----	1.00	16.06	0.999	1.00	9.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria (if applicable)

Note:

Avg Rsd: 9.82

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

SampleID : CAL BNA@50PPM
Data File: 9M88309.D
Acq On : 10/ 8/18 13:26

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 13:40
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.544	96	38833	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	76879	40.00	ng	0.00
31) Naphthalene-d8	6.803	136	292633	40.00	ng	0.00
50) Acenaphthene-d10	8.232	164	183035	40.00	ng	0.00
77) Phenanthrene-d10	9.690	188	321225	40.00	ng	0.00
91) Chrysene-d12	12.747	240	360599	40.00	ng	0.00
103) Perylene-d12	14.373	264	322704	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.592	112	110934	49.55	ng	0.00
Spiked Amount 100.000			Recovery =	49.55%		
16) Phenol-d5	5.479	99	160310	48.69	ng	0.00
Spiked Amount 100.000			Recovery =	48.69%		
32) Nitrobenzene-d5	6.240	128	22975	25.64	ng	0.00
Spiked Amount 50.000			Recovery =	51.28%		
55) 2-Fluorobiphenyl	7.644	172	139301	23.83	ng	0.00
Spiked Amount 50.000			Recovery =	47.66%		
80) 2,4,6-Tribromophenol	8.971	330	39315	62.28	ng	0.00
Spiked Amount 100.000			Recovery =	62.28%		
94) Terphenyl-d14	11.494	244	144216	25.00	ng	0.00
Spiked Amount 50.000			Recovery =	50.00%		
Target Compounds						
8) 1,4-Dioxane	2.578	88	47322	49.0393	ng	95
9) Pyridine	3.041	79	118969	43.0585	ng	82
10) N-Nitrosodimethylamine	2.961	74	69903	43.7723	ng	85
12) Benzaldehyde	5.411	77	65256	38.5636	ng	79
13) Aniline	5.507	93	156287	48.2095	ng	89
14) Pentachloroethane	5.550	117	40592	45.5664	ng	73
15) bis(2-Chloroethyl) ether	5.567	93	113405	44.0342	ng	84
17) Phenol	5.490	94	155856	44.8668	ng	92
18) 2-Chlorophenol	5.612	128	123092	50.1516	ng	85
19) N-Decane	5.664	57	140429	40.3550	ng	72
20) 1,3-Dichlorobenzene	5.743	146	134243	51.2300	ng	96
22) 1,4-Dichlorobenzene	5.806	146	136597	44.9805	ng	97
23) 1,2-Dichlorobenzene	5.931	146	129261	45.8308	ng	96
24) Benzyl alcohol	5.905	108	80442	42.3955	ng	79
25) bis(2-chloroisopropyl)...	6.022	45	172931	32.9273	ng	99
26) 2-Methylphenol	5.999	108	109360	41.5690	ng	98
27) Acetophenone	6.121	105	177535	40.5317	ng	74
28) Hexachloroethane	6.209	117	52608	40.1260	ng	91
29) N-Nitroso-di-n-propyla...	6.121	70	90883	37.1424	ng	95
30) 3&4-Methylphenol	6.124	108	118762	40.5955	ng	95
33) Nitrobenzene	6.257	77	130559	40.8059	ng	82
34) Isophorone	6.445	82	226725	40.4982	ng	86
35) 2-Nitrophenol	6.508	139	71255	51.5320	ng	94
36) 2,4-Dimethylphenol	6.539	107	128528	46.7413	ng	98
37) Benzoic Acid	6.621	105	137028	58.7948	ng	92
38) bis(2-Chloroethoxy)met...	6.610	93	141123	42.3143	ng	95
39) 2,4-Dichlorophenol	6.695	162	107158	51.4295	ng	87
40) 1,2,4-Trichlorobenzene	6.760	180	114928	52.7853	ng	95
41) Naphthalene	6.820	128	359988	46.4380	ng	98
42) 4-Chloroaniline	6.854	127	143544	47.3264	ng	91
43) Hexachlorobutadiene	6.914	225	67596	57.9830	ng	96
44) Caprolactam	7.127	113	40738	46.8601	ng	71
45) 4-Chloro-3-methylphenol	7.224	107	108510	45.7647	ng	93
46) 2-Methylnaphthalene	7.354	142	256561	46.8200	ng	99
47) 1-Methylnaphthalene	7.434	142	247798	45.4096	ng	90
48) Methylnaphthalenes (To...	7.354	142	504349m	92.0463	ng	
49) 1,1'-Biphenyl	7.729	154	297741	42.7747	ng	94
51) 1,2,4,5-Tetrachloroben...	7.488	216	126809	48.8169	ng	97
52) Hexachlorocyclopentadiene	7.482	237	46615	33.0352	ng	98
53) 2,4,6-Trichlorophenol	7.579	196	79252	48.7810	ng	99
54) 2,4,5-Trichlorophenol	7.613	196	86088	49.6569	ng	97
56) 2-Chloronaphthalene	7.752	162	238224	42.7040	ng	90
57) 1,4-Dimethylnaphthalene	8.033	156	206185	40.5314	ng	93
58) Dimethylnaphthalenes (...)	8.033	156	206185	40.5314	ng	93
59) Diphenyl Ether	7.815	170	182580	43.0609	ng	80
60) 2-Nitroaniline	7.826	65	91398	33.0193	ng	65
61) Coumarin	8.013	146	94920	39.2914	ng	80
62) Acenaphthylene	8.110	152	351689	45.9634	ng	98
63) Dimethylphthalate	7.974	163	280754	43.9025	ng	98
64) 2,6-Dinitrotoluene	8.031	165	66242	50.8175	ng	64
65) Acenaphthene	8.261	153	247723	46.3276	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 9M_1008.M
 Data File: 9M88309.D Sam Mult : 1 Vial# : 10 Qt On : 10/08/18 13:40
 Acq On : 10/ 8/18 13:26 Misc : A,BNA Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.178	138	68570	44.7396	ng	78
67)	2,4-Dinitrophenol	8.275	184	36207	60.5760	ng	37
68)	Dibenzofuran	8.417	168	350479	48.1784	ng	89
69)	2,4-Dinitrotoluene	8.389	165	88044	50.4188	ng	67
70)	4-Nitrophenol	8.318	65	51843	37.0784	ng	81
71)	2,3,4,6-Tetrachlorophenol	8.525	232	75661	52.8122	ng	85
72)	Fluorene	8.738	166	295342	46.0150	ng	98
73)	4-Chlorophenyl-phenyle...	8.727	204	142945	46.4314	ng	84
74)	Diethylphthalate	8.607	149	283830	43.5999	ng	96
75)	4-Nitroaniline	8.744	138	79624	40.3667	ng	81
76)	Atrazine	9.372	200	93515	50.2574	ng	94
78)	4,6-Dinitro-2-methylph...	8.775	198	50231	61.8563	ng	58
79)	n-Nitrosodiphenylamine	8.837	169	249924	43.7125	ng	97
81)	1,2-Diphenylhydrazine	8.883	77	281524	33.9709	ng	84
82)	4-Bromophenyl-phenylether	9.213	248	80778	56.5658	ng	88
83)	Hexachlorobenzene	9.289	284	84890	56.5605	ng	67
84)	N-Octadecane	9.562	57	201123	33.2919	ng	91
85)	Pentachlorophenol	9.488	266	52108	53.0408	ng	96
86)	Phenanthrene	9.715	178	411464	47.6052	ng	99
87)	Anthracene	9.772	178	431455	48.4560	ng	100
88)	Carbazole	9.937	167	393055	47.0297	ng	97
89)	Di-n-butylphthalate	10.324	149	491448	43.5445	ng	98
90)	Fluoranthene	11.048	202	470620	49.9458	ng	87
92)	Pyrene	11.310	202	479305	42.1081	ng	84
93)	Benzidine	11.196	184	205360	55.9849	ng	84
95)	4,4'-DDE	11.435	246	105410	45.7207	ng	94
96)	4,4'-DDD	11.832	235	187628	49.2386	ng	95
97)	Butylbenzylphthalate	12.088	149	223270	40.1703	ng	70
98)	4,4'-DDT	12.190	235	173915	51.8767	ng	99
99)	3,3'-Dichlorobenzidine	12.705	252	164122	58.4270	ng	94
100)	Benzo[a]anthracene	12.733	228	467046	45.1069	ng	99
101)	Chrysene	12.776	228	446383	48.7041	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.787	149	317053	43.0445	ng	95
104)	Di-n-octylphthalate	13.537	149	525648	43.5519	ng	98
105)	Benzo[b]fluoranthene	13.958	252	436161	50.0878	ng	92
106)	Benzo[k]fluoranthene	13.986	252	435210	46.9003	ng	92
107)	Benzo[a]pyrene	14.313	252	422160	48.4269	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.688	276	462355	49.7732	ng	83
109)	Dibenzo[a,h]anthracene	15.705	278	384819	54.0529	ng	88
110)	Benzo[g,h,i]perylene	16.060	276	379087	48.5705	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@2PPM
Data File: 9M88302.D
Acq On : 10/ 8/18 10:42

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:09
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.544	96	43359	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.792	152	83713	40.00	ng	0.00
31) Naphthalene-d8	6.803	136	320020	40.00	ng	0.00
50) Acenaphthene-d10	8.230	164	197447	40.00	ng	0.00
77) Phenanthrene-d10	9.690	188	342219	40.00	ng	0.00
91) Chrysene-d12	12.745	240	378938	40.00	ng	0.00
103) Perylene-d12	14.378	264	349977	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.590	112	5720m	2.29	ng	0.00
Spiked Amount 100.000			Recovery	=	2.29%	
16) Phenol-d5	5.479	99	7852	2.14	ng	0.00
Spiked Amount 100.000			Recovery	=	2.14%	
32) Nitrobenzene-d5	6.241	128	1166	1.19	ng	0.00
Spiked Amount 50.000			Recovery	=	2.38%	
55) 2-Fluorobiphenyl	7.641	172	7211	1.14	ng	0.00
Spiked Amount 50.000			Recovery	=	2.28%	
80) 2,4,6-Tribromophenol	8.971	330	1807	3.31	ng	0.00
Spiked Amount 100.000			Recovery	=	3.31%	
94) Terphenyl-d14	11.494	244	7134	1.18	ng	0.00
Spiked Amount 50.000			Recovery	=	2.36%	
Target Compounds						
8) 1,4-Dioxane	2.584	88	2627	2.4382	ng	79
9) Pyridine	3.169	79	6204m	2.0110	ng	
10) N-Nitrosodimethylamine	3.007	74	3100m	1.7386	ng	
12) Benzaldehyde	5.411	77	3302	1.7477	ng	84
13) Aniline	5.507	93	5998	1.6571	ng	51
14) Pentachloroethane	5.547	117	1955	1.9655	ng	56
15) bis(2-Chloroethyl)ether	5.564	93	5987	2.0820	ng	77
17) Phenol	5.490	94	7841	2.0216	ng	90
18) 2-Chlorophenol	5.610	128	6318	2.3055	ng	80
19) N-Decane	5.661	57	7745	1.9934	ng	72
20) 1,3-Dichlorobenzene	5.740	146	6944	2.3734	ng	91
22) 1,4-Dichlorobenzene	5.806	146	7119	2.1529	ng	96
23) 1,2-Dichlorobenzene	5.931	146	6786	2.2096	ng	95
24) Benzyl alcohol	5.905	108	3577	1.7313	ng	85
25) bis(2-chloroisopropyl)...	6.019	45	9047	1.5820	ng	91
26) 2-Methylphenol	5.999	108	5279	1.8428	ng	91
27) Acetophenone	6.118	105	8597	1.8025	ng	66
28) Hexachloroethane	6.206	117	2721	1.9060	ng	96
29) N-Nitroso-di-n-propyla...	6.118	70	4872	1.8286	ng	98
30) 3&4-Methylphenol	6.124	108	5529	1.7356	ng	83
33) Nitrobenzene	6.255	77	6590	1.8834	ng	74
34) Isophorone	6.442	82	11011	1.7985	ng	94
35) 2-Nitrophenol	6.508	139	3338	2.2075	ng	91
36) 2,4-Dimethylphenol	6.536	107	6352	2.2273	ng	86
37) Benzoic Acid	6.587	105	1318	0.5637	ng	89
38) bis(2-Chloroethoxy)met...	6.607	93	6875	1.8850	ng	96
39) 2,4-Dichlorophenol	6.695	162	5036	2.2101	ng	86
40) 1,2,4-Trichlorobenzene	6.758	180	5776	2.6096	ng	96
41) Naphthalene	6.817	128	18333	2.2663	ng	95
42) 4-Chloroaniline	6.857	127	5515	1.5565	ng	99
43) Hexachlorobutadiene	6.911	225	3668	3.3808	ng	91
44) Caprolactam	7.104	113	1982	2.0847	ng	74
45) 4-Chloro-3-methylphenol	7.224	107	5512	2.1258	ng	95
46) 2-Methylnaphthalene	7.354	142	12655	2.1118	ng	96
47) 1-Methylnaphthalene	7.434	142	12319	2.0643	ng	85
48) Methylnaphthalenes (To...	7.354	142	25001m	4.1723	ng	
49) 1,1'-Biphenyl	7.729	154	14882	1.9550	ng	93
51) 1,2,4,5-Tetrachloroben...	7.488	216	6354	2.5445	ng	94
52) Hexachlorocyclopentadiene	7.479	237	451m	0.3253	ng	
53) 2,4,6-Trichlorophenol	7.576	196	3821	2.1802	ng	86
54) 2,4,5-Trichlorophenol	7.616	196	4124	2.2052	ng	95
56) 2-Chloronaphthalene	7.752	162	12419	2.0637	ng	87
57) 1,4-Dimethylnaphthalene	8.031	156	10139	1.8476	ng	91
58) Dimethylnaphthalenes (...)	8.031	156	10139	1.8476	ng	91
59) Diphenyl Ether	7.812	170	9471	2.0707	ng	84
60) 2-Nitroaniline	7.826	65	4239	1.4294	ng	69
61) Coumarin	8.005	146	4975	1.9090	ng	86
62) Acenaphthylene	8.107	152	17711	2.3374	ng	94
63) Dimethylphthalate	7.968	163	13892	2.0138	ng	96
64) 2,6-Dinitrotoluene	8.025	165	3247	2.8209	ng	55
65) Acenaphthene	8.261	153	12520	2.4319	ng	88

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM

Operator : AH/JB

Qt Meth : 9M_1008.M

Data File: 9M88302.D

Sam Mult : 1 Vial# : 3

Qt On : 10/08/18 12:09

Acq On : 10/ 8/18 10:42

Misc : A,BNA

Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\

Qt Path : G:\GCMSData\2018\GCMS_9\METHODQT\

Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.176	138	3271	1.9384	ng	68
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.414	168	16753	2.3174	ng	99
69)	2,4-Dinitrotoluene	8.386	165	4204	2.3801	ng	66
70)	4-Nitrophenol	8.332	65	1932	1.3523	ng	71
71)	2,3,4,6-Tetrachlorophenol	8.525	232	3410	2.2065	ng	80
72)	Fluorene	8.738	166	14092	2.2464	ng	96
73)	4-Chlorophenyl-phenyle...	8.724	204	6971	2.0990	ng	84
74)	Diethylphthalate	8.602	149	14626	2.0827	ng	98
75)	4-Nitroaniline	8.738	138	3835	1.8384	ng	79
76)	Atrazine	9.366	200	4674	2.4742	ng	92
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D. d		
79)	n-Nitrosodiphenylamine	8.835	169	12241	2.0096	ng	97
81)	1,2-Diphenylhydrazine	8.880	77	13302	1.5067	ng	77
82)	4-Bromophenyl-phenylether	9.213	248	3901	3.0521	ng	86
83)	Hexachlorobenzene	9.287	284	4376	3.2446	ng	65
84)	N-Octadecane	9.559	57	10317	1.6030	ng	84
85)	Pentachlorophenol	0.000		0	N.D. d		
86)	Phenanthrene	9.716	178	20263	2.4389	ng	98
87)	Anthracene	9.770	178	21024	2.4866	ng	98
88)	Carbazole	9.937	167	19722	2.4346	ng	97
89)	Di-n-butylphthalate	10.324	149	23756	2.0785	ng	97
90)	Fluoranthene	11.045	202	23422	2.6690	ng	88
92)	Pyrene	11.310	202	23512	1.9656	ng	83
93)	Benzidine	11.199	184	5674	1.3378	ng	86
95)	4,4'-DDE	11.432	246	5376	2.2189	ng	93
96)	4,4'-DDD	11.832	235	8624	2.1536	ng	90
97)	Butylbenzylphthalate	12.085	149	10981	1.8801	ng	68
98)	4,4'-DDT	12.191	235	6697	1.9010	ng	97
99)	3,3'-Dichlorobenzidine	12.705	252	6967	2.1659	ng	98
100)	Benzo[a]anthracene	12.730	228	23854	2.1923	ng	98
101)	Chrysene	12.773	228	21790	2.4883	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.790	149	15883	2.1376	ng	94
104)	Di-n-octylphthalate	13.540	149	27413	2.3491	ng	98
105)	Benzo[b]fluoranthene	13.958	252	21230	2.6471	ng	89
106)	Benzo[k]fluoranthene	13.986	252	21029	2.4323	ng	93
107)	Benzo[a]pyrene	14.313	252	21186	2.5724	ng	88
108)	Indeno[1,2,3-cd]pyrene	15.685	276	22702	2.2535	ng	100
109)	Dibenzo[a,h]anthracene	15.708	278	18886	2.9413	ng	87
110)	Benzo[g,h,i]perylene	16.058	276	19424	2.2948	ng	81

(#)= qualifier out of range (m)= manual integration (+)= signals summed

SampleID : CAL BNA@10PPM
Data File: 9M88301.D
Acq On : 10/ 8/18 10:20

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:09
Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.547	96	46819	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.794	152	88053	40.00	ng	0.00
31) Naphthalene-d8	6.814	136	338146	40.00	ng	0.00
50) Acenaphthene-d10	8.246	164	203823	40.00	ng	0.01
77) Phenanthrene-d10	9.704	188	355448	40.00	ng	0.01
91) Chrysene-d12	12.753	240	386511	40.00	ng	0.00
103) Perylene-d12	14.410	264	356911	40.00	ng	0.04
System Monitoring Compounds						
11) 2-Fluorophenol	4.595	112	22306	8.26	ng	0.00
Spiked Amount 100.000			Recovery	=	8.26%	
16) Phenol-d5	5.482	99	32179	8.11	ng	0.00
Spiked Amount 100.000			Recovery	=	8.11%	
32) Nitrobenzene-d5	6.243	128	4538	4.38	ng	0.00
Spiked Amount 50.000			Recovery	=	8.76%	
55) 2-Fluorobiphenyl	7.658	172	28598	4.39	ng	0.01
Spiked Amount 50.000			Recovery	=	8.78%	
80) 2,4,6-Tribromophenol	8.985	330	7427	12.62	ng	0.01
Spiked Amount 100.000			Recovery	=	12.62%	
94) Terphenyl-d14	11.503	244	27215	4.40	ng	0.00
Spiked Amount 50.000			Recovery	=	8.80%	
Target Compounds						
8) 1,4-Dioxane	2.581	88	10034	8.6245	ng	65
9) Pyridine	3.101	79	26106m	7.8369	ng	
10) N-Nitrosodimethylamine	2.981	74	14467m	7.5138	ng	
12) Benzaldehyde	5.414	77	17051	8.3577	ng	76
13) Aniline	5.510	93	25900m	6.6266	ng	
14) Pentachloroethane	5.553	117	8673	8.0752	ng	77
15) bis(2-Chloroethyl) ether	5.567	93	23518	7.5742	ng	85
17) Phenol	5.493	94	31474	7.5151	ng	91
18) 2-Chlorophenol	5.615	128	24980	8.4416	ng	84
19) N-Decane	5.666	57	29559	7.0455	ng	71
20) 1,3-Dichlorobenzene	5.746	146	27092	8.5754	ng	98
22) 1,4-Dichlorobenzene	5.808	146	27815	7.9970	ng	99
23) 1,2-Dichlorobenzene	5.933	146	25645	7.9388	ng	98
24) Benzyl alcohol	5.908	108	16070	7.3946	ng	73
25) bis(2-chloroisopropyl)...	6.024	45	35910	5.9698	ng	92
26) 2-Methylphenol	6.002	108	22662	7.5210	ng	97
27) Acetophenone	6.121	105	35457	7.0677	ng	73
28) Hexachloroethane	6.212	117	10636	7.0830	ng	86
29) N-Nitroso-di-n-propyla...	6.121	70	18131	6.4695	ng	94
30) 3&4-Methylphenol	6.130	108	23405	6.9851	ng	97
33) Nitrobenzene	6.257	77	25848	6.9914	ng	82
34) Isophorone	6.451	82	45989	7.1090	ng	91
35) 2-Nitrophenol	6.513	139	13971	8.7440	ng	92
36) 2,4-Dimethylphenol	6.544	107	24951	8.2197	ng	97
37) Benzoic Acid	6.587	105	19946	7.9819	ng	83
38) bis(2-Chloroethoxy)met...	6.615	93	27182	7.0533	ng	97
39) 2,4-Dichlorophenol	6.704	162	21237	8.8206	ng	84
40) 1,2,4-Trichlorobenzene	6.766	180	22552	9.5429	ng	97
41) Naphthalene	6.829	128	72323	8.4052	ng	82
42) 4-Chloroaniline	6.865	127	23690	6.3704	ng	89
43) Hexachlorobutadiene	6.925	225	13211	11.2406	ng	95
44) Caprolactam	7.121	113	7916	7.8800	ng	73
45) 4-Chloro-3-methylphenol	7.235	107	21392	7.8079	ng	99
46) 2-Methylnaphthalene	7.368	142	51078	8.0667	ng	95
47) 1-Methylnaphthalene	7.448	142	48429	7.6802	ng	89
48) Methylnaphthalenes (To...	7.368	142	99506m	15.7161	ng	
49) 1,1'-Biphenyl	7.743	154	58614	7.2873	ng	90
51) 1,2,4,5-Tetrachloroben...	7.502	216	24605	9.3758	ng	98
52) Hexachlorocyclopentadiene	7.496	237	5049	3.4945	ng	92
53) 2,4,6-Trichlorophenol	7.593	196	15416	8.5210	ng	98
54) 2,4,5-Trichlorophenol	7.627	196	16282	8.4339	ng	97
56) 2-Chloronaphthalene	7.766	162	47599	7.6623	ng	93
57) 1,4-Dimethylnaphthalene	8.048	156	40120	7.0823	ng	88
58) Dimethylnaphthalenes (...)	8.048	156	40120	7.0823	ng	88
59) Diphenyl Ether	7.829	170	34875	7.3863	ng	85
60) 2-Nitroaniline	7.840	65	17974	5.8656	ng	75
61) Coumarin	8.025	146	19136	7.1133	ng	83
62) Acenaphthylene	8.124	152	68901	8.6955	ng	97
63) Dimethylphthalate	7.988	163	55176	7.7481	ng	98
64) 2,6-Dinitrotoluene	8.045	165	12722	10.3472	ng	66
65) Acenaphthene	8.278	153	47740	8.8282	ng	91

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@10PPM
 Data File: 9M88301.D
 Acq On : 10/ 8/18 10:20

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 9M_1008.M
 Qt On : 10/08/18 12:09
 Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.192	138	12433	7.1551	ng	75
67) 2,4-Dinitrophenol	8.289	184	4862	10.0495	ng	25
68) Dibenzofuran	8.431	168	66919	8.8591	ng	91
69) 2,4-Dinitrotoluene	8.406	165	16546	8.9923	ng	58
70) 4-Nitrophenol	8.343	65	9969	6.7036	ng	92
71) 2,3,4,6-Tetrachlorophenol	8.542	232	14391	9.0206	ng	84
72) Fluorene	8.755	166	55002	8.3722	ng	100
73) 4-Chlorophenyl-phenyle...	8.744	204	27144	7.9177	ng	82
74) Diethylphthalate	8.621	149	54562	7.5266	ng	97
75) 4-Nitroaniline	8.755	138	14890	6.8965	ng	79
76) Atrazine	9.383	200	18498	9.4003	ng	99
78) 4,6-Dinitro-2-methylph...	8.789	198	7720	10.0830	ng	51
79) n-Nitrosodiphenylamine	8.854	169	48110	7.6044	ng	95
81) 1,2-Diphenylhydrazine	8.897	77	52212	5.6937	ng	85
82) 4-Bromophenyl-phenylether	9.230	248	15492	11.3358	ng	82
83) Hexachlorobenzene	9.301	284	16264	11.2939	ng	69
84) N-Octadecane	9.576	57	39410	5.8954	ng	87
85) Pentachlorophenol	9.505	266	9658	10.1053	ng	92
86) Phenanthrene	9.730	178	80531	9.1835	ng	98
87) Anthracene	9.784	178	80328	8.9918	ng	98
88) Carbazole	9.951	167	75953	8.8994	ng	98
89) Di-n-butylphthalate	10.335	149	92388	7.7278	ng	97
90) Fluoranthene	11.057	202	89118	9.5759	ng	88
92) Pyrene	11.321	202	88967	7.2920	ng	83
93) Benzidine	11.207	184	37822	8.8536	ng	90
95) 4,4'-DDE	11.443	246	19764	7.9978	ng	95
96) 4,4'-DDD	11.841	235	33946	8.3111	ng	92
97) Butylbenzylphthalate	12.094	149	43250	7.2598	ng	69
98) 4,4'-DDT	12.199	235	29431	8.1904	ng	97
99) 3,3'-Dichlorobenzidine	12.710	252	26658	8.1973	ng	95
100) Benzo[a]anthracene	12.742	228	88371	7.9626	ng	98
101) Chrysene	12.781	228	81152	8.9604	ng	96
102) bis(2-Ethylhexyl)phtha...	12.798	149	59872	7.8541	ng	95
104) Di-n-octylphthalate	13.557	149	102420	8.4539	ng	98
105) Benzo[b]fluoranthene	13.983	252	82175	9.7856	ng	93
106) Benzo[k]fluoranthene	14.015	252	79076	8.7640	ng	92
107) Benzo[a]pyrene	14.344	252	79182	9.2292	ng	89
108) Indeno[1,2,3-cd]pyrene	15.725	276	87778	8.5438	ng	72
109) Dibenzo[a,h]anthracene	15.748	278	73755	10.9184	ng	86
110) Benzo[g,h,i]perylene	16.100	276	74111	8.5854	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@20PPM
Data File: 9M88307.D
Acq On : 10/ 8/18 12:38

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 13:00
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.549	96	41655	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	79684	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	302917	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	182887	40.00	ng	0.00
77) Phenanthrene-d10	9.690	188	320085	40.00	ng	0.00
91) Chrysene-d12	12.744	240	361759	40.00	ng	0.00
103) Perylene-d12	14.373	264	324385	40.00	ng	0.00

System Monitoring Compounds						
11) 2-Fluorophenol	4.589	112	45909	19.12	ng	0.00
Spiked Amount	100.000		Recovery	=	19.12%	
16) Phenol-d5	5.479	99	66536	18.84	ng	0.00
Spiked Amount	100.000		Recovery	=	18.84%	
32) Nitrobenzene-d5	6.240	128	9698	10.46	ng	0.00
Spiked Amount	50.000		Recovery	=	20.92%	
55) 2-Fluorobiphenyl	7.644	172	56949	9.75	ng	0.00
Spiked Amount	50.000		Recovery	=	19.50%	
80) 2,4,6-Tribromophenol	8.971	330	16032	28.54	ng	0.00
Spiked Amount	100.000		Recovery	=	28.54%	
94) Terphenyl-d14	11.494	244	58007	10.02	ng	0.00
Spiked Amount	50.000		Recovery	=	20.04%	

Target Compounds						Qvalue
8) 1,4-Dioxane	2.583	88	19913	19.2377	ng	85
9) Pyridine	3.061	79	45960	15.5074	ng	80
10) N-Nitrosodimethylamine	2.967	74	28083	16.3939	ng	83
12) Benzaldehyde	5.411	77	33718	18.5760	ng	79
13) Aniline	5.507	93	67182	19.3195	ng	86
14) Pentachloroethane	5.550	117	16972	17.7611	ng	71
15) bis(2-Chloroethyl)ether	5.564	93	46560	16.8540	ng	87
17) Phenol	5.490	94	65241	17.5088	ng	91
18) 2-Chlorophenol	5.609	128	51487	19.5563	ng	83
19) N-Decane	5.663	57	59243	15.8713	ng	76
20) 1,3-Dichlorobenzene	5.740	146	56923	20.2514	ng	95
22) 1,4-Dichlorobenzene	5.806	146	57013	18.1131	ng	98
23) 1,2-Dichlorobenzene	5.931	146	53045	18.1456	ng	98
24) Benzyl alcohol	5.905	108	32541	16.5464	ng	76
25) bis(2-chloroisopropyl)...	6.019	45	72916	13.3950	ng	99
26) 2-Methylphenol	5.999	108	45381	16.6426	ng	97
27) Acetophenone	6.118	105	72950	16.0684	ng	70
28) Hexachloroethane	6.209	117	21898	16.1145	ng	85
29) N-Nitroso-di-n-propyla...	6.118	70	37647	14.8441	ng	96
30) 3&4-Methylphenol	6.124	108	47608	15.7006	ng	95
33) Nitrobenzene	6.255	77	53477	16.1467	ng	82
34) Isophorone	6.445	82	93890	16.2015	ng	82
35) 2-Nitrophenol	6.507	139	28602	19.9829	ng	89
36) 2,4-Dimethylphenol	6.539	107	52593	19.0890	ng	95
37) Benzoic Acid	6.598	105	46967	20.5841	ng	86
38) bis(2-Chloroethoxy)met...	6.607	93	57874	16.7638	ng	97
39) 2,4-Dichlorophenol	6.695	162	43675	20.2498	ng	86
40) 1,2,4-Trichlorobenzene	6.760	180	46925	21.7681	ng	95
41) Naphthalene	6.820	128	146510	18.7964	ng	83
42) 4-Chloroaniline	6.854	127	58354	17.8027	ng	87
43) Hexachlorobutadiene	6.914	225	27535	25.0688	ng	95
44) Caprolactam	7.115	113	16834	18.7064	ng	68
45) 4-Chloro-3-methylphenol	7.223	107	44757	18.2357	ng	96
46) 2-Methylnaphthalene	7.357	142	104118	18.3555	ng	96
47) 1-Methylnaphthalene	7.437	142	99206	17.5625	ng	89
48) Methylnaphthalenes (To...	7.357	142	203039m	35.7976	ng	
49) 1,1'-Biphenyl	7.729	154	120702	16.7518	ng	90
51) 1,2,4,5-Tetrachloroben...	7.491	216	51748	21.3162	ng	95
52) Hexachlorocyclopentadiene	7.482	237	14186	10.7131	ng	98
53) 2,4,6-Trichlorophenol	7.579	196	32218	19.8468	ng	96
54) 2,4,5-Trichlorophenol	7.613	196	34614	19.9821	ng	93
56) 2-Chloronaphthalene	7.752	162	98098	17.5993	ng	92
57) 1,4-Dimethylnaphthalene	8.033	156	84646	16.6530	ng	90
58) Dimethylnaphthalenes (...)	8.033	156	84646	16.6530	ng	90
59) Diphenyl Ether	7.814	170	74514	17.5881	ng	80
60) 2-Nitroaniline	7.829	65	38095	13.8310	ng	68
61) Coumarin	8.011	146	38429	15.9203	ng	81
62) Acenaphthylene	8.110	152	142758	19.6442	ng	96
63) Dimethylphthalate	7.974	163	114774	17.9622	ng	98
64) 2,6-Dinitrotoluene	8.030	165	26767	22.9688	ng	66
65) Acenaphthene	8.263	153	99055	19.8263	ng	91

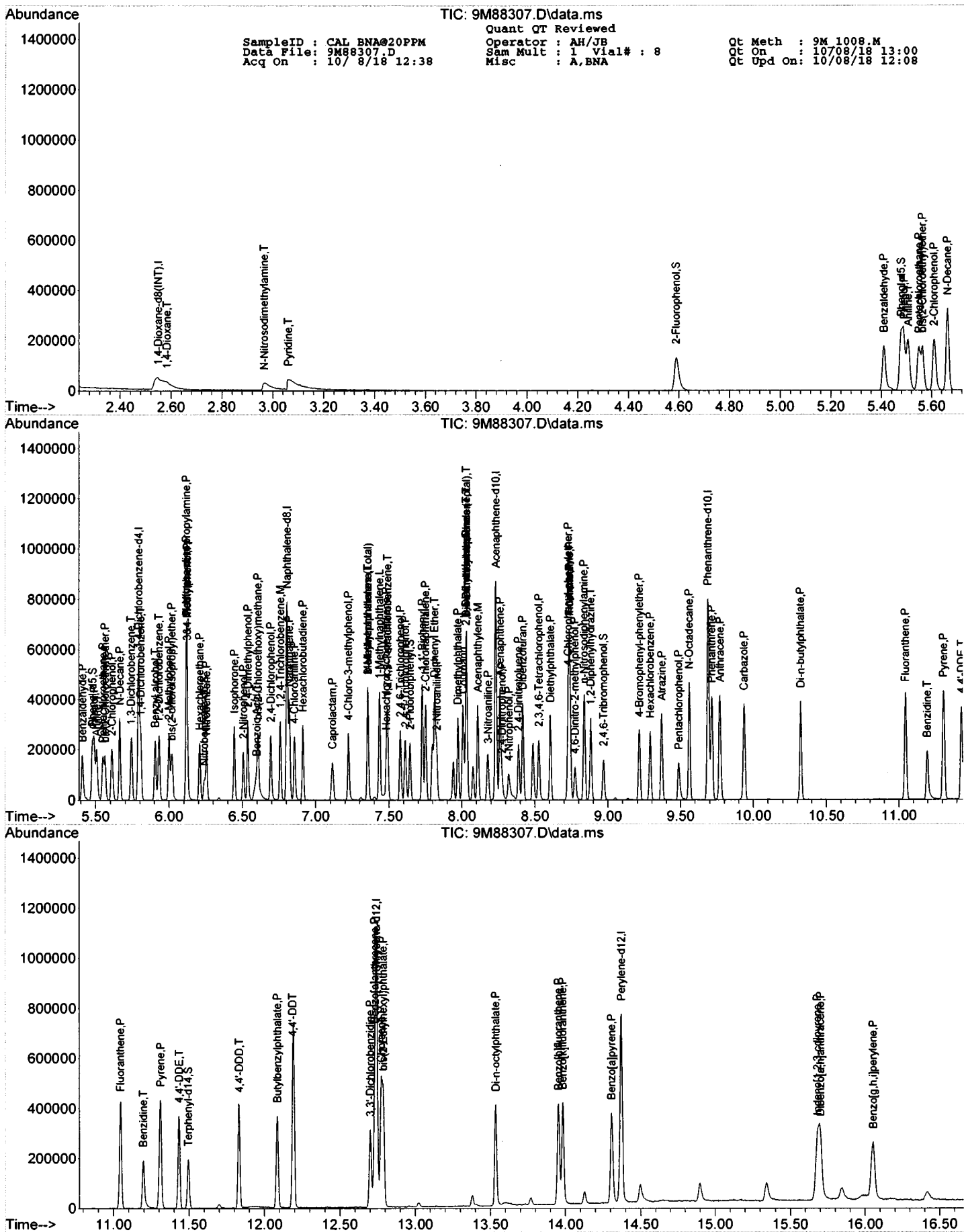
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 9M_1008.M
 Data File: 9M88307.D Sam Mult : 1 Vial# : 8 Qt On : 10/08/18 13:00
 Acq On : 10/ 8/18 12:38 Misc : A,BNA Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.181	138	27933	18.0079	ng	71
67)	2,4-Dinitrophenol	8.275	184	11792	24.5238	ng	43
68)	Dibenzofuran	8.417	168	141998	20.5102	ng	88
69)	2,4-Dinitrotoluene	8.388	165	35427	21.1070	ng	65
70)	4-Nitrophenol	8.323	65	21169	15.6479	ng	99
71)	2,3,4,6-Tetrachlorophenol	8.528	232	28896	20.1860	ng	86
72)	Fluorene	8.738	166	115854	19.1700	ng	97
73)	4-Chlorophenyl-phenyle...	8.729	204	58177	18.9123	ng	81
74)	Diethylphthalate	8.607	149	114194	17.5558	ng	97
75)	4-Nitroaniline	8.738	138	31895	16.3831	ng	81
76)	Atrazine	9.369	200	39317	21.9119	ng	92
78)	4,6-Dinitro-2-methylph...	8.775	198	18867	25.9796	ng	57
79)	n-Nitrosodiphenylamine	8.837	169	100208	17.5891	ng	98
81)	1,2-Diphenylhydrazine	8.883	77	112328	13.6026	ng	83
82)	4-Bromophenyl-phenylether	9.215	248	32816	25.4272	ng	81
83)	Hexachlorobenzene	9.289	284	34665	25.5041	ng	71
84)	N-Octadecane	9.562	57	79505	13.2073	ng	91
85)	Pentachlorophenol	9.488	266	19349	21.6788	ng	95
86)	Phenanthrene	9.715	178	164107	20.2529	ng	99
87)	Anthracene	9.772	178	169465	20.4542	ng	98
88)	Carbazole	9.937	167	155621	19.7769	ng	96
89)	Di-n-butylphthalate	10.323	149	199606	18.2998	ng	97
90)	Fluoranthene	11.045	202	189699	21.8374	ng	88
92)	Pyrene	11.309	202	190699	16.6997	ng	85
93)	Benzidine	11.196	184	89235	22.8588	ng	87
95)	4,4'-DDE	11.434	246	41867	18.1012	ng	95
96)	4,4'-DDD	11.832	235	73452	19.2139	ng	94
97)	Butylbenzylphthalate	12.085	149	89819	16.1083	ng	72
98)	4,4'-DDT	12.187	235	65635	19.5153	ng	99
99)	3,3'-Dichlorobenzidine	12.702	252	68656	23.0623	ng	95
100)	Benzo[a]anthracene	12.733	228	188859	18.1814	ng	99
101)	Chrysene	12.776	228	175752	20.2465	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.787	149	124417	17.2731	ng	94
104)	Di-n-octylphthalate	13.537	149	207995	18.3618	ng	99
105)	Benzo[b]fluoranthene	13.955	252	166555	20.9680	ng	91
106)	Benzo[k]fluoranthene	13.983	252	181483	21.1824	ng	92
107)	Benzo[a]pyrene	14.307	252	166192	20.5758	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.682	276	183678	19.6708	ng	81
109)	Dibenzo[a,h]anthracene	15.702	278	154591	23.9773	ng	85
110)	Benzo[g,h,i]perylene	16.055	276	154301	19.6674	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@80PPM
Data File: 9M88306.D
Acq On : 10/ 8/18 12:15

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:36
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.546	96	38165	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	76781	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	290205	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	177627	40.00	ng	0.00
77) Phenanthrene-d10	9.693	188	306432	40.00	ng	0.00
91) Chrysene-d12	12.747	240	343097	40.00	ng	0.00
103) Perylene-d12	14.367	264	307663	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.592	112	181209	82.36	ng	0.00
Spiked Amount 100.000			Recovery =	82.36%		
16) Phenol-d5	5.482	99	260524	80.51	ng	0.00
Spiked Amount 100.000			Recovery =	80.51%		
32) Nitrobenzene-d5	6.240	128	36443	41.01	ng	0.00
Spiked Amount 50.000			Recovery =	82.02%		
55) 2-Fluorobiphenyl	7.644	172	227488	40.10	ng	0.00
Spiked Amount 50.000			Recovery =	80.20%		
80) 2,4,6-Tribromophenol	8.971	330	66087	98.46	ng	0.00
Spiked Amount 100.000			Recovery =	98.46%		
94) Terphenyl-d14	11.497	244	234038	42.64	ng	0.00
Spiked Amount 50.000			Recovery =	85.28%		
Target Compounds						
8) 1,4-Dioxane	2.578	88	72759	76.7192	ng	96
9) Pyridine	3.035	79	193767	71.3576	ng	80
10) N-Nitrosodimethylamine	2.958	74	113606	72.3837	ng	80
12) Benzaldehyde	5.411	77	93769	56.3836	ng	77
13) Aniline	5.507	93	250831	78.7275	ng	93
14) Pentachloroethane	5.550	117	66702	76.1866	ng	74
15) bis(2-Chloroethyl) ether	5.567	93	182085	71.9395	ng	85
17) Phenol	5.493	94	255989	74.9822	ng	92
18) 2-Chlorophenol	5.612	128	200702	83.2037	ng	83
19) N-Decane	5.663	57	227997	66.6661	ng	73
20) 1,3-Dichlorobenzene	5.743	146	220754	85.7190	ng	97
22) 1,4-Dichlorobenzene	5.806	146	224434	73.9989	ng	97
23) 1,2-Dichlorobenzene	5.931	146	210216	74.6293	ng	98
24) Benzyl alcohol	5.908	108	130107	68.6581	ng	79
25) bis(2-chloroisopropyl) ...	6.021	45	277621	52.9284	ng	99
26) 2-Methylphenol	6.002	108	177230	67.4532	ng	99
27) Acetophenone	6.121	105	288467	65.9418	ng	72
28) Hexachloroethane	6.209	117	87104	66.5222	ng	88
29) N-Nitroso-di-n-propyla...	6.124	70	145547	59.5586	ng	94
30) 3&4-Methylphenol	6.127	108	194413	66.5395	ng	95
33) Nitrobenzene	6.257	77	210990	66.4961	ng	80
34) Isophorone	6.448	82	364875	65.7202	ng	85
35) 2-Nitrophenol	6.507	139	114131	83.2307	ng	92
36) 2,4-Dimethylphenol	6.539	107	205053	72.9752	ng	96
37) Benzoic Acid	6.641	105	241284	98.7881	ng	89
38) bis(2-Chloroethoxy)met...	6.610	93	227157	68.6806	ng	96
39) 2,4-Dichlorophenol	6.695	162	173130	83.7874	ng	87
40) 1,2,4-Trichlorobenzene	6.760	180	187939	83.4494	ng	96
41) Naphthalene	6.820	128	590679	74.6515	ng	83
42) 4-Chloroaniline	6.854	127	228298	79.7544	ng	91
43) Hexachlorobutadiene	6.914	225	111804	89.1311	ng	96
44) Caprolactam	7.138	113	67617	78.4293	ng	71
45) 4-Chloro-3-methylphenol	7.226	107	175082	74.4597	ng	95
46) 2-Methylnaphthalene	7.357	142	419650	77.2229	ng	95
47) 1-Methylnaphthalene	7.437	142	405227	74.8801	ng	89
48) Methylnaphthalenes (To...	7.357	142	825771m	151.9684	ng	
49) 1,1'-Biphenyl	7.729	154	498995	72.2875	ng	92
51) 1,2,4,5-Tetrachloroben...	7.491	216	210455	78.1038	ng	99
52) Hexachlorocyclopentadiene	7.482	237	85997	58.6958	ng	97
53) 2,4,6-Trichlorophenol	7.579	196	129647	82.2296	ng	98
54) 2,4,5-Trichlorophenol	7.613	196	138377	82.2482	ng	99
56) 2-Chloronaphthalene	7.752	162	395915	73.1325	ng	91
57) 1,4-Dimethylnaphthalene	8.036	156	343162	69.5119	ng	92
58) Dimethylnaphthalenes (...)	8.036	156	343162	69.5119	ng	92
59) Diphenyl Ether	7.814	170	300848	73.1143	ng	80
60) 2-Nitroaniline	7.829	65	148353	54.9665	ng	62
61) Coumarin	8.016	146	155362	66.2690	ng	81
62) Acenaphthylene	8.110	152	575429	73.6604	ng	97
63) Dimethylphthalate	7.979	163	456587	73.5720	ng	99
64) 2,6-Dinitrotoluene	8.033	165	111197	79.3457	ng	60
65) Acenaphthene	8.263	153	409615	73.9368	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM
 Data File: 9M88306.D
 Acq On : 10/ 8/18 12:15

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 9M_1008.M
 Qt On : 10/08/18 12:36
 Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.181	138	104704	71.3093	ng	77
67)	2,4-Dinitrophenol	8.275	184	65515	95.1582	ng	42
68)	Dibenzofuran	8.420	168	571198	77.0832	ng	87
69)	2,4-Dinitrotoluene	8.391	165	146935	83.1692	ng	64
70)	4-Nitrophenol	8.320	65	86790	61.7158	ng	81
71)	2,3,4,6-Tetrachlorophenol	8.528	232	121438	87.3458	ng	84
72)	Fluorene	8.741	166	477898	72.5836	ng	97
73)	4-Chlorophenyl-phenyle...	8.729	204	231296	77.4169	ng	83
74)	Diethylphthalate	8.607	149	452742	71.6643	ng	98
75)	4-Nitroaniline	8.746	138	127909	65.9593	ng	79
76)	Atrazine	9.374	200	151648	80.9249	ng	94
78)	4,6-Dinitro-2-methylph...	8.778	198	86902	100.9167	ng	64
79)	n-Nitrosodiphenylamine	8.840	169	408074	74.8189	ng	98
81)	1,2-Diphenylhydrazine	8.886	77	447048	56.5485	ng	83
82)	4-Bromophenyl-phenylether	9.215	248	131108	87.9834	ng	83
83)	Hexachlorobenzene	9.289	284	139153	88.7896	ng	66
84)	N-Octadecane	9.562	57	310484	53.8754	ng	85
85)	Pentachlorophenol	9.488	266	89090	86.8125	ng	97
86)	Phenanthrene	9.718	178	674234	76.8990	ng	98
87)	Anthracene	9.775	178	698753	77.0544	ng	99
88)	Carbazole	9.940	167	634897	75.3227	ng	95
89)	Di-n-butylphthalate	10.326	149	786596	70.7640	ng	97
90)	Fluoranthene	11.048	202	764671	78.9710	ng	87
92)	Pyrene	11.315	202	775373	71.5933	ng	84
93)	Benzidine	11.199	184	297367	91.0696	ng	86
95)	4,4'-DDE	11.434	246	172178	78.4903	ng	95
96)	4,4'-DDD	11.835	235	303513	83.7129	ng	96
97)	Butylbenzylphthalate	12.088	149	351691	66.5034	ng	70
98)	4,4'-DDT	12.190	235	279376	87.5854	ng	98
99)	3,3'-Dichlorobenzidine	12.707	252	253030	101.6886	ng	94
100)	Benzo[a]anthracene	12.736	228	753777	76.5128	ng	99
101)	Chrysene	12.781	228	734112	79.3962	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.790	149	511986	71.1020	ng	93
104)	Di-n-octylphthalate	13.537	149	846002	68.9180	ng	99
105)	Benzo[b]fluoranthene	13.955	252	717602	79.1330	ng	93
106)	Benzo[k]fluoranthene	13.986	252	695650	72.6908	ng	92
107)	Benzo[a]pyrene	14.310	252	690014	76.8766	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.685	276	751500	84.8552	ng	79
109)	Dibenzo[a,h]anthracene	15.702	278	634190	84.8336	ng	87
110)	Benzo[g,h,i]perylene	16.060	276	622914	83.7126	ng	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@120PPM
Data File: 9M88305.D
Acq On : 10/ 8/18 11:52

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:10
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.546	96	37155	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	74085	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	286486	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	175647	40.00	ng	0.00
77) Phenanthrene-d10	9.693	188	305309	40.00	ng	0.00
91) Chrysene-d12	12.750	240	341164	40.00	ng	0.00
103) Perylene-d12	14.373	264	303710	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.595	112	273608	127.73	ng	0.00
Spiked Amount 100.000			Recovery =	127.73%		
16) Phenol-d5	5.485	99	390644	124.00	ng	0.00
Spiked Amount 100.000			Recovery =	124.00%		
32) Nitrobenzene-d5	6.243	128	55055	62.76	ng	0.00
Spiked Amount 50.000			Recovery =	125.52%		
55) 2-Fluorobiphenyl	7.644	172	341827	60.93	ng	0.00
Spiked Amount 50.000			Recovery =	121.86%		
80) 2,4,6-Tribromophenol	8.974	330	103430	138.75	ng	0.00
Spiked Amount 100.000			Recovery =	138.75%		
94) Terphenyl-d14	11.497	244	360515	66.06	ng	0.00
Spiked Amount 50.000			Recovery =	132.12%		
Target Compounds						
8) 1,4-Dioxane	2.575	88	111622	120.8969	ng	97
9) Pyridine	3.032	79	298099	112.7636	ng	81
10) N-Nitrosodimethylamine	2.956	74	175150	114.6299	ng	81
12) Benzaldehyde	5.413	77	118670	73.2963	ng	79
13) Aniline	5.510	93	362461m	116.8570	ng	
14) Pentachloroethane	5.550	117	100163	117.5155	ng	74
15) bis(2-Chloroethyl) ether	5.570	93	270565	109.8026	ng	84
17) Phenol	5.496	94	386414	116.2621	ng	94
18) 2-Chlorophenol	5.615	128	302688	128.8944	ng	80
19) N-Decane	5.664	57	338218	101.5830	ng	72
20) 1,3-Dichlorobenzene	5.743	146	329257	131.3262	ng	97
22) 1,4-Dichlorobenzene	5.806	146	336630	115.0305	ng	99
23) 1,2-Dichlorobenzene	5.931	146	321727	118.3735	ng	97
24) Benzyl alcohol	5.908	108	196890	107.6808	ng	76
25) bis(2-chloroisopropyl)...	6.022	45	407568	80.5305	ng	99
26) 2-Methylphenol	6.005	108	267873	105.6617	ng	98
27) Acetophenone	6.124	105	438942	103.9909	ng	71
28) Hexachloroethane	6.209	117	129886	102.8050	ng	86
29) N-Nitroso-di-n-propyla...	6.127	70	215440	91.3674	ng	93
30) 3&4-Methylphenol	6.127	108	296079	105.0232	ng	95
33) Nitrobenzene	6.260	77	314286	100.3369	ng	79
34) Isophorone	6.451	82	552747	100.8515	ng	85
35) 2-Nitrophenol	6.510	139	175232	129.4479	ng	89
36) 2,4-Dimethylphenol	6.542	107	312063	108.2101	ng	95
37) Benzoic Acid	6.658	105	380271	147.9481	ng	88
38) bis(2-Chloroethoxy)met...	6.613	93	338944	103.8096	ng	96
39) 2,4-Dichlorophenol	6.698	162	264224	129.5329	ng	86
40) 1,2,4-Trichlorobenzene	6.760	180	288331	123.1166	ng	97
41) Naphthalene	6.823	128	899812	111.1168	ng	83
42) 4-Chloroaniline	6.857	127	320971m	121.5386	ng	
43) Hexachlorobutadiene	6.914	225	170427	125.9622	ng	97
44) Caprolactam	7.150	113	102240	120.1281	ng	70
45) 4-Chloro-3-methylphenol	7.229	107	264218	113.8265	ng	97
46) 2-Methylnaphthalene	7.357	142	640924	119.4722	ng	98
47) 1-Methylnaphthalene	7.437	142	621619	116.3574	ng	89
48) Methylnaphthalenes (To...	7.357	142	1263203m	235.4878	ng	
49) 1,1'-Biphenyl	7.732	154	759041	111.3867	ng	92
51) 1,2,4,5-Tetrachloroben...	7.491	216	322963	112.6460	ng	97
52) Hexachlorocyclopentadiene	7.482	237	141365	90.3043	ng	98
53) 2,4,6-Trichlorophenol	7.579	196	199244	127.7965	ng	99
54) 2,4,5-Trichlorophenol	7.616	196	213223	128.1636	ng	98
56) 2-Chloronaphthalene	7.755	162	602842	112.6108	ng	90
57) 1,4-Dimethylnaphthalene	8.039	156	538954	110.4027	ng	88
58) Dimethylnaphthalenes (...)	8.039	156	538954	110.4027	ng	88
59) Diphenyl Ether	7.814	170	465836	114.4871	ng	77
60) 2-Nitroaniline	7.832	65	220616	82.1813	ng	58
61) Coumarin	8.019	146	241470	104.1590	ng	82
62) Acenaphthylene	8.113	152	886614	108.1195	ng	97
63) Dimethylphthalate	7.982	163	699388	113.9660	ng	98
64) 2,6-Dinitrotoluene	8.036	165	173807	112.6291	ng	59
65) Acenaphthene	8.266	153	625157	106.2420	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM

Operator : AH/JB

Qt Meth : 9M_1008.M

Data File: 9M88305.D

Sam Mult : 1 Vial# : 6

Qt On : 10/08/18 12:10

Acq On : 10/ 8/18 11:52

Misc : A,BNA

Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.184	138	146379	102.3691	ng	78
67) 2,4-Dinitrophenol	8.278	184	104516	131.6432	ng	40
68) Dibenzofuran	8.420	168	875714	112.8944	ng	87
69) 2,4-Dinitrotoluene	8.394	165	219999	120.3563	ng	64
70) 4-Nitrophenol	8.323	65	129651	89.6611	ng	84
71) 2,3,4,6-Tetrachlorophenol	8.528	232	186163	135.4094	ng	84
72) Fluorene	8.741	166	743886	106.8250	ng	99
73) 4-Chlorophenyl-phenyle...	8.729	204	363907	123.1761	ng	81
74) Diethylphthalate	8.610	149	700561	112.1415	ng	97
75) 4-Nitroaniline	8.752	138	197338	101.1200	ng	78
76) Atrazine	9.377	200	230107	118.8325	ng	94
78) 4,6-Dinitro-2-methylph...	8.783	198	136733	143.6084	ng	68
79) n-Nitrosodiphenylamine	8.843	169	627834	115.5345	ng	97
81) 1,2-Diphenylhydrazine	8.886	77	671844	85.2962	ng	83
82) 4-Bromophenyl-phenylether	9.215	248	202749	124.2520	ng	85
83) Hexachlorobenzene	9.292	284	217460	126.4801	ng	65
84) N-Octadecane	9.565	57	465184	81.0160	ng	87
85) Pentachlorophenol	9.488	266	140038	124.7838	ng	97
86) Phenanthrene	9.721	178	1047591	111.9404	ng	99
87) Anthracene	9.775	178	1081984	111.3100	ng	99
88) Carbazole	9.943	167	978684	109.4021	ng	95
89) Di-n-butylphthalate	10.326	149	1215018	105.4793	ng	97
90) Fluoranthene	11.051	202	1180828	112.9262	ng	86
92) Pyrene	11.315	202	1192445	110.7271	ng	84
93) Benzidine	11.201	184	419387	144.2028	ng	83
95) 4,4'-DDE	11.434	246	265284	121.6195	ng	94
96) 4,4'-DDD	11.835	235	471360	130.7440	ng	97
97) Butylbenzylphthalate	12.091	149	543369	103.3312	ng	69
98) 4,4'-DDT	12.193	235	440296	138.8165	ng	98
99) 3,3'-Dichlorobenzidine	12.707	252	354331	158.7071	ng	94
100) Benzo[a]anthracene	12.739	228	1163672	118.7888	ng	99
101) Chrysene	12.784	228	1151670	117.0853	ng	99
102) bis(2-Ethylhexyl)phtha...	12.790	149	786280	106.2540	ng	94
104) Di-n-octylphthalate	13.537	149	1305426	100.0426	ng	99
105) Benzo[b]fluoranthene	13.961	252	1055274	108.5817	ng	92
106) Benzo[k]fluoranthene	13.992	252	1136976	108.8307	ng	92
107) Benzo[a]pyrene	14.316	252	1064356	110.4701	ng	90
108) Indeno[1,2,3-cd]pyrene	15.697	276	1160616	132.7560	ng	83
109) Dibenzo[a,h]anthracene	15.714	278	985702	120.6473	ng	87
110) Benzo[g,h,i]perylene	16.072	276	950638	129.4178	ng	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@160PPM
Data File: 9M88304.D
Acq On : 10/ 8/18 11:29

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:10
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.544	96	38723	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.791	152	77301	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	295287	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	182343	40.00	ng	0.00
77) Phenanthrene-d10	9.693	188	316509	40.00	ng	0.00
91) Chrysene-d12	12.756	240	365032	40.00	ng	0.00
103) Perylene-d12	14.384	264	313850	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.595	112	380592	170.48	ng	0.00
Spiked Amount 100.000			Recovery	=	170.48%	
16) Phenol-d5	5.487	99	541312	164.87	ng	0.00
Spiked Amount 100.000			Recovery	=	164.87%	
32) Nitrobenzene-d5	6.246	128	75926	83.97	ng	0.00
Spiked Amount 50.000			Recovery	=	167.94%	
55) 2-Fluorobiphenyl	7.647	172	487717	83.74	ng	0.00
Spiked Amount 50.000			Recovery	=	167.48%	
80) 2,4,6-Tribromophenol	8.977	330	147551	174.84	ng	0.00
Spiked Amount 100.000			Recovery	=	174.84%	
94) Terphenyl-d14	11.500	244	512614	87.79	ng	0.00
Spiked Amount 50.000			Recovery	=	175.58%	
Target Compounds						
8) 1,4-Dioxane	2.578	88	147828	153.6279	ng	99
9) Pyridine	3.027	79	402932	146.2475	ng	80
10) N-Nitrosodimethylamine	2.958	74	239006	150.0876	ng	81
12) Benzaldehyde	5.413	77	144919	85.8845	ng	78
13) Aniline	5.510	93	505442	156.3555	ng	58
14) Pentachloroethane	5.553	117	138175	155.5484	ng	73
15) bis(2-Chloroethyl) ether	5.573	93	383035	149.1516	ng	82
17) Phenol	5.499	94	535514	154.5981	ng	96
18) 2-Chlorophenol	5.618	128	428078	174.9081	ng	82
19) N-Decane	5.666	57	460720	132.7729	ng	73
20) 1,3-Dichlorobenzene	5.746	146	464364	177.7146	ng	97
22) 1,4-Dichlorobenzene	5.808	146	477192	156.2782	ng	97
23) 1,2-Dichlorobenzene	5.933	146	449282	158.4277	ng	98
24) Benzyl alcohol	5.911	108	276092	144.7150	ng	76
25) bis(2-chloroisopropyl)...	6.021	45	559512	105.9534	ng	100
26) 2-Methylphenol	6.007	108	375980	142.1342	ng	99
27) Acetophenone	6.127	105	617069	140.1093	ng	70
28) Hexachloroethane	6.212	117	182186	138.2013	ng	89
29) N-Nitroso-di-n-propyla...	6.129	70	302920	123.1227	ng	91
30) 3&4-Methylphenol	6.129	108	421815	143.3985	ng	95
33) Nitrobenzene	6.263	77	440466	136.4292	ng	80
34) Isophorone	6.453	82	764204	135.2772	ng	84
35) 2-Nitrophenol	6.510	139	249137	178.5578	ng	86
36) 2,4-Dimethylphenol	6.544	107	433982	140.9978	ng	95
37) Benzoic Acid	6.675	105	535723	191.6624	ng	89
38) bis(2-Chloroethoxy)met...	6.612	93	475171	141.1948	ng	97
39) 2,4-Dichlorophenol	6.701	162	377313	179.4605	ng	85
40) 1,2,4-Trichlorobenzene	6.763	180	408790	161.4454	ng	97
41) Naphthalene	6.823	128	1269981	147.0263	ng	83
42) 4-Chloroaniline	6.857	127	407611m	160.0878	ng	
43) Hexachlorobutadiene	6.914	225	242835	161.1002	ng	98
44) Caprolactam	7.158	113	141495	161.2961	ng	68
45) 4-Chloro-3-methylphenol	7.232	107	368076	153.8430	ng	97
46) 2-Methylnaphthalene	7.357	142	906320	163.9083	ng	98
47) 1-Methylnaphthalene	7.439	142	879111	159.6513	ng	89
48) Methylnaphthalenes (To...	7.357	142	1784751m	322.7989	ng	
49) 1,1'-Biphenyl	7.732	154	1081887	154.0314	ng	92
51) 1,2,4,5-Tetrachloroben...	7.491	216	463437	145.8146	ng	96
52) Hexachlorocyclopentadiene	7.482	237	209174	120.2325	ng	99
53) 2,4,6-Trichlorophenol	7.581	196	285281	176.2618	ng	99
54) 2,4,5-Trichlorophenol	7.616	196	306737	177.6023	ng	100
56) 2-Chloronaphthalene	7.755	162	862894	155.2693	ng	89
57) 1,4-Dimethylnaphthalene	8.039	156	772334	152.3999	ng	87
58) Dimethylnaphthalenes (...)	8.039	156	772334	152.3999	ng	87
59) Diphenyl Ether	7.814	170	667096	157.9296	ng	76
60) 2-Nitroaniline	7.834	65	305992	109.1689	ng	54
61) Coumarin	8.025	146	342773	142.4269	ng	72
62) Acenaphthylene	8.116	152	1255442	139.9724	ng	97
63) Dimethylphthalate	7.985	163	987883	155.0652	ng	98
64) 2,6-Dinitrotoluene	8.039	165	248679	142.2951	ng	58
65) Acenaphthene	8.266	153	885997	136.2940	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM

Operator : AH/JB

Qt Meth : 9M_1008.M

Data File: 9M88304.D

Sam Mult : 1 Vial# : 5

Qt On : 10/08/18 12:10

Acq On : 10/ 8/18 11:29

Misc : A,BNA

Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\

Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.187	138	196048	134.1876	ng	74
67)	2,4-Dinitrophenol	8.280	184	151857	163.7305	ng	39
68)	Dibenzofuran	8.422	168	1255231	147.8809	ng	85
69)	2,4-Dinitrotoluene	8.397	165	313399	158.0642	ng	62
70)	4-Nitrophenol	8.326	65	180629	116.1165	ng	87
71)	2,3,4,6-Tetrachlorophenol	8.530	232	269683	188.9560	ng	83
72)	Fluorene	8.744	166	1064216	138.7880	ng	99
73)	4-Chlorophenyl-phenyle...	8.732	204	517282	168.6611	ng	81
74)	Diethylphthalate	8.613	149	984394	151.7892	ng	97
75)	4-Nitroaniline	8.758	138	273730	133.0163	ng	79
76)	Atrazine	9.380	200	328100	156.5185	ng	95
78)	4,6-Dinitro-2-methylph...	8.786	198	192152	179.6664	ng	67
79)	n-Nitrosodiphenylamine	8.846	169	895207	158.9073	ng	98
81)	1,2-Diphenylhydrazine	8.889	77	934630	114.4602	ng	80
82)	4-Bromophenyl-phenylether	9.218	248	290538	158.3389	ng	82
83)	Hexachlorobenzene	9.292	284	309002	160.2039	ng	65
84)	N-Octadecane	9.565	57	637629	107.1193	ng	85
85)	Pentachlorophenol	9.491	266	203150	160.9751	ng	98
86)	Phenanthrene	9.721	178	1473362	143.3229	ng	99
87)	Anthracene	9.778	178	1536274	143.0922	ng	99
88)	Carbazole	9.946	167	1385218	141.2778	ng	95
89)	Di-n-butylphthalate	10.329	149	1712478	138.3546	ng	97
90)	Fluoranthene	11.054	202	1687057	145.0214	ng	86
92)	Pyrene	11.318	202	1697058	147.2802	ng	84
93)	Benzidine	11.201	184	561270	211.6388	ng	84
95)	4,4'-DDE	11.437	246	370876	158.9108	ng	93
96)	4,4'-DDD	11.835	235	669354	173.5230	ng	97
97)	Butylbenzylphthalate	12.094	149	765344	136.0271	ng	66
98)	4,4'-DDT	12.193	235	636414	187.5290	ng	97
99)	3,3'-Dichlorobenzidine	12.713	252	469562	224.7381	ng	95
100)	Benzo[a]anthracene	12.744	228	1662810	158.6425	ng	99
101)	Chrysene	12.790	228	1674114	150.3948	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.793	149	1141916	139.8852	ng	93
104)	Di-n-octylphthalate	13.548	149	1854203	128.9598	ng	99
105)	Benzo[b]fluoranthene	13.972	252	1527767m	140.2281	ng	
106)	Benzo[k]fluoranthene	14.006	252	1537154	133.6111	ng	92
107)	Benzo[a]pyrene	14.330	252	1509868	141.2453	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.711	276	1648275	182.4451	ng	82
109)	Dibenzo[a,h]anthracene	15.731	278	1416051	153.8973	ng	88
110)	Benzo[g,h,i]perylene	16.094	276	1339690	176.4900	ng	74

(#)= qualifier out of range (m) = manual integration (+) = signals summed

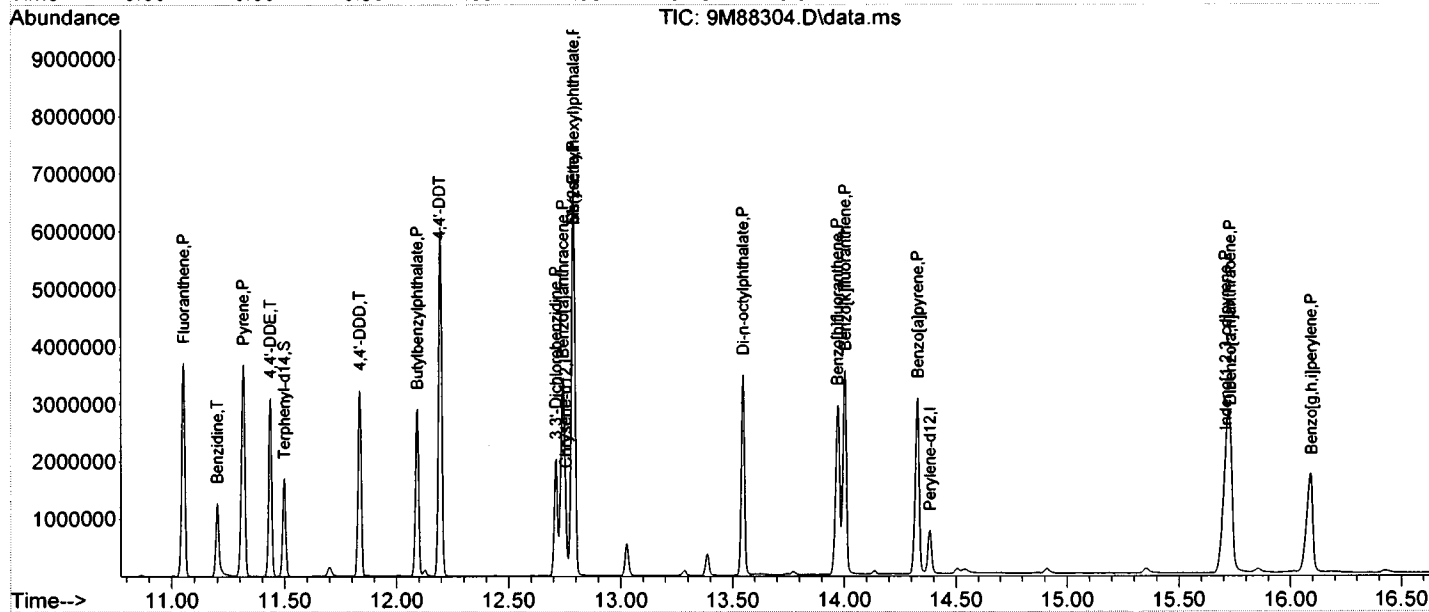
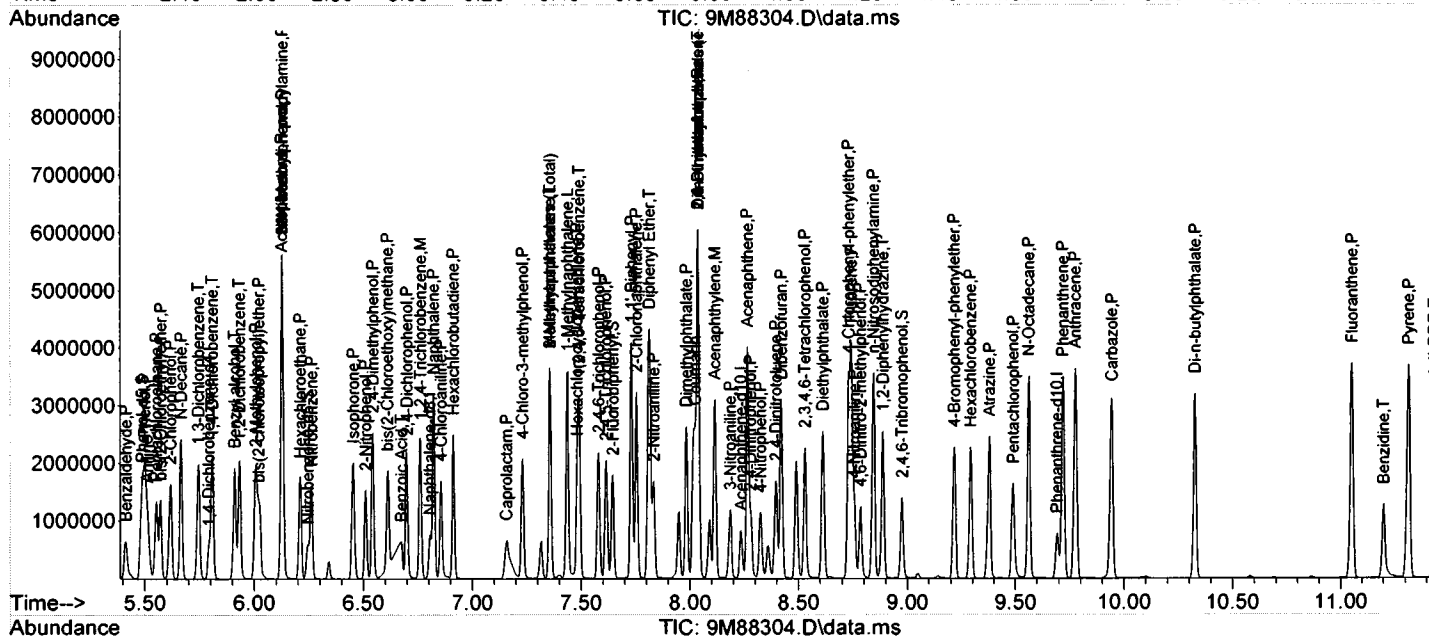
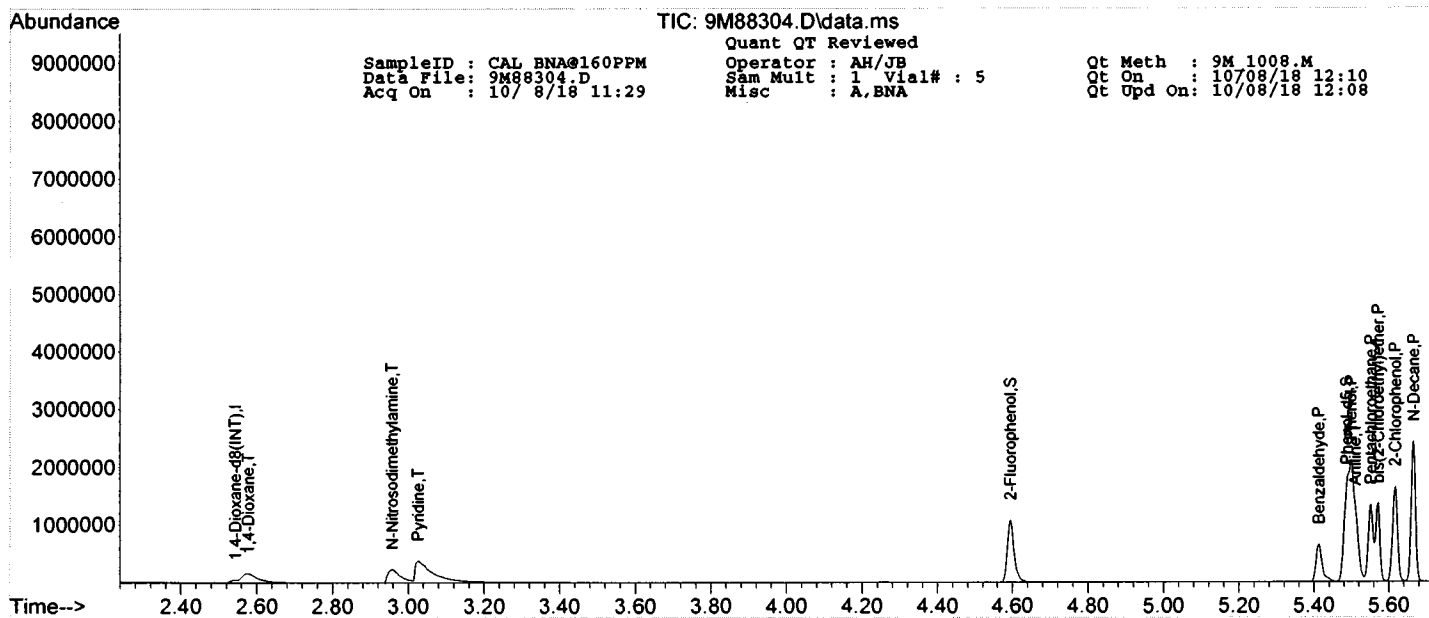
TIC: 9M88304.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@160PPM
Data File: 9M88304.D
Acq On : 10/ 8/18 11:29

```
Operator   : AH/JB
Sam Mult   : 1   Vial#   : 5
Misc       : A,BNA
```

```
Qt Meth   : 9M 1008.M
Qt On      : 10/08/18 12:10
Qt Upd On : 10/08/18 12:08
```



SampleID : CAL BNA@196PPM
Data File: 9M88303.D
Acq On : 10/ 8/18 11:05

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 12:09
Qt Upd On: 10/08/18 12:08

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.541	96	39900	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.792	152	79169	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	308563	40.00	ng	0.00
50) Acenaphthene-d10	8.238	164	192321	40.00	ng	0.00
77) Phenanthrene-d10	9.696	188	330720	40.00	ng	0.00
91) Chrysene-d12	12.753	240	382634	40.00	ng	0.00
103) Perylene-d12	14.378	264	329075	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.595	112	479192	208.31	ng	0.00
Spiked Amount 100.000			Recovery =	208.31%		
16) Phenol-d5	5.490	99	689183	203.72	ng	0.00
Spiked Amount 100.000			Recovery =	203.72%		
32) Nitrobenzene-d5	6.246	128	98321	104.06	ng	0.00
Spiked Amount 50.000			Recovery =	208.12%		
55) 2-Fluorobiphenyl	7.647	172	642539	104.60	ng	0.00
Spiked Amount 50.000			Recovery =	209.20%		
80) 2,4,6-Tribromophenol	8.980	330	197591	207.97	ng	0.00
Spiked Amount 100.000			Recovery =	207.97%		
94) Terphenyl-d14	11.500	244	672730	109.91	ng	0.00
Spiked Amount 50.000			Recovery =	219.82%		
Target Compounds						
8) 1,4-Dioxane	2.575	88	188408	190.0242	ng	98
9) Pyridine	3.021	79	513280	180.8037	ng	81
10) N-Nitrosodimethylamine	2.956	74	298076	181.6599	ng	81
12) Benzaldehyde	5.414	77	162903	93.6946	ng	79
13) Aniline	5.513	93	645903m	193.9122	ng	
14) Pentachloroethane	5.553	117	176558	192.8944	ng	72
15) bis(2-Chloroethyl) ether	5.573	93	492307	186.0465	ng	82
17) Phenol	5.502	94	682147	191.1206	ng	99
18) 2-Chlorophenol	5.618	128	542480	215.1131	ng	80
19) N-Decane	5.667	57	571858	159.9399	ng	74
20) 1,3-Dichlorobenzene	5.746	146	595907	221.3294	ng	96
22) 1,4-Dichlorobenzene	5.809	146	616232	197.0514	ng	98
23) 1,2-Dichlorobenzene	5.934	146	579216	199.4264	ng	98
24) Benzyl alcohol	5.914	108	351196	179.7377	ng	77
25) bis(2-chloroisopropyl)...	6.025	45	687182	127.0595	ng	99
26) 2-Methylphenol	6.008	108	486733	179.6613	ng	99
27) Acetophenone	6.130	105	799554	177.2601	ng	69
28) Hexachloroethane	6.209	117	234318	173.5533	ng	90
29) N-Nitroso-di-n-propyla...	6.133	70	381053	151.2256	ng	89
30) 3&4-Methylphenol	6.133	108	544706	180.8068	ng	97
33) Nitrobenzene	6.263	77	559838	165.9425	ng	79
34) Isophorone	6.456	82	982314	166.4049	ng	84
35) 2-Nitrophenol	6.510	139	317656	217.8704	ng	89
36) 2,4-Dimethylphenol	6.545	107	559453	168.9965	ng	93
37) Benzoic Acid	6.687	105	683404	225.0172	ng	89
38) bis(2-Chloroethoxy)met...	6.616	93	611240	173.8125	ng	97
39) 2,4-Dichlorophenol	6.701	162	495924	225.7265	ng	86
40) 1,2,4-Trichlorobenzene	6.763	180	532442	193.6406	ng	96
41) Naphthalene	6.826	128	1666420	179.2088	ng	83
42) 4-Chloroaniline	6.857	127	456580	176.9511	ng	92
43) Hexachlorobutadiene	6.914	225	312729	187.8445	ng	96
44) Caprolactam	7.170	113	177988	194.1663	ng	71
45) 4-Chloro-3-methylphenol	7.235	107	480794	192.3090	ng	97
46) 2-Methylnaphthalene	7.360	142	1196571	207.0896	ng	97
47) 1-Methylnaphthalene	7.440	142	1151872	200.1859	ng	90
48) Methylnaphthalenes (To...	7.360	142	2349617m	406.6791	ng	
49) 1,1'-Biphenyl	7.732	154	1433120	195.2587	ng	92
51) 1,2,4,5-Tetrachloroben...	7.494	216	614305	173.9009	ng	96
52) Hexachlorocyclopentadiene	7.485	237	277702	143.8576	ng	99
53) 2,4,6-Trichlorophenol	7.582	196	374514	219.3895	ng	99
54) 2,4,5-Trichlorophenol	7.619	196	396253	217.5290	ng	99
56) 2-Chloronaphthalene	7.758	162	1148827	195.9951	ng	89
57) 1,4-Dimethylnaphthalene	8.042	156	1041195	194.7933	ng	86
58) Dimethylnaphthalenes (...)	8.042	156	1041195	194.7933	ng	86
59) Diphenyl Ether	7.817	170	898105	201.5880	ng	73
60) 2-Nitroaniline	7.835	65	388564	130.8334	ng	58
61) Coumarin	8.028	146	459646	181.0803	ng	75
62) Acenaphthylene	8.119	152	1666883	168.5198	ng	98
63) Dimethylphthalate	7.991	163	1305004	194.2151	ng	98
64) 2,6-Dinitrotoluene	8.042	165	333675	168.5790	ng	58
65) Acenaphthene	8.269	153	1183433	163.6282	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@196PPM
 Data File: 9M88303.D
 Acq On : 10/ 8/18 11:05

Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

Qt Meth : 9M_1008.M
 Qt On : 10/08/18 12:09
 Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.190	138	245978	161.8876	ng	75
67) 2,4-Dinitrophenol	8.283	184	203037	190.1331	ng	40
68) Dibenzofuran	8.423	168	1659723	177.6384	ng	84
69) 2,4-Dinitrotoluene	8.403	165	412090	190.1162	ng	61
70) 4-Nitrophenol	8.332	65	236128	139.5844	ng	86
71) 2,3,4,6-Tetrachlorophenol	8.534	232	363700	241.6088	ng	83
72) Fluorene	8.747	166	1417015	166.8322	ng	99
73) 4-Chlorophenyl-phenyle...	8.732	204	694686	214.7526	ng	80
74) Diethylphthalate	8.616	149	1298391	189.8191	ng	97
75) 4-Nitroaniline	8.764	138	359349	163.1674	ng	79
76) Atrazine	9.386	200	429115	187.7109	ng	94
78) 4,6-Dinitro-2-methylph...	8.792	198	252553	211.5674	ng	69
79) n-Nitrosodiphenylamine	8.849	169	1171001	198.9314	ng	98
81) 1,2-Diphenylhydrazine	8.892	77	1221262	143.1361	ng	79
82) 4-Bromophenyl-phenylether	9.218	248	385325	188.1316	ng	81
83) Hexachlorobenzene	9.295	284	412330	191.2328	ng	63
84) N-Octadecane	9.565	57	816673	131.3026	ng	82
85) Pentachlorophenol	9.491	266	269585	191.7172	ng	99
86) Phenanthrene	9.724	178	1951012	172.5813	ng	100
87) Anthracene	9.781	178	2047675	172.6650	ng	100
88) Carbazole	9.949	167	1822737	169.7130	ng	95
89) Di-n-butylphthalate	10.332	149	2251513	168.6211	ng	96
90) Fluoranthene	11.054	202	2224500	172.8070	ng	87
92) Pyrene	11.321	202	2234362	184.9901	ng	84
95) 4,4'-DDE	11.437	246	493483	201.7178	ng	93
96) 4,4'-DDD	11.838	235	880243	217.6964	ng	97
97) Butylbenzylphthalate	12.094	149	991985	168.1982	ng	69
98) 4,4'-DDT	12.196	235	846016	237.8234	ng	97
100) Benzo[a]anthracene	12.745	228	2188523	199.1937	ng	99
101) Chrysene	12.790	228	2219121	181.0846	ng	98
102) bis(2-Ethylhexyl)phtha...	12.793	149	1507836	171.3855	ng	92
104) Di-n-octylphthalate	13.546	149	2430440	153.2241	ng	98
105) Benzo[b]fluoranthene	13.969	252	2016314	165.9593	ng	92
106) Benzo[k]fluoranthene	14.003	252	2094072	162.1122	ng	92
107) Benzo[a]pyrene	14.327	252	1987151	167.4945	ng	91
108) Indeno[1,2,3-cd]pyrene	15.711	276	2150838	227.0584	ng	81
109) Dibenzo[a,h]anthracene	15.731	278	1865818	181.1559	ng	87
110) Benzo[g,h,i]perylene	16.092	276	1729466	217.2976	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@.SPPM
Data File: 9M88308.D
Acq On : 10/ 8/18 13:02

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/08/18 13:28
Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.547	96	38089	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.792	152	74902m	40.00	ng	0.00
31) Naphthalene-d8	6.803	136	287012	40.00	ng	0.00
50) Acenaphthene-d10	8.229	164	174925	40.00	ng	0.00
77) Phenanthrene-d10	9.690	188	307469	40.00	ng	0.00
91) Chrysene-d12	12.742	240	336446	40.00	ng	0.00
103) Perylene-d12	14.378	264	301465	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	5.482	99	1708	0.53	ng	0.00
Spiked Amount 100.000			Recovery =	0.53%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
8) 1,4-Dioxane	2.581	88	462m	0.4881	ng	
9) Pyridine	0.000		0	N.D.		
10) N-Nitrosodimethylamine	0.000		0	N.D.		
12) Benzaldehyde	0.000		0	N.D. d		
13) Aniline	5.510	93	1254m	0.3944	ng	
14) Pentachloroethane	0.000		0	N.D. d		
15) bis(2-Chloroethyl) ether	5.564	93	1367	0.5412	ng	73
17) Phenol	0.000		0	N.D. d		
18) 2-Chlorophenol	0.000		0	N.D. d		
19) N-Decane	0.000		0	N.D. d		
20) 1,3-Dichlorobenzene	0.000		0	N.D. d		
22) 1,4-Dichlorobenzene	0.000		0	N.D. d		
23) 1,2-Dichlorobenzene	0.000		0	N.D. d		
24) Benzyl alcohol	0.000		0	N.D. d		
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d		
26) 2-Methylphenol	6.002	108	1421	0.5544	ng	84
27) Acetophenone	0.000		0	N.D. d		
28) Hexachloroethane	0.000		0	N.D. d		
29) N-Nitroso-di-n-propyla...	6.124	70	920	0.3859	ng	78
30) 3&4-Methylphenol	6.130	108	1213	0.4256	ng	88
33) Nitrobenzene	0.000		0	N.D. d		
34) Isophorone	0.000		0	N.D. d		
35) 2-Nitrophenol	0.000		0	N.D. d		
36) 2,4-Dimethylphenol	6.539	107	1298	0.5085	ng	93
37) Benzoic Acid	0.000		0	N.D.		
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d		
39) 2,4-Dichlorophenol	6.701	162	884	0.4326	ng	84
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d		
41) Naphthalene	6.817	128	4259	0.5881	ng	79
42) 4-Chloroaniline	6.857	127	1171	0.3679	ng	88
43) Hexachlorobutadiene	0.000		0	N.D. d		
44) Caprolactam	0.000		0	N.D.		
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d		
46) 2-Methylnaphthalene	0.000		0	N.D. d		
47) 1-Methylnaphthalene	0.000		0	N.D. d		
48) Methylnaphthalenes (To...	0.000		0	N.D. d		
49) 1,1'-Biphenyl	0.000		0	N.D. d		
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d		
52) Hexachlorocyclopentadiene	0.000		0	N.D.		
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d		
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d		
56) 2-Chloronaphthalene	0.000		0	N.D. d		
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d		
58) Dimethylnaphthalenes (...)	0.000		0	N.D. d		
59) Diphenyl Ether	0.000		0	N.D. d		
60) 2-Nitroaniline	0.000		0	N.D. d		
61) Coumarin	0.000		0	N.D. d		
62) Acenaphthylene	0.000		0	N.D. d		
63) Dimethylphthalate	0.000		0	N.D. d		
64) 2,6-Dinitrotoluene	0.000		0	N.D. d		
65) Acenaphthene	0.000		0	N.D. d		

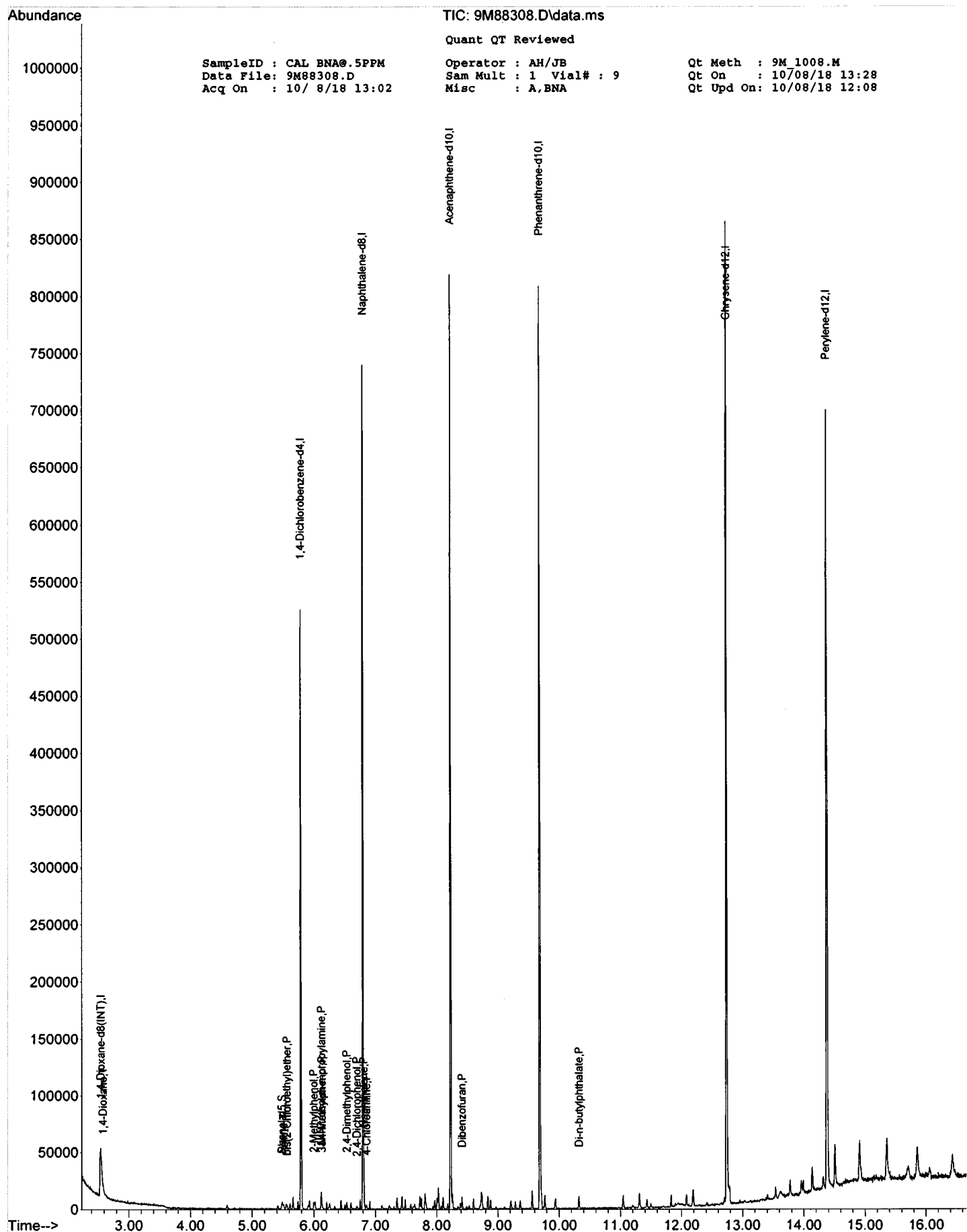
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 9M_1008.M
 Data File: 9M88308.D Sam Mult : 1 Vial# : 9 Qt On : 10/08/18 13:28
 Acq On : 10/ 8/18 13:02 Misc : A,BNA Qt Upd On: 10/08/18 12:08

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.	d	
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.414	168	3949	0.6185	ng	96
69) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
70) 4-Nitrophenol	0.000		0	N.D.	d	
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	d	
72) Fluorene	0.000		0	N.D.	d	
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D.	d	
74) Diethylphthalate	0.000		0	N.D.	d	
75) 4-Nitroaniline	0.000		0	N.D.	d	
76) Atrazine	0.000		0	N.D.	d	
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D.	d	
81) 1,2-Diphenylhydrazine	0.000		0	N.D.	d	
82) 4-Bromophenyl-phenylether	0.000		0	N.D.	d	
83) Hexachlorobenzene	0.000		0	N.D.	d	
84) N-Octadecane	0.000		0	N.D.	d	
85) Pentachlorophenol	0.000		0	N.D.	d	
86) Phenanthrene	0.000		0	N.D.	d	
87) Anthracene	0.000		0	N.D.	d	
88) Carbazole	0.000		0	N.D.	d	
89) Di-n-butylphthalate	10.324	149	5611	0.5475	ng	94
90) Fluoranthene	0.000		0	N.D.	d	
92) Pyrene	0.000		0	N.D.	d	
93) Benzidine	0.000		0	N.D.	d	
95) 4,4'-DDE	0.000		0	N.D.	d	
96) 4,4'-DDD	0.000		0	N.D.	d	
97) Butylbenzylphthalate	0.000		0	N.D.	d	
98) 4,4'-DDT	0.000		0	N.D.	d	
99) 3,3'-Dichlorobenzidine	0.000		0	N.D.	d	
100) Benzo[a]anthracene	0.000		0	N.D.	d	
101) Chrysene	0.000		0	N.D.	d	
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D.	d	
104) Di-n-octylphthalate	0.000		0	N.D.	d	
105) Benzo[b]fluoranthene	0.000		0	N.D.	d	
106) Benzo[k]fluoranthene	0.000		0	N.D.	d	
107) Benzo[a]pyrene	0.000		0	N.D.	d	
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
109) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
110) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Level #:	Data File:	Cal Identifier:	Analysis Date/Time					Level #:	Data File:	Cal Identifier:	Analysis Date/Time																
			RF1	RF2	RF3	RF4	RF5				RF6	RF7	RF8	RF9	AVgrt	RT	Corr1	Corr2	%Rsd								
1	7M95177.D	CAL BNA@50PPM	10/08/18 16:13					2	7M95175.D	CAL BNA@20PPM	10/08/18 15:27																
3	7M95169.D	CAL BNA@10PPM	10/08/18 13:05					4	7M95174.D	CAL BNA@20PPM	10/08/18 15:03																
5	7M95173.D	CAL BNA@80PPM	10/08/18 14:40					6	7M95172.D	CAL BNA@120PPM	10/08/18 14:16																
7	7M95171.D	CAL BNA@160PPM	10/08/18 13:53					8	7M95170.D	CAL BNA@196PPM	10/08/18 13:29																
9	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50																								
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AVgrt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9	
1,4-Dioxane	1	0	AVG	0.9192	1.1824	0.9196	0.9532	0.9407	0.9409	0.9363	0.9544	0.7095	0.9402	2.54	1.00	1.00	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
Pyridine	1	0	Qua	2.4474	2.9790	2.1569	2.5134	2.5477	2.5491	2.5516	2.6004	---	2.542	2.97	1.00	1.00	8.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---	
N-Nitrosodimethylamin	1	0	AVG	1.3934	1.6205	1.2920	1.4062	1.4695	1.4580	1.4617	1.4979	---	2.145	2.91	1.00	1.00	6.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---	
2-Fluorophenol	1	0	AVG	2.0854	2.3564	1.8446	2.0999	2.1739	2.2007	2.1903	2.2146	---	2.154	4.55	0.995	0.998	6.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---	
Benzaldehyde	1	0	AVG	1.1489	1.2212	1.2224	1.4526	1.0744	0.8985	0.7892	---	---	1.125	3.37	0.967	0.998	20	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	---	
Aniline	1	0	AVG	3.0158	2.4540	2.5073	3.1152	3.0647	2.9985	2.9629	2.9573	2.4182	2.835	4.46	1.00	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50	
Pentachloroethane	1	0	AVG	0.7127	0.8200	0.6369	0.7036	0.7320	0.7330	0.7309	0.7286	---	0.725	5.51	1.00	1.00	6.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-Chloroethyl)ether	1	0	Qua	2.1655	2.5532	1.9671	2.2064	2.1783	2.1559	2.1425	2.1050	2.5200	2.225	5.52	1.00	1.00	8.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	AVG	3.0106	3.2708	2.6449	3.0642	3.1043	3.0946	3.0604	3.0654	---	3.045	5.43	1.00	1.00	5.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Phenol	1	0	AVG	2.9869	3.4311	2.6666	3.0210	3.0582	3.0368	2.9832	2.9620	---	3.025	5.44	1.00	1.00	6.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Chlorophenol	1	0	AVG	2.2163	2.4976	1.9300	2.2065	2.2761	2.2808	2.2609	2.2759	---	2.245	5.57	1.00	1.00	6.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
N-Decane	1	0	AVG	1.9136	2.4041	1.7781	1.9477	1.9392	1.8766	1.8327	1.7897	---	1.945	6.63	0.999	1.00	10	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,3-Dichlorobenzene	1	0	AVG	2.3621	2.8113	2.1153	2.3971	2.4165	2.4233	2.3833	2.3966	---	2.415	7.70	1.00	1.00	7.9	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,4-Dichlorobenzene	1	0	AVG	1.4240	1.6867	1.2490	1.4235	1.4815	1.4796	1.4760	1.4573	---	1.465	5.76	1.00	1.00	8.2	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,2-Dichlorobenzene	1	0	AVG	1.3427	1.5938	1.1702	1.3627	1.3950	1.3939	1.4008	1.3731	---	1.385	5.89	1.00	1.00	8.3	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Benzyl alcohol	1	0	AVG	0.8500	0.9775	0.7418	0.8533	0.8989	0.9130	0.9099	0.9062	---	0.881	5.86	0.999	0.999	7.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-chloroisopropyl)ether	1	0	AVG	1.3124	1.5928	1.1806	1.3526	1.3516	1.3488	1.3254	1.3052	---	1.355	5.98	1.00	1.00	8.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Methylphenol	1	0	AVG	1.1566	1.2817	1.0234	1.1764	1.2176	1.2159	1.2227	1.2162	1.3384	1.215	5.95	1.00	1.00	7.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	AVG	1.7507	2.0988	1.5919	1.8050	1.7571	1.6742	1.6014	1.5050	---	1.726	6.08	0.995	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Hexachloroethane	1	0	AVG	0.5202	0.5834	0.4495	0.5245	0.5433	0.5509	0.5531	0.5483	---	0.534	6.17	1.00	1.00	7.4	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
N-Nitroso-di-n-propylamine	1	0	AVG	0.8294	1.0297	0.7640	0.8685	0.8351	0.7866	0.7628	0.7274	0.9288	0.837	6.08	0.997	0.999	11	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3,8,4-Methylenphenol	1	0	AVG	1.2200	1.3508	1.0683	1.2493	1.2386	1.1750	1.1318	1.0548	1.3396	1.206	6.08	0.995	1.00	8.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	AVG	0.1226	0.1262	0.1069	0.1185	0.1308	0.1305	0.1331	0.1354	---	0.126	6.20	0.999	1.00	7.4	---	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	---
Nitrobenzene	1	0	AVG	0.3283	0.3783	0.2821	0.3301	0.3383	0.3379	0.3390	0.3398	---	0.334	6.21	1.00	1.00	7.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Isophorone	1	0	AVG	0.6068	0.6678	0.5430	0.6173	0.6262	0.6258	0.6248	0.6256	---	0.617	6.40	1.00	1.00	5.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Nitrophenol	1	0	Qua	0.1725	0.1643	0.1401	0.1699	0.1868	0.1943	0.1949	0.1991	---	0.178	6.46	0.998	0.999	11	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2,4-Dimethylphenol	1	0	AVG	0.3278	0.3596	0.2840	0.3273	0.3355	0.3329	0.3377	0.3360	0.3502	0.332	6.49	1.00	1.00	6.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.3299	0.1827	0.1959	0.2907	0.3704	0.4048	0.4084	0.4239	---	0.326	6.56	0.993	0.998	29	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-Chloroethoxy)methane	1	0	AVG	0.4156	0.4624	0.3686	0.4196	0.4205	0.4212	0.4195	0.4153	---	0.418	6.56	1.00	1.00	6.0	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2,4-Dichlorophenol	1	0	AVG	0.2776	0.2845	0.2322	0.2767	0.2880	0.2936	0.2947	0.2958	0.2724	0.280	6.64	1.00	1.00	7.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	AVG	0.3019	0.3601	0.2675	0.3055	0.3116	0.3169	0.3160	0.3149	---	0.312	6.71	1.00	1.00	8.1	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Naphthalene	1	0	AVG	1.0377	1.1829	0.8976	1.0574	1.0617	1.0503	1.0371	1.0371	1.2649	1.076	7.77	0.999	1.00	9.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3986	0.3224	0.3214	0.4134	0.3970	0.3669	0.3347	0.3101	0.3085	0.353	6.80	0.990	0.998	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	AVG	0.1545	0.1790	0.1353	0.1563	0.1583	0.1614	0.1597	0.1604	---	0.158	6.87	1.00	1.00	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Caprolactam	1	0	AVG	0.1138	0.0993	0.0963	0.1139	0.1210	0.1238	0.1255	0.1365	---	0.116	7.07	0.996	0.999											

Flags

a - failed the min rf criteria

c - failed the minimum correlation coefficient criteria (if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M95177.D	CAL BNA@50PPM	10/08/18 16:13	2	7M95175.D	CAL BNA@20PPM	10/08/18 15:27
3	7M95169.D	CAL BNA@10PPM	10/08/18 13:05	4	7M95174.D	CAL BNA@20PPM	10/08/18 15:03
5	7M95173.D	CAL BNA@80PPM	10/08/18 14:40	6	7M95172.D	CAL BNA@120PPM	10/08/18 14:16
7	7M95171.D	CAL BNA@160PPM	10/08/18 13:53	8	7M95170.D	CAL BNA@196PPM	10/08/18 13:29
9	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations									
																		Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
Hexachlorocyclopenta	1	0	Qua	0.2407	0.1919	0.1817	0.2230	0.2729	0.2787	0.2802	0.2758	---	0.2437	4.3	0.997	0.998	17	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3284	0.3787	0.2747	0.3363	0.3480	0.3720	0.3550	0.3566	---	0.3447	5.2	0.999	0.999	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3493	0.3418	0.2903	0.3351	0.3672	0.3841	0.3753	0.3883	---	0.3547	5.5	0.999	0.999	9.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2250	1.4424	1.0815	1.2457	1.2830	1.3026	1.2893	1.2904	---	1.2775	5.9	0.999	0.999	7.9	0.80	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0650	1.2410	0.9641	1.0993	1.1021	1.0831	1.0803	1.0603	---	1.0977	7.0	1.00	1.00	7.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9394	1.1393	0.8470	0.9698	0.9674	0.9384	0.8982	0.8487	---	0.9447	7.97	0.997	0.999	9.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9394	1.1393	0.8470	0.9698	0.9674	0.9384	0.8982	0.8487	---	0.9447	7.97	0.997	0.999	9.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7846	0.9335	0.7004	0.8124	0.8214	0.8235	0.8033	0.7910	---	0.8097	7.6	0.999	1.00	7.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3247	0.3308	0.2803	0.3334	0.3392	0.3393	0.3283	0.3270	---	0.3257	7.77	0.999	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4389	0.4986	0.4020	0.4511	0.4571	0.4674	0.4571	0.4533	---	0.4537	7.95	1.00	1.00	6.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.5838	1.8286	1.3893	1.6155	1.6582	1.6680	1.6310	1.6101	---	1.6285	8.05	0.999	0.999	7.4	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylbthalate	1	0	Avg	1.1527	1.3496	1.0173	1.2002	1.2182	1.2097	1.2035	1.1932	---	1.1979	9.2	1.00	1.00	7.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2637	0.2492	0.2184	0.2660	0.2810	0.2730	0.2623	0.2484	---	0.2587	9.7	0.996	0.999	7.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0931	1.2600	0.9570	1.1211	1.1422	1.1276	1.1019	1.0805	---	1.1182	8.20	0.999	1.00	7.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.2994	0.2559	0.2387	0.3080	0.3121	0.2994	0.2870	0.2842	---	0.2868	11	0.998	1.00	9.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.0954	---	0.0470	0.0669	0.1281	0.1442	0.1490	0.1524	---	0.1128	8.20	0.996	0.998	38	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.4890	1.7689	1.3173	1.5404	1.5731	1.5550	1.5545	1.5155	1.7770	---	1.5783	8.35	1.00	1.00	8.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
2,4-Dinitrotoluene	1	0	Qua	0.3421	0.2512	0.2503	0.3259	0.3741	0.3849	0.3865	0.3900	---	0.3388	8.32	0.999	1.00	17	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.1992	0.1389	0.1510	0.1798	0.2170	0.2214	0.2229	0.2252	---	0.1948	8.24	0.998	0.999	18	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Qua	0.2907	0.2851	0.2322	0.2898	0.3185	0.3273	0.3309	0.3342	---	0.3018	8.46	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2296	1.3981	1.0871	1.2546	1.2663	1.2318	1.1917	1.1493	---	1.2388	8.67	0.998	1.00	7.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5582	0.6243	0.4943	0.5692	0.5841	0.5759	0.5629	0.5500	---	0.5658	8.66	0.999	1.00	6.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylbthalate	1	0	Avg	1.1711	1.2768	1.0380	1.1883	1.2296	1.2377	1.2275	1.2199	---	1.2085	5.5	1.00	1.00	6.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3362	0.2658	0.2659	0.3320	0.3535	0.3579	0.3518	0.3503	---	0.3278	8.67	1.00	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Altazine	1	0	Avg	0.3522	0.3473	0.2967	0.3567	0.3785	0.3843	0.3815	0.3853	---	0.3609	9.30	1.00	1.00	8.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.0789	---	0.0400	0.0603	0.0989	0.1068	0.1099	0.1132	---	0.0869	8.70	0.996	0.999	32	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6220	0.6465	0.5304	0.6231	0.6380	0.6429	0.6345	0.6301	---	0.6218	8.77	0.999	0.999	6.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0898	0.0673	0.0699	0.0863	0.0981	0.1025	0.1047	0.1075	---	0.0908	8.90	0.999	1.00	17	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7069	0.8013	0.6141	0.7267	0.7144	0.7092	0.6988	0.6906	---	0.7088	8.81	0.999	1.00	7.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.1869	0.2191	0.1612	0.1907	0.2026	0.2020	0.2046	0.2074	---	0.1979	9.14	0.999	1.00	8.9	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.1926	0.2157	0.1680	0.1958	0.2027	0.2066	0.2061	0.2118	---	0.2009	9.21	0.994	0.997	7.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3828	0.4361	0.3437	0.3923	0.3883	0.3789	0.3689	0.3557	---	0.3819	9.50	0.998	1.00	7.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1135	---	0.0812	0.1033	0.1312	0.1368	0.1410	0.1445	---	0.1229	9.41	0.998	0.999	19	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0653	1.2194	0.9303	1.0755	1.1011	1.1039	1.0814	1.0696	---	1.0899	9.64	0.999	0.999	7.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0988	1.1463	0.9497	1.1043	1.1295	1.1234	1.1157	1.0995	---	1.1097	9.70	1.00	1.00	5.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9839	1.0530	0.8599	1.0041	1.0251	1.0295	1.0245	1.0275	---	1.0098	9.86	1.00	1.00	6.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1698	1.0882	0.9799	1.1542	1.2209	1.2192	1.2004	1.1887	1.0502	---	1.1410	10.25	1.00	1.00	7.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Fluoranthene	1	0	Avg	1.1013	1.1791	0.9379	1.1153	1.1585	1.1590	1.1573	1.1485	---	1.1210	9.6	1.00	1.00	6.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pvrene	1	0	Avg	1.1327	1.2311	0.9908	1.1439	1.1889	1.1940	1.1942	1.1887	---	1.1611	11.22	1.00	1.00	6.4	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benidine	1	0	Qua	0.3542	0.1519	0.3161	0.4285	0.4131	0.3950	0.3648	0.3541	---	0.3471	11.11	0.995	0.997	25	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6563	0.6962	0.5673	0.6433	0.7084	0.7147	0.7355	0.7695	---	0.6861	11.41	0.998	1.00	9.2	0.80	25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound

Avg Rsd: 9.49

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																		
								LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9										
1	7M95177.D	CAL BNA@50PPM	10/08/18 16:13	2	7M95175.D	CAL BNA@2PPM	10/08/18 15:27																			
3	7M95169.D	CAL BNA@10PPM	10/08/18 13:05	4	7M95174.D	CAL BNA@20PPM	10/08/18 15:03																			
5	7M95173.D	CAL BNA@80PPM	10/08/18 14:40	6	7M95172.D	CAL BNA@120PPM	10/08/18 14:16																			
7	7M95171.D	CAL BNA@160PPM	10/08/18 13:53	8	7M95170.D	CAL BNA@196PPM	10/08/18 13:29																			
9	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50																							
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd									
4,4'-DDE	1	0	Avg	0.2340	0.2542	0.1951	0.2291	0.2450	0.2496	0.2537	0.2571	----	0.240	11.35	0.999	1.00	8.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3980	0.3964	0.3285	0.3932	0.4249	0.4332	0.4418	0.4469	----	0.408	11.75	0.998	0.999	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzophthalate	1	0	Qua	0.5024	0.4324	0.4348	0.4871	0.5433	0.5551	0.5581	0.5608	----	0.509	12.00	1.00	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
4,4'-DDT	1	0	Qua	0.2937	----	0.1946	0.2496	0.3381	0.3555	0.3604	0.3702	----	0.309	12.10	0.998	0.999	21	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3338	0.2373	0.2798	0.3422	0.3514	0.3325	0.3247	0.3248	----	0.316	12.61	0.999	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzolanthracene	1	0	Avg	1.0642	1.2050	0.9376	1.0668	1.1231	1.1287	1.1357	1.1410	----	1.10	12.63	1.00	1.00	7.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Chrysene	1	0	Avg	0.9916	1.0527	0.8673	1.0014	1.0392	1.0569	1.0505	1.0459	----	1.01	12.68	1.00	1.00	6.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6840	0.5790	0.5824	0.6487	0.7450	0.7529	0.7508	0.7574	----	0.688	12.71	1.00	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Di-n-octylphthalate	1	0	Qua	1.2965	0.9298	1.0326	1.2104	1.4208	1.4801	1.4701	1.4540	----	1.29	13.46	0.999	0.999	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzobifluoranthene	1	0	Qua	1.1258	1.0867	0.9346	1.0683	1.2193	1.2557	1.2075	1.2714	----	1.15	13.86	0.998	0.999	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzokfluoranthene	1	0	Avg	1.1389	1.0704	0.8837	1.1185	1.1216	1.1457	1.1945	1.1343	----	1.10	13.89	0.999	0.999	8.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzolaprene	1	0	Avg	1.0983	1.0051	0.8668	1.0234	1.1416	1.1679	1.1814	1.1950	----	1.08	14.21	1.00	1.00	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Indenofl 1,2,3-cdipren	1	0	Avg	1.1504	1.0578	0.9153	1.0934	1.2048	1.2696	1.2854	1.3019	----	1.16	15.54	0.998	0.999	12	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Dibenzofluoranthracen	1	0	Avg	0.9529	0.8842	0.7667	0.9094	1.0071	1.0586	1.0674	1.0798	----	0.966	15.56	0.999	1.00	11	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	0.9508	0.9261	0.7800	0.9221	1.0008	1.0524	1.0567	1.0883	----	0.972	15.89	0.999	1.00	10	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria if applicable

Note:

Avg Rsd: 9.49

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

SampleID : CAL BNA@50PPM
Data File: 7M95177.D
Acq On : 10/ 8/18 16:13

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 16:28
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	79420	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	134473	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	495463	40.00	ng	0.00
50) Acenaphthene-d10	8.173	164	286738	40.00	ng	-0.01
77) Phenanthrene-d10	9.615	188	488913	40.00	ng	0.00
91) Chrysene-d12	12.649	240	483764	40.00	ng	0.00
103) Perylene-d12	14.273	264	413657	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	207033	45.33	ng	0.00
Spiked Amount 100.000			Recovery =	45.33%		
16) Phenol-d5	5.432	99	298883	43.64	ng	0.00
Spiked Amount 100.000			Recovery =	43.64%		
32) Nitrobenzene-d5	6.196	128	37994	23.21	ng	0.00
Spiked Amount 50.000			Recovery =	46.42%		
55) 2-Fluorobiphenyl	7.590	172	219549	24.59	ng	-0.01
Spiked Amount 50.000			Recovery =	49.18%		
80) 2,4,6-Tribromophenol	8.899	330	54891	56.71	ng	-0.01
Spiked Amount 100.000			Recovery =	56.71%		
94) Terphenyl-d14	11.410	244	198434	24.19	ng	0.00
Spiked Amount 50.000			Recovery =	48.38%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	91256	48.6272	ng	90
9) Pyridine	2.969	79	242967	42.1344	ng	61
10) N-Nitrosodimethylamine	2.905	74	138339	37.6880	ng	66
12) Benzaldehyde	5.368	77	114062	33.6387	ng	75
13) Aniline	5.464	93	299396m	39.8339	ng	
14) Pentachloroethane	5.507	117	70755	44.6781	ng	83
15) bis(2-Chloroethyl) ether	5.523	93	214983	44.0056	ng	74
17) Phenol	5.443	94	296527	38.2752	ng	76
18) 2-Chlorophenol	5.566	128	220023	43.3991	ng	77
19) N-Decane	5.630	57	189977	30.4874	ng	84
20) 1,3-Dichlorobenzene	5.699	146	234499	41.9303	ng	98
22) 1,4-Dichlorobenzene	5.763	146	239369	43.9189	ng	97
23) 1,2-Dichlorobenzene	5.886	146	225698	43.2386	ng	96
24) Benzyl alcohol	5.859	108	142893	53.8573	ng	67
25) bis(2-chloroisopropyl)...	5.977	45	220608	25.9200	ng	94
26) 2-Methylphenol	5.950	108	194430	43.3181	ng	97
27) Acetophenone	6.078	105	294282	41.3861	ng	67
28) Hexachloroethane	6.169	117	87454	38.0853	ng	86
29) N-Nitroso-di-n-propyla...	6.078	70	139429	29.5337	ng	89
30) 3&4-Methylphenol	6.078	108	205076	39.2268	ng	98
33) Nitrobenzene	6.212	77	203326	30.2184	ng	72
34) Isophorone	6.399	82	375852	32.6591	ng	85
35) 2-Nitrophenol	6.463	139	106843	39.6116	ng	79
36) 2,4-Dimethylphenol	6.490	107	203044	37.3950	ng	87
37) Benzoic Acid	6.565	105	204339	50.4268	ng	43
38) bis(2-Chloroethoxy)met...	6.565	93	257422	38.7396	ng	96
39) 2,4-Dichlorophenol	6.645	162	171962	43.2826	ng	87
40) 1,2,4-Trichlorobenzene	6.714	180	187013	40.5980	ng	98
41) Naphthalene	6.773	128	642691	45.8550	ng	99
42) 4-Chloroaniline	6.805	127	246877m	51.1016	ng	
43) Hexachlorobutadiene	6.869	225	95716	35.7807	ng	96
44) Caprolactam	7.067	113	70501	43.8466	ng	58
45) 4-Chloro-3-methylphenol	7.168	107	167571	35.0828	ng	73
46) 2-Methylnaphthalene	7.302	142	431855	42.6034	ng	99
47) 1-Methylnaphthalene	7.382	142	412833	42.3776	ng	91
48) Methylnaphthalenes (To...	7.382	142	844995m	84.9619	ng	
49) 1,1'-Biphenyl	7.676	154	493540	40.8329	ng	93
51) 1,2,4,5-Tetrachloroben...	7.435	216	184622	45.3333	ng	98
52) Hexachlorocyclopentadiene	7.430	237	86283	58.1151	ng	100
53) 2,4,6-Trichlorophenol	7.521	196	117733m	42.8749	ng	
54) 2,4,5-Trichlorophenol	7.553	196	125203	42.6593	ng	99
56) 2-Chloronaphthalene	7.697	162	381729	44.1725	ng	89
57) 1,4-Dimethylnaphthalene	7.975	156	336709	52.6922	ng	86
58) Dimethylnaphthalenes (...)	7.975	156	336709	52.6922	ng	86
59) Diphenyl Ether	7.761	170	281232	46.4680	ng	76
60) 2-Nitroaniline	7.767	65	116388	28.5465	ng	48
61) Coumarin	7.948	146	157315	46.8207	ng	84
62) Acenaphthylene	8.050	152	567690	46.5784	ng	98
63) Dimethylphthalate	7.916	163	413168	40.6331	ng	98
64) 2,6-Dinitrotoluene	7.970	165	94526	41.8198	ng	59
65) Acenaphthene	8.199	153	391790	45.3439	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@50PPM
 Data File: 7M95177.D
 Acq On : 10/ 8/18 16:13

Operator : AH/JB
 Sam Mult : 1 Vial# : 10
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 16:28
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.114	138	107344	49.0007	ng	74
67) 2,4-Dinitrophenol	8.205	184	34202	27.6422	ng	56
68) Dibenzofuran	8.354	168	533718	45.0039	ng	84
69) 2,4-Dinitrotoluene	8.322	165	122630	39.0033	ng	58
70) 4-Nitrophenol	8.237	65	71415	28.8366	ng	85
71) 2,3,4,6-Tetrachlorophenol	8.456	232	104208	41.1236	ng	84
72) Fluorene	8.669	166	440724	43.2342	ng	100
73) 4-Chlorophenyl-phenyle...	8.664	204	200072	40.7141	ng	84
74) Diethylphthalate	8.547	149	419755	41.4422	ng	96
75) 4-Nitroaniline	8.669	138	120518	45.6404	ng	67
76) Atrazine	9.300	200	126241	42.1613	ng	95
78) 4,6-Dinitro-2-methylph...	8.701	198	48249	31.1469	ng	69
79) n-Nitrosodiphenylamine	8.771	169	380175	44.2427	ng	99
81) 1,2-Diphenylhydrazine	8.814	77	432030	36.5939	ng	85
82) 4-Bromophenyl-phenylether	9.145	248	114249	41.2681	ng	85
83) Hexachlorobenzene	9.214	284	117738	43.7251	ng	69
84) N-Octadecane	9.497	57	233961	29.7075	ng	66
85) Pentachlorophenol	9.407	266	69369	43.7770	ng	97
86) Phenanthrene	9.642	178	651080	43.8552	ng	99
87) Anthracene	9.695	178	671550	43.8706	ng	99
88) Carbazole	9.855	167	601318	43.4630	ng	97
89) Di-n-butylphthalate	10.251	149	714929	39.9045	ng	97
90) Fluoranthene	10.961	202	673087	40.9285	ng	92
92) Pyrene	11.218	202	684987	42.9959	ng	93
93) Benzidine	11.111	184	214188	38.2008	ng	87
95) 4,4'-DDE	11.351	246	141506	47.1720	ng	95
96) 4,4'-DDD	11.747	235	240700	47.1382	ng	96
97) Butylbenzylphthalate	12.003	149	303851	40.1649	ng	75
98) 4,4'-DDT	12.104	235	177614	40.6430	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	201859	46.7367	ng	96
100) Benzo[a]anthracene	12.633	228	643545	43.9109	ng	99
101) Chrysene	12.676	228	599672	43.4671	ng	99
102) bis(2-Ethylhexyl)phtha...	12.713	149	413643	41.4502	ng	94
104) Di-n-octylphthalate	13.461	149	670427	38.4609	ng	100
105) Benzo[b]fluoranthene	13.862	252	582139m	42.7154	ng	
106) Benzo[k]fluoranthene	13.894	252	588897m	44.6607	ng	
107) Benzo[a]pyrene	14.215	252	567904	43.9305	ng	95
108) Indeno[1,2,3-cd]pyrene	15.540	276	594866	46.3525	ng	87
109) Dibenzo[a,h]anthracene	15.561	278	492754	51.8691	ng	94
110) Benzo[g,h,i]perylene	15.892	276	491669	45.9875	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@2PPM
Data File: 7M95175.D
Acq On : 10/ 8/18 15:27

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:45
Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	82999	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	140993	40.00	ng	0.00
31) Naphthalene-d8	6.762	136	521955	40.00	ng	0.00
50) Acenaphthene-d10	8.178	164	299110	40.00	ng	0.00
77) Phenanthrene-d10	9.620	188	516763	40.00	ng	0.00
91) Chrysene-d12	12.644	240	500060	40.00	ng	0.00
103) Perylene-d12	14.252	264	434960	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	9779m	2.05	ng	0.00
Spiked Amount 100.000			Recovery =	2.05%		
16) Phenol-d5	5.426	99	13574	1.90	ng	0.00
Spiked Amount 100.000			Recovery =	1.90%		
32) Nitrobenzene-d5	6.196	128	1648	0.96	ng	0.00
Spiked Amount 50.000			Recovery =	1.92%		
55) 2-Fluorobiphenyl	7.601	172	10786	1.16	ng	0.00
Spiked Amount 50.000			Recovery =	2.32%		
80) 2,4,6-Tribromophenol	8.904	330	1739	2.07	ng	0.00
Spiked Amount 100.000			Recovery =	2.07%		
94) Terphenyl-d14	11.410	244	8691	1.02	ng	0.00
Spiked Amount 50.000			Recovery =	2.04%		
Target Compounds						
8) 1,4-Dioxane	2.547	88	4907m	2.5830	ng	Qvalue
9) Pyridine	2.990	79	12363	2.1228	ng	53
10) N-Nitrosodimethylamine	2.916	74	6725	1.7531	ng	65
12) Benzaldehyde	5.368	77	5068	1.3822	ng	73
13) Aniline	5.464	93	10184	1.2965	ng	92
14) Pentachloroethane	5.507	117	3403	2.1384	ng	77
15) bis(2-Chloroethyl) ether	5.523	93	10596	2.1794	ng	71
17) Phenol	5.437	94	14239	1.7587	ng	78
18) 2-Chlorophenol	5.565	128	10365	1.9563	ng	73
19) N-Decane	5.624	57	9977	1.5409	ng	88
20) 1,3-Dichlorobenzene	5.699	146	11667	1.9962	ng	90
22) 1,4-Dichlorobenzene	5.763	146	11891	2.0808	ng	98
23) 1,2-Dichlorobenzene	5.886	146	11236	2.0530	ng	98
24) Benzyl alcohol	5.859	108	6891	2.7402	ng	63
25) bis(2-chloroisopropyl)...	5.977	45	11229	1.2583	ng	93
26) 2-Methylphenol	5.950	108	9036	2.0392	ng	99
27) Acetophenone	6.073	105	14796	1.9846	ng	75
28) Hexachloroethane	6.169	117	4113	1.7083	ng	84
29) N-Nitroso-di-n-propyla...	6.078	70	7259	1.4161	ng	89
30) 3&4-Methylphenol	6.073	108	9523	1.7373	ng	96
33) Nitrobenzene	6.206	77	9873	1.3929	ng	83
34) Isophorone	6.399	82	17430	1.4377	ng	84
35) 2-Nitrophenol	6.463	139	4288	1.5091	ng	81
36) 2,4-Dimethylphenol	6.490	107	9386	1.6607	ng	92
37) Benzoic Acid	6.516	105	4768	1.1938	ng	40
38) bis(2-Chloroethoxy)met...	6.564	93	12070	1.7242	ng	97
39) 2,4-Dichlorophenol	6.645	162	7427	1.8502	ng	90
40) 1,2,4-Trichlorobenzene	6.714	180	9398	1.9366	ng	96
41) Naphthalene	6.778	128	30872	2.1842	ng	99
42) 4-Chloroaniline	6.810	127	8415	1.6534	ng	95
43) Hexachlorobutadiene	6.874	225	4672	1.6578	ng	95
44) Caprolactam	7.045	113	2593	1.5308	ng	65
45) 4-Chloro-3-methylphenol	7.168	107	7595	1.5094	ng	84
46) 2-Methylnaphthalene	7.312	142	20637	1.9326	ng	98
47) 1-Methylnaphthalene	7.392	142	20337	1.9816	ng	91
48) Methylnaphthalenes (To...	7.312	142	41029m	3.9160	ng	
49) 1,1'-Biphenyl	7.681	154	24292	1.9078	ng	96
51) 1,2,4,5-Tetrachloroben...	7.441	216	9230	2.1726	ng	96
52) Hexachlorocyclopentadiene	7.441	237	2871	2.3093	ng	96
53) 2,4,6-Trichlorophenol	7.526	196	5664	1.9773	ng	97
54) 2,4,5-Trichlorophenol	7.553	196	5112	1.6697	ng	98
56) 2-Chloronaphthalene	7.702	162	18561	2.0590	ng	90
57) 1,4-Dimethylnaphthalene	7.980	156	17040	2.5563	ng	85
58) Dimethylnaphthalenes (...)	7.980	156	17040	2.5563	ng	85
59) Diphenyl Ether	7.766	170	13961	2.2114	ng	81
60) 2-Nitroaniline	7.772	65	4948	1.1634	ng	71
61) Coumarin	7.953	146	7458	2.1279	ng	91
62) Acenaphthylene	8.055	152	27348	2.1511	ng	99
63) Dimethylphthalate	7.921	163	20185	1.9030	ng	96
64) 2,6-Dinitrotoluene	7.975	165	3727	1.5807	ng	65
65) Acenaphthene	8.204	153	18845	2.0908	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM
 Data File: 7M95175.D
 Acq On : 10/ 8/18 15:27

Operator : AH/JB
 Sam Mult : 1 Vial# : 8
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:45
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.119	138	3828	1.6751	ng	74
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.359	168	26456	2.1666	ng	86
69)	2,4-Dinitrotoluene	8.327	165	3757	1.1455	ng	62
70)	4-Nitrophenol	8.242	65	2078	0.8044	ng	99
71)	2,3,4,6-Tetrachlorophenol	8.466	232	4265	1.6135	ng	86
72)	Fluorene	8.680	166	20910	1.9664	ng	100
73)	4-Chlorophenyl-phenyle...	8.675	204	9338	1.8217	ng	82
74)	Diethylphthalate	8.552	149	19096	1.8074	ng	95
75)	4-Nitroaniline	8.669	138	3976	1.4434	ng	80
76)	Atrazine	9.300	200	5195	1.6632	ng	95
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D. d		
79)	n-Nitrosodiphenylamine	8.776	169	16706	1.8394	ng	100
81)	1,2-Diphenylhydrazine	8.824	77	20705	1.6592	ng	81
82)	4-Bromophenyl-phenylether	9.150	248	5662	1.9350	ng	80
83)	Hexachlorobenzene	9.219	284	5574	1.9585	ng	71
84)	N-Octadecane	9.503	57	11270	1.3539	ng	67
85)	Pentachlorophenol	0.000		0	N.D. d		
86)	Phenanthrene	9.642	178	31508	2.0079	ng	99
87)	Anthracene	9.695	178	29620	1.8307	ng	97
88)	Carbazole	9.861	167	27209	1.8607	ng	97
89)	Di-n-butylphthalate	10.256	149	28117	1.4848	ng	97
90)	Fluoranthene	10.961	202	30466	1.7527	ng	97
92)	Pyrene	11.223	202	30783	1.8692	ng	89
93)	Benzidine	11.111	184	3798	0.6284	ng	88
95)	4,4'-DDE	11.351	246	6356	2.0498	ng	95
96)	4,4'-DDD	11.746	235	9912	1.8779	ng	95
97)	Butylbenzylphthalate	12.008	149	10812	1.3826	ng	68
98)	4,4'-DDT	12.104	235	3868	0.8563	ng	95
99)	3,3'-Dichlorobenzidine	12.612	252	5935	1.2571	ng	99
100)	Benzo[a]anthracene	12.633	228	30129	1.9888	ng	99
101)	Chrysene	12.676	228	26321	1.8457	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.713	149	14479	1.4036	ng	94
104)	Di-n-octylphthalate	13.456	149	20222	1.1033	ng	97
105)	Benzo[b]fluoranthene	13.846	252	23634	1.6492	ng	95
106)	Benzo[k]fluoranthene	13.878	252	23280	1.6790	ng	93
107)	Benzo[a]pyrene	14.193	252	21859	1.6081	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.507	276	23007	1.7049	ng	93
109)	Dibenzo[a,h]anthracene	15.529	278	19231	2.1975	ng	92
110)	Benzo[g,h,i]perylene	15.855	276	20141	1.7916	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@10PPM
Data File: 7M95169.D
Acq On : 10/ 8/18 13:05

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 13:23
Qt Upd On: 10/08/18 12:13

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSData\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	80619	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	137139	40.00	ng	0.00
31) Naphthalene-d8	6.773	136	504127	40.00	ng	-0.02
50) Acenaphthene-d10	8.204	164	290829	40.00	ng	-0.03
77) Phenanthrene-d10	9.642	188	495869	40.00	ng	-0.02
91) Chrysene-d12	12.655	240	480420	40.00	ng	-0.02
103) Perylene-d12	14.279	264	431710	40.00	ng	-0.05
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	37178	8.02	ng	0.00
Spiked Amount 100.000			Recovery =	8.02%		
16) Phenol-d5	5.426	99	53308	7.67	ng	-0.01
Spiked Amount 100.000			Recovery =	7.67%		
32) Nitrobenzene-d5	6.196	128	6742	4.05	ng	-0.01
Spiked Amount 50.000			Recovery =	8.10%		
55) 2-Fluorobiphenyl	7.627	172	39318	4.34	ng	-0.02
Spiked Amount 50.000			Recovery =	8.68%		
80) 2,4,6-Tribromophenol	8.931	330	8670	10.40	ng	-0.03
Spiked Amount 100.000			Recovery =	10.40%		
94) Terphenyl-d14	11.420	244	34071	4.18	ng	-0.01
Spiked Amount 50.000			Recovery =	8.36%		
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.547	88	18536	9.9931	ng	81
9) Pyridine	2.980	79	43473	7.6484	ng	61
10) N-Nitrosodimethylamine	2.910	74	26041	6.9889	ng	68
12) Benzaldehyde	5.368	77	25638	7.2430	ng	72
13) Aniline	5.464	93	50534	6.6234	ng	81
14) Pentachloroethane	5.507	117	12838	8.2578	ng	85
15) bis(2-Chloroethyl)ether	5.523	93	39648	8.3341	ng	75
17) Phenol	5.437	94	53746	6.8343	ng	78
18) 2-Chlorophenol	5.565	128	38899	7.5586	ng	75
19) N-Decane	5.629	57	35839	5.6939	ng	88
20) 1,3-Dichlorobenzene	5.699	146	42634	7.5099	ng	98
22) 1,4-Dichlorobenzene	5.763	146	42824	7.7045	ng	98
23) 1,2-Dichlorobenzene	5.891	146	40122	7.5370	ng	99
24) Benzyl alcohol	5.859	108	25434	10.2386	ng	69
25) bis(2-chloroisopropyl)...	5.977	45	40478	4.6634	ng	95
26) 2-Methylphenol	5.950	108	35089	8.0683	ng	94
27) Acetophenone	6.078	105	54578	7.5263	ng	69
28) Hexachloroethane	6.169	117	15414	6.5821	ng	85
29) N-Nitroso-di-n-propyla...	6.078	70	26196	5.2788	ng	85
30) 3&4-Methylphenol	6.078	108	36629	6.8702	ng	97
33) Nitrobenzene	6.212	77	35564	5.1947	ng	79
34) Isophorone	6.404	82	68441	5.8449	ng	87
35) 2-Nitrophenol	6.468	139	17658	6.4341	ng	81
36) 2,4-Dimethylphenol	6.500	107	35804	6.5482	ng	83
37) Benzoic Acid	6.532	105	24698	6.3568	ng	41
38) bis(2-Chloroethoxy)met...	6.575	93	46462	6.8719	ng	97
39) 2,4-Dichlorophenol	6.655	162	29269	7.5056	ng	88
40) 1,2,4-Trichlorobenzene	6.730	180	33719	7.1941	ng	96
41) Naphthalene	6.789	128	113126	8.2358	ng	99
42) 4-Chloroaniline	6.826	127	40516m	8.2424	ng	
43) Hexachlorobutadiene	6.890	225	17062	6.2685	ng	95
44) Caprolactam	7.072	113	12143m	7.4223	ng	
45) 4-Chloro-3-methylphenol	7.195	107	29319	6.0328	ng	70
46) 2-Methylnaphthalene	7.334	142	75262	7.2971	ng	98
47) 1-Methylnaphthalene	7.414	142	73580	7.4232	ng	91
48) Methylnaphthalenes (To...	7.334	142	148958m	14.7199	ng	
49) 1,1'-Biphenyl	7.708	154	90256	7.3390	ng	96
51) 1,2,4,5-Tetrachloroben...	7.467	216	33284	8.0578	ng	95
52) Hexachlorocyclopentadiene	7.462	237	13211	10.5462	ng	92
53) 2,4,6-Trichlorophenol	7.553	196	19974	7.1716	ng	99
54) 2,4,5-Trichlorophenol	7.579	196	21112	7.0921	ng	99
56) 2-Chloronaphthalene	7.729	162	70098	7.9974	ng	92
57) 1,4-Dimethylnaphthalene	8.012	156	61589	9.5026	ng	84
58) Dimethylnaphthalenes (...)	8.012	156	61589	9.5026	ng	84
59) Diphenyl Ether	7.798	170	50925	8.2960	ng	76
60) 2-Nitroaniline	7.798	65	20381	4.9285	ng	71
61) Coumarin	7.980	146	29233	8.5781	ng	84
62) Acenaphthylene	8.082	152	101017	8.1718	ng	99
63) Dimethylphthalate	7.953	163	73965	7.1718	ng	98
64) 2,6-Dinitrotoluene	8.001	165	15882	6.9276	ng	65
65) Acenaphthene	8.236	153	69587	7.9404	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@10PPM
 Data File: 7M95169.D
 Acq On : 10/ 8/18 13:05

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 13:23
 Qt Upd On: 10/08/18 12:13

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.146	138	17359	7.8126	ng	80
67)	2,4-Dinitrophenol	8.236	184	3419	2.8236	ng	43
68)	Dibenzofuran	8.386	168	95780	8.0528	ng	85
69)	2,4-Dinitrotoluene	8.354	165	18202	5.7078	ng	64
70)	4-Nitrophenol	8.274	65	10981	4.3716	ng	93
71)	2,3,4,6-Tetrachlorophenol	8.493	232	16885	6.5696	ng	84
72)	Fluorene	8.707	166	79042	7.6448	ng	99
73)	4-Chlorophenyl-phenyle...	8.701	204	35941	7.2110	ng	81
74)	Diethylphthalate	8.578	149	75473	7.3466	ng	98
75)	4-Nitroaniline	8.696	138	19336	7.2196	ng	73
76)	Atrazine	9.326	200	21578m	7.1051	ng	
78)	4,6-Dinitro-2-methylph...	8.733	198	4959	3.3279	ng	57
79)	n-Nitrosodiphenylamine	8.803	169	65757	7.5451	ng	99
81)	1,2-Diphenylhydrazine	8.851	77	76130	6.3579	ng	79
82)	4-Bromophenyl-phenylether	9.177	248	19989	7.1190	ng	86
83)	Hexachlorobenzene	9.246	284	20829	7.6269	ng	64
84)	N-Octadecane	9.524	57	42610	5.3346	ng	72
85)	Pentachlorophenol	9.433	266	10077	6.7058	ng	93
86)	Phenanthrene	9.663	178	115332m	7.6595	ng	
87)	Anthracene	9.716	178	117735	7.5834	ng	99
88)	Carbazole	9.877	167	106611	7.5977	ng	98
89)	Di-n-butylphthalate	10.272	149	121483	6.6856	ng	97
90)	Fluoranthene	10.972	202	116270	6.9709	ng	95
92)	Pyrene	11.233	202	119006	7.5219	ng	90
93)	Benzidine	11.121	184	37967	6.5816	ng	87
95)	4,4'-DDE	11.362	246	23434	7.8663	ng	94
96)	4,4'-DDD	11.752	235	39456	7.7808	ng	94
97)	Butylbenzylphthalate	12.008	149	52231	6.9523	ng	75
98)	4,4'-DDT	12.110	235	23383	5.3879	ng	93
99)	3,3'-Dichlorobenzidine	12.617	252	33611	7.4655	ng	97
100)	Benzo[a]anthracene	12.639	228	112618	7.7377	ng	100
101)	Chrysene	12.681	228	104171	7.6034	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.719	149	69951	7.0584	ng	95
104)	Di-n-octylphthalate	13.472	149	111447	6.1261	ng	99
105)	Benzo[b]fluoranthene	13.867	252	100877	7.0925	ng	96
106)	Benzo[k]fluoranthene	13.899	252	95379	6.9309	ng	93
107)	Benzo[a]pyrene	14.220	252	93552	6.9341	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.534	276	98792	7.3761	ng	85
109)	Dibenzo[a,h]anthracene	15.561	278	82751	9.3371	ng	94
110)	Benzo[g,h,i]perylene	15.887	276	84185	7.5448	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@20PPM
Data File: 7M95174.D
Acq On : 10/ 8/18 15:03

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:37
Qt Upd On: 10/07/18 16:40

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.510	96	80893	40.00	ng	0.05
21) 1,4-Dichlorobenzene-d4	5.747	152	137180	40.00	ng	0.04
31) Naphthalene-d8	6.762	136	506716	40.00	ng	0.04
50) Acenaphthene-d10	8.183	164	288424	40.00	ng	0.05
77) Phenanthrene-d10	9.620	188	491343	40.00	ng	0.04
91) Chrysene-d12	12.649	240	489782	40.00	ng	0.03
103) Perylene-d12	14.257	264	422072	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	84937	18.26	ng	0.03
Spiked Amount 100.000			Recovery =	18.26%		
16) Phenol-d5	5.427	99	123938m	17.77	ng	0.03
Spiked Amount 100.000			Recovery =	17.77%		
32) Nitrobenzene-d5	6.196	128	15014	8.97	ng	0.04
Spiked Amount 50.000			Recovery =	17.94%		
55) 2-Fluorobiphenyl	7.601	172	89825	10.00	ng	0.05
Spiked Amount 50.000			Recovery =	20.00%		
80) 2,4,6-Tribromophenol	8.910	330	21215	24.38	ng	0.05
Spiked Amount 100.000			Recovery =	24.38%		
94) Terphenyl-d14	11.415	244	78776	9.49	ng	0.04
Spiked Amount 50.000			Recovery =	18.98%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	38556	20.5639	ng	91
9) Pyridine	2.975	79	101662	17.6719	ng	61
10) N-Nitrosodimethylamine	2.910	74	56878	15.2132	ng	65
12) Benzaldehyde	5.368	77	58756m	16.7083	ng	
13) Aniline	5.464	93	126002m	16.4590	ng	
14) Pentachloroethane	5.507	117	28459	18.0778	ng	82
15) bis(2-Chloroethyl)ether	5.523	93	89241	18.4724	ng	74
17) Phenol	5.437	94	122191	15.4850	ng	78
18) 2-Chlorophenol	5.566	128	89249	17.2836	ng	76
19) N-Decane	5.630	57	78781	12.4570	ng	83
20) 1,3-Dichlorobenzene	5.699	146	96956m	17.0208	ng	
22) 1,4-Dichlorobenzene	5.763	146	97638	17.5609	ng	98
23) 1,2-Dichlorobenzene	5.886	146	93472	17.5537	ng	98
24) Benzyl alcohol	5.859	108	58533	22.9583	ng	68
25) bis(2-chloroisopropyl)...	5.977	45	92781	10.6860	ng	95
26) 2-Methylphenol	5.950	108	80695	18.2715	ng	96
27) Acetophenone	6.073	105	123806	17.0678	ng	72
28) Hexachloroethane	6.169	117	35981	15.3601	ng	87
29) N-Nitroso-di-n-propyla...	6.078	70	59572	12.1023	ng	89
30) 3&4-Methylphenol	6.073	108	85694	16.0680	ng	100
33) Nitrobenzene	6.212	77	83650	12.1560	ng	74
34) Isophorone	6.399	82	156413	13.2894	ng	88
35) 2-Nitrophenol	6.463	139	43048	15.6054	ng	78
36) 2,4-Dimethylphenol	6.490	107	82928	15.0461	ng	87
37) Benzoic Acid	6.543	105	73656	18.5468	ng	38
38) bis(2-Chloroethoxy)met...	6.570	93	106315	15.6441	ng	97
39) 2,4-Dichlorophenol	6.650	162	70127	17.7063	ng	86
40) 1,2,4-Trichlorobenzene	6.719	180	77422	16.4340	ng	97
41) Naphthalene	6.778	128	267911	19.1913	ng	99
42) 4-Chloroaniline	6.810	127	104762m	21.2033	ng	
43) Hexachlorobutadiene	6.880	225	39600	14.4746	ng	98
44) Caprolactam	7.061	113	28867	17.5545	ng	59
45) 4-Chloro-3-methylphenol	7.174	107	69045	14.1343	ng	75
46) 2-Methylnaphthalene	7.312	142	175587	16.9373	ng	100
47) 1-Methylnaphthalene	7.393	142	170850	17.1484	ng	91
48) Methylnaphthalenes (To...	7.312	142	346353m	34.0515	ng	
49) 1,1'-Biphenyl	7.686	154	205840	16.6519	ng	94
51) 1,2,4,5-Tetrachloroben...	7.446	216	76224	18.6071	ng	98
52) Hexachlorocyclopentadiene	7.441	237	32164	24.4464	ng	98
53) 2,4,6-Trichlorophenol	7.531	196	48505	17.5608	ng	98
54) 2,4,5-Trichlorophenol	7.558	196	48335	16.3725	ng	99
56) 2-Chloronaphthalene	7.708	162	158543	18.2388	ng	90
57) 1,4-Dimethylnaphthalene	7.986	156	139863	21.7595	ng	84
58) Dimethylnaphthalenes (...)	7.986	156	139863	21.7595	ng	84
59) Diphenyl Ether	7.772	170	117170	19.2468	ng	75
60) 2-Nitroaniline	7.777	65	48084	11.7246	ng	44
61) Coumarin	7.959	146	65066	19.2520	ng	84
62) Acenaphthylene	8.060	152	232982	19.0042	ng	99
63) Dimethylphthalate	7.927	163	173089	16.9230	ng	98
64) 2,6-Dinitrotoluene	7.975	165	38373	16.8776	ng	63
65) Acenaphthene	8.210	153	161689	18.6037	ng	98

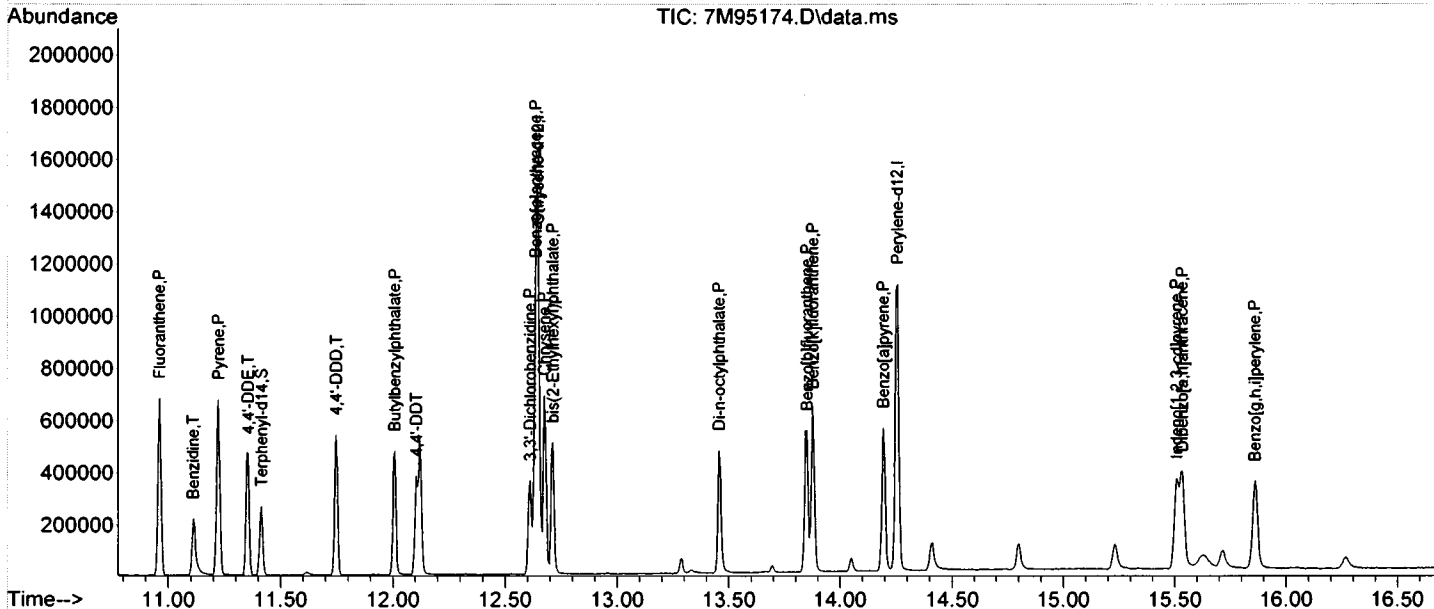
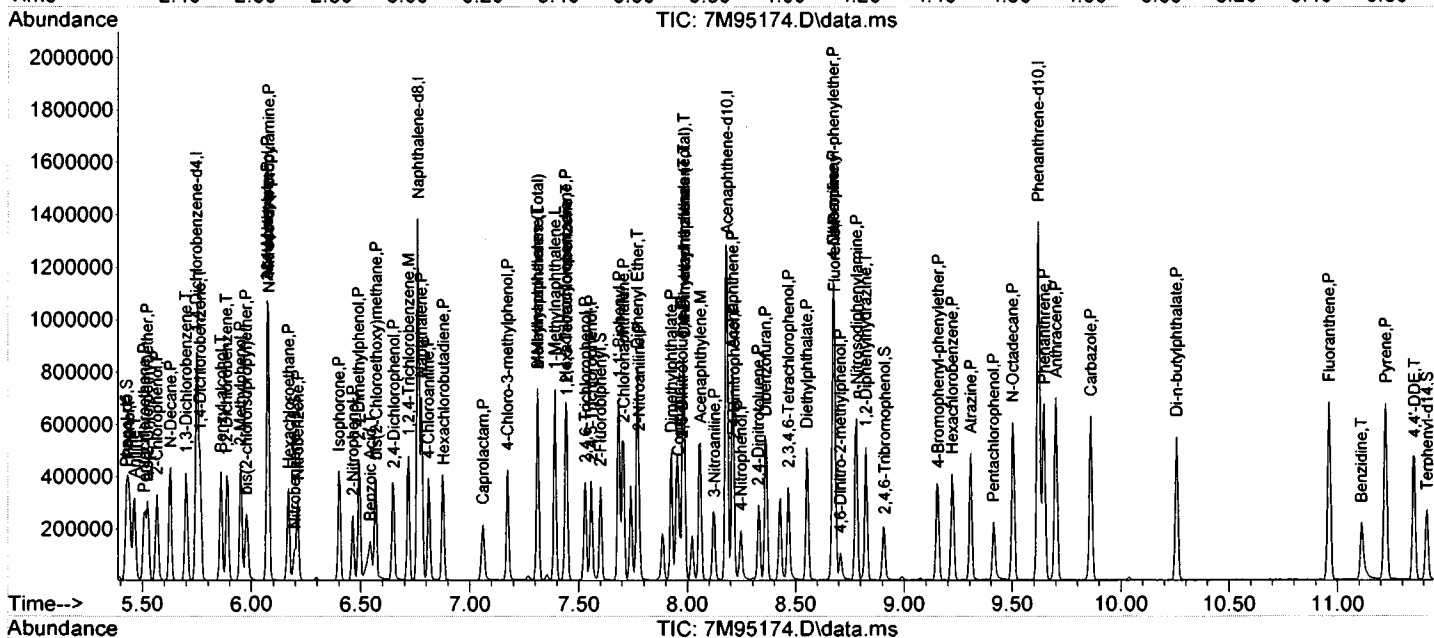
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95174.D Sam Mult : 1 Vial# : 7 Qt On : 10/08/18 15:37
 Acq On : 10/ 8/18 15:03 Misc : A,BNA Qt Upd On: 10/07/18 16:40

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.124	138	44421	20.1589	ng	68
67) 2,4-Dinitrophenol	8.215	184	9658	7.9821	ng	68
68) Dibenzofuran	8.360	168	222147	18.7714	ng	84
69) 2,4-Dinitrotoluene	8.327	165	47006	14.8632	ng	67
70) 4-Nitrophenol	8.247	65	25930	10.4090	ng	78
71) 2,3,4,6-Tetrachlorophenol	8.466	232	41795	16.3972	ng	85
72) Fluorene	8.680	166	180941	17.6462	ng	97
73) 4-Chlorophenyl-phenyle...	8.675	204	82098	16.6090	ng	83
74) Diethylphthalate	8.552	149	171367	16.8201	ng	98
75) 4-Nitroaniline	8.675	138	47882	18.0270	ng	71
76) Atrazine	9.305	200	51448	17.0819	ng	96
78) 4,6-Dinitro-2-methylph...	8.707	198	14835	9.9196	ng	59
79) n-Nitrosodiphenylamine	8.782	169	153095	17.7283	ng	98
81) 1,2-Diphenylhydrazine	8.824	77	178529	15.0470	ng	84
82) 4-Bromophenyl-phenylether	9.155	248	46861	16.8431	ng	79
83) Hexachlorobenzene	9.220	284	48117	17.7812	ng	73
84) N-Octadecane	9.503	57	96393	12.1791	ng	68
85) Pentachlorophenol	9.412	266	25384	16.7330	ng	99
86) Phenanthrene	9.647	178	264241	17.7106	ng	100
87) Anthracene	9.700	178	271313	17.6365	ng	100
88) Carbazole	9.861	167	246695	17.7428	ng	98
89) Di-n-butylphthalate	10.256	149	283562	15.7490	ng	97
90) Fluoranthene	10.961	202	274020	16.5800	ng	95
92) Pyrene	11.223	202	280151	17.3687	ng	89
93) Benzidine	11.111	184	104954	18.0744	ng	90
95) 4,4'-DDE	11.356	246	56107	18.4738	ng	95
96) 4,4'-DDD	11.746	235	96304	18.6283	ng	95
97) Butylbenzylphthalate	12.008	149	119288	15.5745	ng	67
98) 4,4'-DDT	12.104	235	61144	13.8195	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	83805	18.5046	ng	97
100) Benzo[a]anthracene	12.639	228	261261	17.6075	ng	100
101) Chrysene	12.676	228	245257	17.5590	ng	100
102) bis(2-Ethylhexyl)phtha...	12.713	149	158865	15.7239	ng	94
104) Di-n-octylphthalate	13.456	149	255448	14.3623	ng	100
105) Benzo[b]fluoranthene	13.851	252	225459m	16.2136	ng	
106) Benzo[k]fluoranthene	13.878	252	236059	17.5453	ng	96
107) Benzo[a]pyrene	14.193	252	215981	16.3742	ng	95
108) Indeno[1,2,3-cd]pyrene	15.507	276	230747	17.6216	ng	87
109) Dibenzo[a,h]anthracene	15.534	278	191936	21.4283	ng	91
110) Benzo[g,h,i]perylene	15.860	276	194600	17.8387	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@80PPM
Data File: 7M95173.D
Acq On : 10/ 8/18 14:40

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:44
Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	80331	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.753	152	133398	40.00	ng	0.00
31) Naphthalene-d8	6.768	136	496038	40.00	ng	0.00
50) Acenaphthene-d10	8.183	164	282685	40.00	ng	0.00
77) Phenanthrene-d10	9.626	188	487063	40.00	ng	0.00
91) Chrysene-d12	12.655	240	479929	40.00	ng	0.00
103) Perylene-d12	14.268	264	425562	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	349270	75.61	ng	0.00
Spiked Amount 100.000			Recovery =	75.61%		
16) Phenol-d5	5.432	99	498756	71.99	ng	0.00
Spiked Amount 100.000			Recovery =	71.99%		
32) Nitrobenzene-d5	6.196	128	64907	39.61	ng	0.00
Spiked Amount 50.000			Recovery =	79.22%		
55) 2-Fluorobiphenyl	7.606	172	362702	41.21	ng	0.00
Spiked Amount 50.000			Recovery =	82.42%		
80) 2,4,6-Tribromophenol	8.915	330	95582	89.54	ng	0.00
Spiked Amount 100.000			Recovery =	89.54%		
94) Terphenyl-d14	11.415	244	340013	41.78	ng	0.00
Spiked Amount 50.000			Recovery =	83.56%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	151135	78.0577	ng	90
9) Pyridine	2.969	79	409329	68.6502	ng	60
10) N-Nitrosodimethylamine	2.905	74	236099	63.5915	ng	67
12) Benzaldehyde	5.368	77	172619	51.3057	ng	74
13) Aniline	5.464	93	492390m	64.7683	ng	
14) Pentachloroethane	5.512	117	117614	71.6760	ng	83
15) bis(2-Chloroethyl) ether	5.528	93	349977	68.8720	ng	72
17) Phenol	5.443	94	491348	62.7031	ng	77
18) 2-Chlorophenol	5.571	128	365683	71.3122	ng	74
19) N-Decane	5.630	57	311566	49.2499	ng	83
20) 1,3-Dichlorobenzene	5.699	146	388240	68.6331	ng	96
22) 1,4-Dichlorobenzene	5.763	146	395277	73.1091	ng	96
23) 1,2-Dichlorobenzene	5.891	146	372195	71.8787	ng	98
24) Benzyl alcohol	5.859	108	239842	85.9471	ng	68
25) bis(2-chloroisopropyl)...	5.982	45	360622	42.7121	ng	94
26) 2-Methylphenol	5.956	108	324857	70.2779	ng	97
27) Acetophenone	6.078	105	468805	66.4614	ng	68
28) Hexachloroethane	6.169	117	144964	63.6390	ng	86
29) N-Nitroso-di-n-propyla...	6.084	70	222825	48.7666	ng	91
30) 3&4-Methylphenol	6.078	108	330463	63.7201	ng	100
33) Nitrobenzene	6.212	77	335711	49.8357	ng	75
34) Isophorone	6.404	82	621317	53.9258	ng	84
35) 2-Nitrophenol	6.463	139	185382	68.6499	ng	82
36) 2,4-Dimethylphenol	6.495	107	332873	60.7608	ng	86
37) Benzoic Acid	6.586	105	367472	86.4972	ng	41
38) bis(2-Chloroethoxy)met...	6.570	93	417207	62.7130	ng	96
39) 2,4-Dichlorophenol	6.650	162	285728	69.9875	ng	87
40) 1,2,4-Trichlorobenzene	6.720	180	309195	67.0442	ng	97
41) Naphthalene	6.784	128	1053360	73.1179	ng	99
42) 4-Chloroaniline	6.816	127	393940m	81.4480	ng	
43) Hexachlorobutadiene	6.880	225	157056	58.6428	ng	96
44) Caprolactam	7.088	113	120045	74.5729	ng	57
45) 4-Chloro-3-methylphenol	7.179	107	284378	59.4686	ng	75
46) 2-Methylnaphthalene	7.318	142	703401	69.3115	ng	99
47) 1-Methylnaphthalene	7.398	142	677418	69.4568	ng	91
48) Methylnaphthalenes (To...	7.318	142	1380665m	138.6611	ng	
49) 1,1'-Biphenyl	7.686	154	817775	67.5799	ng	96
51) 1,2,4,5-Tetrachloroben...	7.451	216	304277	75.7854	ng	99
52) Hexachlorocyclopentadiene	7.446	237	154306	93.6561	ng	99
53) 2,4,6-Trichlorophenol	7.537	196	196769	72.6849	ng	100
54) 2,4,5-Trichlorophenol	7.564	196	207651	71.7655	ng	98
56) 2-Chloronaphthalene	7.708	162	623092	73.1360	ng	92
57) 1,4-Dimethylnaphthalene	7.991	156	546954	86.8210	ng	85
58) Dimethylnaphthalenes (...)	7.991	156	546954	86.8210	ng	85
59) Diphenyl Ether	7.777	170	464394	77.8320	ng	74
60) 2-Nitroaniline	7.783	65	191797	47.7166	ng	43
61) Coumarin	7.964	146	258454	78.0250	ng	85
62) Acenaphthylene	8.066	152	937536	78.0268	ng	99
63) Dimethylphthalate	7.938	163	688769	68.7083	ng	98
64) 2,6-Dinitrotoluene	7.986	165	158899	71.3073	ng	59
65) Acenaphthene	8.215	153	645768	75.8097	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@80PPM
 Data File: 7M95173.D
 Acq On : 10/ 8/18 14:40

Operator : AH/JB
 Sam Mult : 1 Vial# : 6
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:44
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

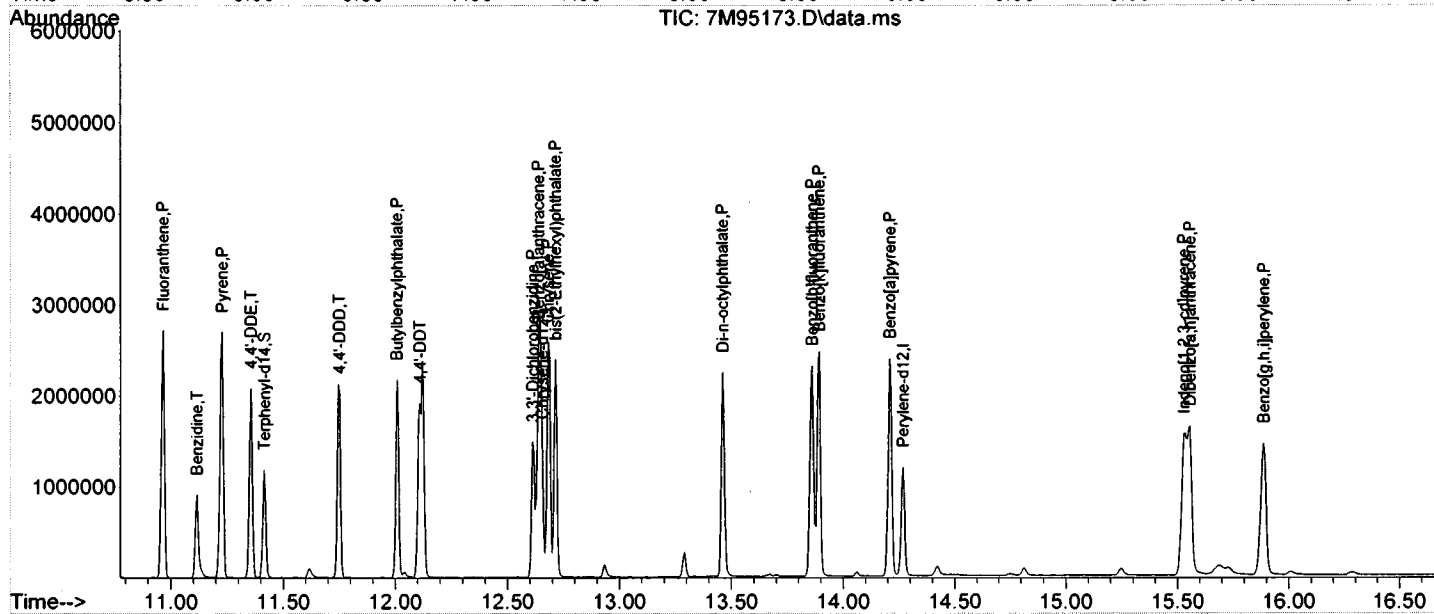
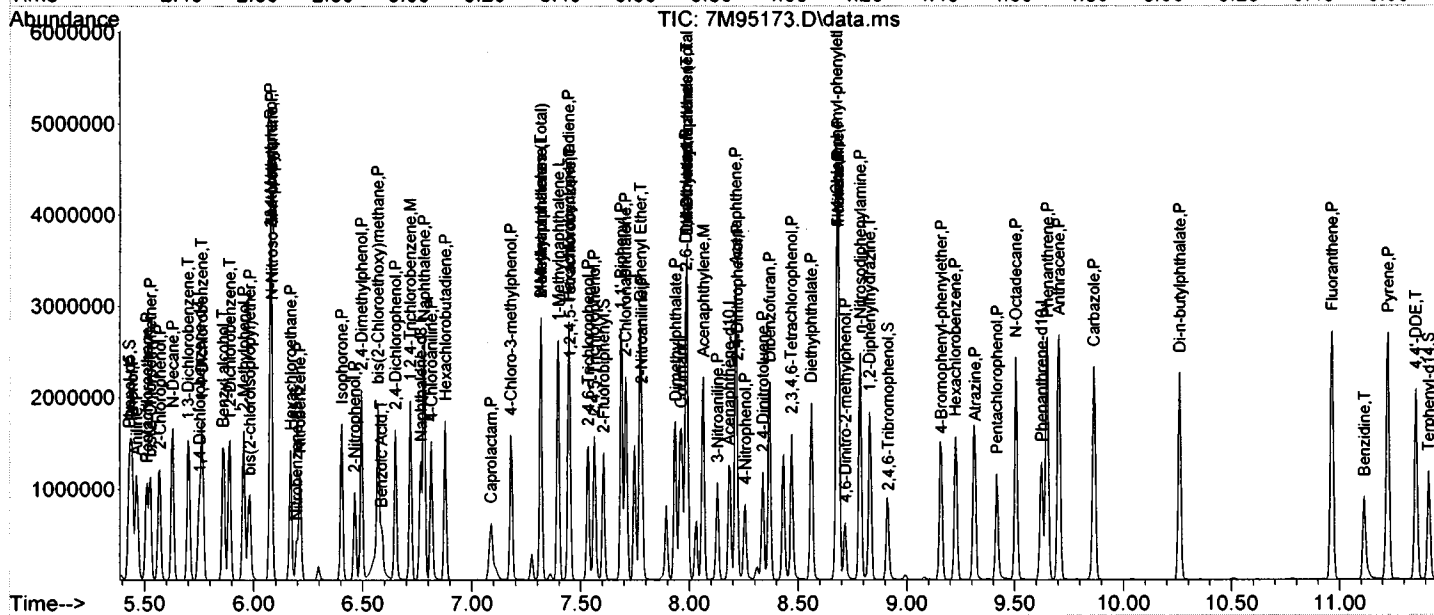
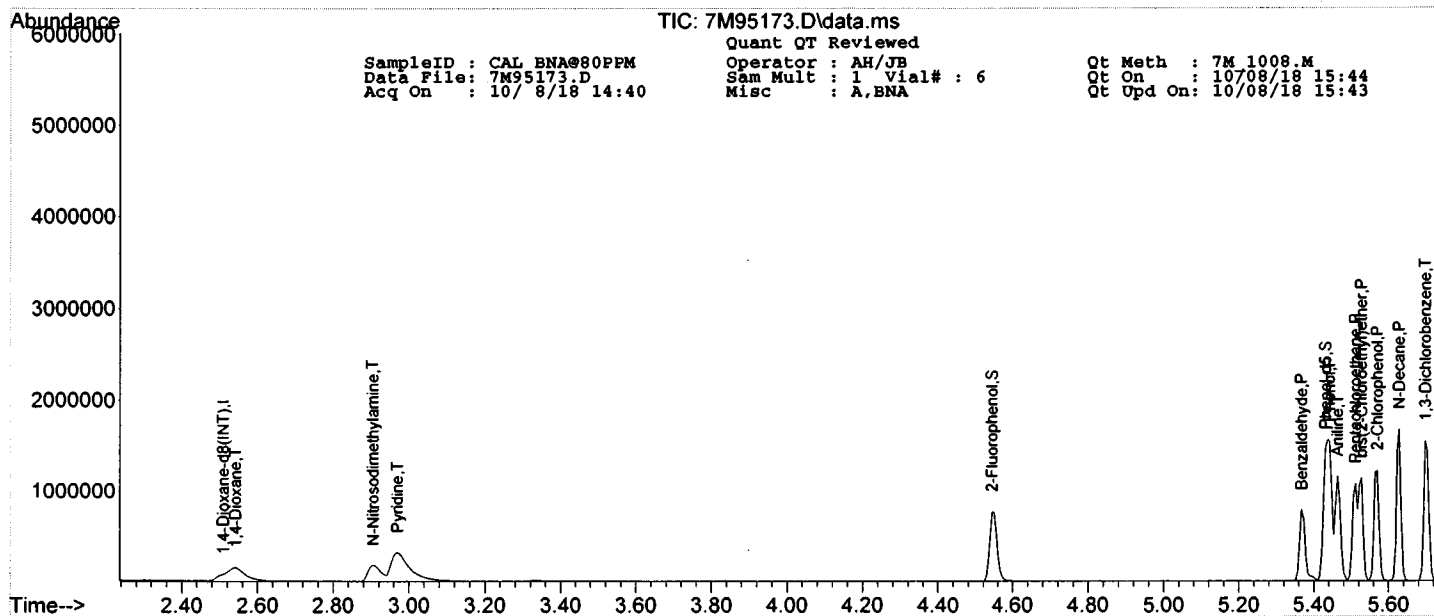
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.130	138	176498	81.7234	ng	73
67) 2,4-Dinitrophenol	8.221	184	72475	57.0407	ng	47
68) Dibenzofuran	8.370	168	889421	75.3791	ng	83
69) 2,4-Dinitrotoluene	8.338	165	211535	68.2448	ng	59
70) 4-Nitrophenol	8.258	65	122737	50.2704	ng	81
71) 2,3,4,6-Tetrachlorophenol	8.472	232	180122	72.1007	ng	84
72) Fluorene	8.685	166	715948	71.2401	ng	99
73) 4-Chlorophenyl-phenyle...	8.680	204	330278	68.1742	ng	82
74) Diethylphthalate	8.563	149	695221	69.6230	ng	96
75) 4-Nitroaniline	8.685	138	199888	76.7832	ng	69
76) Atrazine	9.316	200	214031	72.5058	ng	96
78) 4,6-Dinitro-2-methylph...	8.717	198	96388	59.3556	ng	68
79) n-Nitrosodiphenylamine	8.787	169	621522	72.6041	ng	100
81) 1,2-Diphenylhydrazine	8.830	77	696008	59.1774	ng	82
82) 4-Bromophenyl-phenylether	9.161	248	197399	71.5738	ng	78
83) Hexachlorobenzene	9.225	284	197503	73.6266	ng	71
84) N-Octadecane	9.508	57	378277	48.2147	ng	65
85) Pentachlorophenol	9.417	266	127836	76.5782	ng	97
86) Phenanthrene	9.652	178	1072610	72.5228	ng	100
87) Anthracene	9.706	178	1100317	72.1539	ng	100
88) Carbazole	9.866	167	998668	72.4575	ng	97
89) Di-n-butylphthalate	10.261	149	1189360	66.6376	ng	97
90) Fluoranthene	10.967	202	1128530	68.8833	ng	93
92) Pyrene	11.228	202	1141203	72.2044	ng	90
93) Benzidine	11.116	184	396554	74.3531	ng	88
95) 4,4'-DDE	11.357	246	235169	79.0216	ng	94
96) 4,4'-DDD	11.752	235	407915	80.5236	ng	94
97) Butylbenzylphthalate	12.008	149	521567	69.4949	ng	73
98) 4,4'-DDT	12.110	235	324557	74.8611	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	337311	82.4438	ng	98
100) Benzo[a]anthracene	12.639	228	1078099	74.1495	ng	98
101) Chrysene	12.681	228	997510	72.8820	ng	100
102) bis(2-Ethylhexyl)phtha...	12.714	149	715154	72.2365	ng	93
104) Di-n-octylphthalate	13.461	149	1209334	67.4360	ng	99
105) Benzo[b]fluoranthene	13.862	252	1037783	74.0188	ng	95
106) Benzo[k]fluoranthene	13.894	252	954681	70.3756	ng	94
107) Benzo[a]pyrene	14.209	252	971691	73.0629	ng	95
108) Indeno[1,2,3-cd]pyrene	15.529	276	1025449	77.6687	ng	88
109) Dibenzo[a,h]anthracene	15.556	278	857228	81.6459	ng	93
110) Benzo[g,h,i]perylene	15.887	276	851832	77.4459	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@80PPM
Data File: 7M95173.D
Acq On : 10/ 8/18 14:40

Quant QT Reviewed
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

```
Qt Meth   : 7M 1008.M
Qt On      : 10/08/18 15:44
Qt Upd On : 10/08/18 15:43
```



SampleID : CAL BNA@120PPM
Data File: 7M95172.D
Acq On : 10/ 8/18 14:16

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:43
Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	82152	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.753	152	134996	40.00	ng	0.00
31) Naphthalene-d8	6.762	136	501928	40.00	ng	0.00
50) Acenaphthene-d10	8.178	164	287749	40.00	ng	0.00
77) Phenanthrene-d10	9.620	188	498911	40.00	ng	0.00
91) Chrysene-d12	12.655	240	487388	40.00	ng	0.00
103) Perylene-d12	14.295	264	430382	40.00	ng	0.04
System Monitoring Compounds						
11) 2-Fluorophenol	4.551	112	542384	114.81	ng	0.00
Spiked Amount 100.000			Recovery =	114.81%		
16) Phenol-d5	5.437	99	762683	107.65	ng	0.01
Spiked Amount 100.000			Recovery =	107.65%		
32) Nitrobenzene-d5	6.196	128	98291	59.28	ng	0.00
Spiked Amount 50.000			Recovery =	118.56%		
55) 2-Fluorobiphenyl	7.596	172	562247	62.76	ng	0.00
Spiked Amount 50.000			Recovery =	125.52%		
80) 2,4,6-Tribromophenol	8.910	330	153461	126.56	ng	0.00
Spiked Amount 100.000			Recovery =	126.56%		
94) Terphenyl-d14	11.415	244	522557	63.23	ng	0.00
Spiked Amount 50.000			Recovery =	126.46%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	231906	114.3497	ng	90
9) Pyridine	2.969	79	628257	100.4113	ng	61
10) N-Nitrosodimethylamine	2.905	74	359343	94.6410	ng	65
12) Benzaldehyde	5.368	77	221456	65.3701	ng	73
13) Aniline	5.464	93	739008m	95.0534	ng	
14) Pentachloroethane	5.512	117	180666	104.6196	ng	83
15) bis(2-Chloroethyl)ether	5.528	93	531347	98.9455	ng	73
17) Phenol	5.448	94	748440	93.3946	ng	76
18) 2-Chlorophenol	5.571	128	562119	107.1896	ng	74
19) N-Decane	5.630	57	462518	71.1825	ng	83
20) 1,3-Dichlorobenzene	5.704	146	597250	103.2415	ng	96
22) 1,4-Dichlorobenzene	5.763	146	599219	109.5176	ng	97
23) 1,2-Dichlorobenzene	5.891	146	564550	107.7359	ng	98
24) Benzyl alcohol	5.865	108	369770	122.8955	ng	63
25) bis(2-chloroisopropyl)...	5.982	45	546267	63.9341	ng	94
26) 2-Methylphenol	5.956	108	492435	101.0332	ng	96
27) Acetophenone	6.078	105	678037	94.9858	ng	68
28) Hexachloroethane	6.169	117	223127	96.7930	ng	85
29) N-Nitroso-di-n-propyla...	6.084	70	319378	71.1358	ng	90
30) 3&4-Methylphenol	6.084	108	475892	90.6755	ng	98
33) Nitrobenzene	6.212	77	508942	74.6649	ng	75
34) Isophorone	6.404	82	942394	80.8332	ng	83
35) 2-Nitrophenol	6.463	139	292633	107.0949	ng	80
36) 2,4-Dimethylphenol	6.495	107	501291	89.5741	ng	85
37) Benzoic Acid	6.602	105	609559	133.8724	ng	42
38) bis(2-Chloroethoxy)met...	6.570	93	634321	94.2299	ng	96
39) 2,4-Dichlorophenol	6.650	162	442226	103.6864	ng	87
40) 1,2,4-Trichlorobenzene	6.719	180	477181	102.2552	ng	97
41) Naphthalene	6.778	128	1581629	105.2726	ng	99
42) 4-Chloroaniline	6.810	127	552515m	112.8932	ng	
43) Hexachlorobutadiene	6.874	225	243070	89.6944	ng	96
44) Caprolactam	7.093	113	186462	114.4724	ng	57
45) 4-Chloro-3-methylphenol	7.179	107	435933	90.0918	ng	71
46) 2-Methylnaphthalene	7.312	142	1057555	102.9862	ng	99
47) 1-Methylnaphthalene	7.387	142	1032374	104.6089	ng	91
48) Methylnaphthalenes (To...	7.312	142	2089996m	207.4366	ng	
49) 1,1'-Biphenyl	7.681	154	1226961	100.2047	ng	94
51) 1,2,4,5-Tetrachloroben...	7.441	216	461928	113.0263	ng	98
52) Hexachlorocyclopentadiene	7.435	237	240608	129.0989	ng	99
53) 2,4,6-Trichlorophenol	7.526	196	321127	116.5341	ng	99
54) 2,4,5-Trichlorophenol	7.558	196	331601	112.5866	ng	99
56) 2-Chloronaphthalene	7.702	162	935055	107.8214	ng	92
57) 1,4-Dimethylnaphthalene	7.986	156	810145	126.3356	ng	86
58) Dimethylnaphthalenes (...)	7.986	156	810145	126.3356	ng	86
59) Diphenyl Ether	7.767	170	710945	117.0568	ng	77
60) 2-Nitroaniline	7.777	65	292981	71.6071	ng	42
61) Coumarin	7.964	146	403534	119.6794	ng	86
62) Acenaphthylene	8.060	152	1439961	117.7323	ng	99
63) Dimethylphthalate	7.932	163	1044295	102.3406	ng	98
64) 2,6-Dinitrotoluene	7.980	165	235690	103.9066	ng	59
65) Acenaphthene	8.210	153	973464	112.2683	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM
 Data File: 7M95172.D
 Acq On : 10/ 8/18 14:16

Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.124	138	258513	117.5921	ng	74
67)	2,4-Dinitrophenol	8.215	184	124496	91.9045	ng	38
68)	Dibenzofuran	8.360	168	1342349	110.5941	ng	85
69)	2,4-Dinitrotoluene	8.333	165	332338	105.3310	ng	59
70)	4-Nitrophenol	8.253	65	191188	76.9283	ng	81
71)	2,3,4,6-Tetrachlorophenol	8.466	232	282587	111.1256	ng	83
72)	Fluorene	8.680	166	1063389	103.9499	ng	100
73)	4-Chlorophenyl-phenyle...	8.669	204	497186	100.8204	ng	84
74)	Diethylphthalate	8.557	149	1068494	105.1213	ng	96
75)	4-Nitroaniline	8.685	138	308969	116.5959	ng	68
76)	Atrazine	9.310	200	331798	110.4228	ng	96
78)	4,6-Dinitro-2-methylph...	8.712	198	159910	91.0506	ng	62
79)	n-Nitrosodiphenylamine	8.782	169	962262	109.7387	ng	100
81)	1,2-Diphenylhydrazine	8.824	77	1061543	88.1132	ng	80
82)	4-Bromophenyl-phenylether	9.156	248	302438	107.0551	ng	78
83)	Hexachlorobenzene	9.220	284	309329	112.5755	ng	71
84)	N-Octadecane	9.503	57	567155	70.5721	ng	63
85)	Pentachlorophenol	9.412	266	204854	112.9838	ng	97
86)	Phenanthrene	9.647	178	1652249	109.0613	ng	99
87)	Anthracene	9.700	178	1681442	107.6430	ng	98
88)	Carbazole	9.866	167	1540992	109.1502	ng	97
89)	Di-n-butylphthalate	10.256	149	1824827	99.8136	ng	97
90)	Fluoranthene	10.967	202	1734740	103.3707	ng	93
92)	Pyrene	11.228	202	1745936	108.7755	ng	89
93)	Benzidine	11.116	184	577572	111.5689	ng	86
95)	4,4'-DDE	11.357	246	365067	120.7926	ng	93
96)	4,4'-DDD	11.752	235	633460	123.1331	ng	95
97)	Butylbenzylphthalate	12.008	149	811746	106.5038	ng	73
98)	4,4'-DDT	12.110	235	519878	118.0779	ng	97
99)	3,3'-Dichlorobenzidine	12.617	252	486288	123.8199	ng	96
100)	Benzo[a]anthracene	12.644	228	1650442	111.7770	ng	97
101)	Chrysene	12.687	228	1545396	111.1847	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.713	149	1100864	109.4947	ng	94
104)	Di-n-octylphthalate	13.477	149	1911146	105.3775	ng	99
105)	Benzo[b]fluoranthene	13.883	252	1621317m	114.3436	ng	
106)	Benzo[k]fluoranthene	13.915	252	1479291m	107.8266	ng	
107)	Benzo[a]pyrene	14.241	252	1508003	112.1192	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.572	276	1639331	122.7742	ng	90
109)	Dibenzo[a,h]anthracene	15.593	278	1366922	118.5674	ng	94
110)	Benzo[g,h,i]perylene	15.930	276	1358884	122.1618	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : CAL BNA@160PPM

Operator : AH/JB

Qt Meth : 7M_1008.M

Data File: 7M95171.D

Sam Mult : 1 Vial# : 4

Qt On : 10/08/18 15:43

Acq On : 10/ 8/18 13:53

Misc : A,BNA

Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\

Qt Path : G:\GCMSData\2018\GCMS_7\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	76070	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.752	152	123955	40.00	ng	0.00
31) Naphthalene-d8	6.778	136	459360	40.00	ng	0.02
50) Acenaphthene-d10	8.210	164	266448	40.00	ng	0.03
77) Phenanthrene-d10	9.642	188	461445	40.00	ng	0.02
91) Chrysene-d12	12.660	240	448112	40.00	ng	0.01
103) Perylene-d12	14.279	264	397716	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.550	112	666474	152.36	ng	0.00
Spiked Amount 100.000			Recovery	=	152.36%	
16) Phenol-d5	5.437	99	931222	141.94	ng	0.01
Spiked Amount 100.000			Recovery	=	141.94%	
32) Nitrobenzene-d5	6.201	128	122329	80.61	ng	0.00
Spiked Amount 50.000			Recovery	=	161.22%	
55) 2-Fluorobiphenyl	7.628	172	687062	82.82	ng	0.03
Spiked Amount 50.000			Recovery	=	165.64%	
80) 2,4,6-Tribromophenol	8.936	330	193421	158.84	ng	0.03
Spiked Amount 100.000			Recovery	=	158.84%	
94) Terphenyl-d14	11.426	244	659232	86.76	ng	0.01
Spiked Amount 50.000			Recovery	=	173.52%	
Target Compounds						
8) 1,4-Dioxane	2.542	88	284901	148.4183	ng	91
9) Pyridine	2.969	79	776420	130.8265	ng	61
10) N-Nitrosodimethylamine	2.905	74	444794	126.5126	ng	65
12) Benzaldehyde	5.368	77	240146	77.6129	ng	71
13) Aniline	5.469	93	901555m	125.2320	ng	
14) Pentachloroethane	5.512	117	222398	135.4957	ng	84
15) bis(2-Chloroethyl) ether	5.528	93	651919	127.2396	ng	74
17) Phenol	5.448	94	907753	122.3312	ng	77
18) 2-Chlorophenol	5.571	128	687953	141.6733	ng	76
19) N-Decane	5.630	57	557669	92.3054	ng	82
20) 1,3-Dichlorobenzene	5.704	146	725190	135.3801	ng	97
22) 1,4-Dichlorobenzene	5.769	146	731875	145.6773	ng	97
23) 1,2-Dichlorobenzene	5.891	146	694591	144.3591	ng	97
24) Benzyl alcohol	5.865	108	451176	155.0270	ng	67
25) bis(2-chloroisopropyl)...	5.982	45	657201	83.7688	ng	95
26) 2-Methylphenol	5.961	108	606245	130.4428	ng	96
27) Acetophenone	6.084	105	794025	121.1425	ng	68
28) Hexachloroethane	6.175	117	274283	129.5828	ng	88
29) N-Nitroso-di-n-propyla...	6.089	70	378220	94.7339	ng	91
30) 3&4-Methylphenol	6.084	108	561195	116.4535	ng	99
33) Nitrobenzene	6.217	77	622944	99.8586	ng	76
34) Isophorone	6.415	82	1148096	107.6028	ng	80
35) 2-Nitrophenol	6.474	139	358129	143.2100	ng	79
36) 2,4-Dimethylphenol	6.506	107	620651	119.9820	ng	86
37) Benzoic Acid	6.623	105	750486	172.2890	ng	41
38) bis(2-Chloroethoxy)met...	6.581	93	770813	125.1171	ng	95
39) 2,4-Dichlorophenol	6.661	162	541630	134.8444	ng	88
40) 1,2,4-Trichlorobenzene	6.730	180	580793	135.9915	ng	97
41) Naphthalene	6.794	128	1905776	134.9056	ng	98
42) 4-Chloroaniline	6.826	127	615062m	137.3191	ng	
43) Hexachlorobutadiene	6.890	225	293550	118.3598	ng	96
44) Caprolactam	7.125	113	230612	154.6966	ng	55
45) 4-Chloro-3-methylphenol	7.200	107	536973	121.2568	ng	75
46) 2-Methylnaphthalene	7.334	142	1280021	136.2013	ng	100
47) 1-Methylnaphthalene	7.414	142	1247882	138.1635	ng	91
48) Methylnaphthalenes (To...	7.414	142	2528236m	274.1863	ng	
49) 1,1'-Biphenyl	7.713	154	1489028	132.8766	ng	93
51) 1,2,4,5-Tetrachloroben...	7.473	216	556919	147.1630	ng	98
52) Hexachlorocyclopentadiene	7.462	237	298637	159.3977	ng	99
53) 2,4,6-Trichlorophenol	7.558	196	378389	148.2915	ng	100
54) 2,4,5-Trichlorophenol	7.585	196	400046	146.6838	ng	99
56) 2-Chloronaphthalene	7.729	162	1151374	143.3790	ng	92
57) 1,4-Dimethylnaphthalene	8.012	156	957395	161.2335	ng	88
58) Dimethylnaphthalenes (...)	8.012	156	957395	161.2335	ng	88
59) Diphenyl Ether	7.799	170	856156	152.2352	ng	74
60) 2-Nitroaniline	7.804	65	349895	92.3540	ng	48
61) Coumarin	7.996	146	487176	156.0366	ng	86
62) Acenaphthylene	8.087	152	1738379	153.4937	ng	98
63) Dimethylphthalate	7.964	163	1282684	135.7519	ng	98
64) 2,6-Dinitrotoluene	8.012	165	279600	133.1191	ng	60
65) Acenaphthene	8.237	153	1174450	146.2761	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95171.D Sam Mult : 1 Vial# : 4 Qt On : 10/08/18 15:43
 Acq On : 10/ 8/18 13:53 Misc : A,BNA Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.156	138	305912	150.2774	ng	73
67) 2,4-Dinitrophenol	8.247	184	158845	121.8928	ng	30
68) Dibenzofuran	8.392	168	1656816	145.8861	ng	85
69) 2,4-Dinitrotoluene	8.365	165	412025	141.0266	ng	57
70) 4-Nitrophenol	8.285	65	237620	103.2547	ng	83
71) 2,3,4,6-Tetrachlorophenol	8.493	232	352766	149.8131	ng	84
72) Fluorene	8.707	166	1270157	134.0883	ng	100
73) 4-Chlorophenyl-phenyle...	8.701	204	599978	131.3912	ng	82
74) Diethylphthalate	8.584	149	1308296	139.0036	ng	96
75) 4-Nitroaniline	8.717	138	375024	152.8371	ng	69
76) Atrazine	9.337	200	406699	146.1704	ng	96
78) 4,6-Dinitro-2-methylph...	8.744	198	202866	119.2720	ng	69
79) n-Nitrosodiphenylamine	8.808	169	1171229	144.4147	ng	100
81) 1,2-Diphenylhydrazine	8.851	77	1289869	115.7583	ng	79
82) 4-Bromophenyl-phenylether	9.177	248	377774	144.5793	ng	82
83) Hexachlorobenzene	9.246	284	380533	149.7334	ng	67
84) N-Octadecane	9.524	57	681052	91.6252	ng	61
85) Pentachlorophenol	9.439	266	260365	147.3459	ng	98
86) Phenanthrene	9.668	178	1996194	142.4626	ng	99
87) Anthracene	9.722	178	2059489	142.5498	ng	98
88) Carbazole	9.882	167	1891124	144.8263	ng	97
89) Di-n-butylphthalate	10.272	149	2215679	131.0321	ng	97
90) Fluoranthene	10.977	202	2136180	137.6271	ng	94
92) Pyrene	11.239	202	2140705	145.0601	ng	89
93) Benzidine	11.121	184	654052	143.0032	ng	91
95) 4,4'-DDE	11.362	246	454826	163.6822	ng	93
96) 4,4'-DDD	11.757	235	791896	167.4219	ng	96
97) Butylbenzylphthalate	12.014	149	1000407	142.7611	ng	74
98) 4,4'-DDT	12.115	235	646003	159.5843	ng	98
99) 3,3'-Dichlorobenzidine	12.623	252	582164	173.2059	ng	96
100) Benzo[a]anthracene	12.649	228	2035789	149.9592	ng	98
101) Chrysene	12.692	228	1883076	147.3538	ng	99
102) bis(2-Ethylhexyl)phtha...	12.719	149	1345888	145.5984	ng	93
104) Di-n-octylphthalate	13.472	149	2338806	139.5499	ng	99
105) Benzo[b]fluoranthene	13.878	252	1920988	146.6053	ng	95
106) Benzo[k]fluoranthene	13.910	252	1900387	149.8979	ng	94
107) Benzo[a]pyrene	14.225	252	1879552	151.2213	ng	94
108) Indeno[1,2,3-cd]pyrene	15.550	276	2044951	165.7313	ng	91
109) Dibenzo[a,h]anthracene	15.577	278	1698107	149.5014	ng	93
110) Benzo[g,h,i]perylene	15.913	276	1681208	163.5519	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

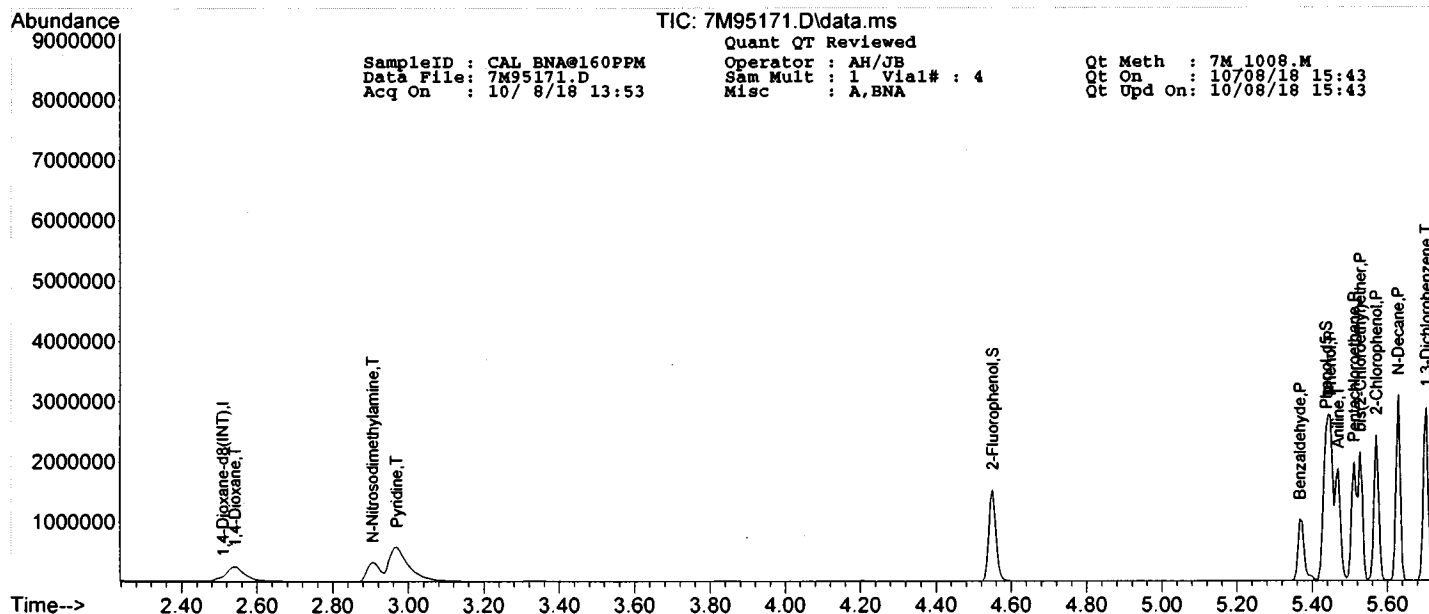
TIC: 7M95171.D\data.ms

Quant QT Reviewed

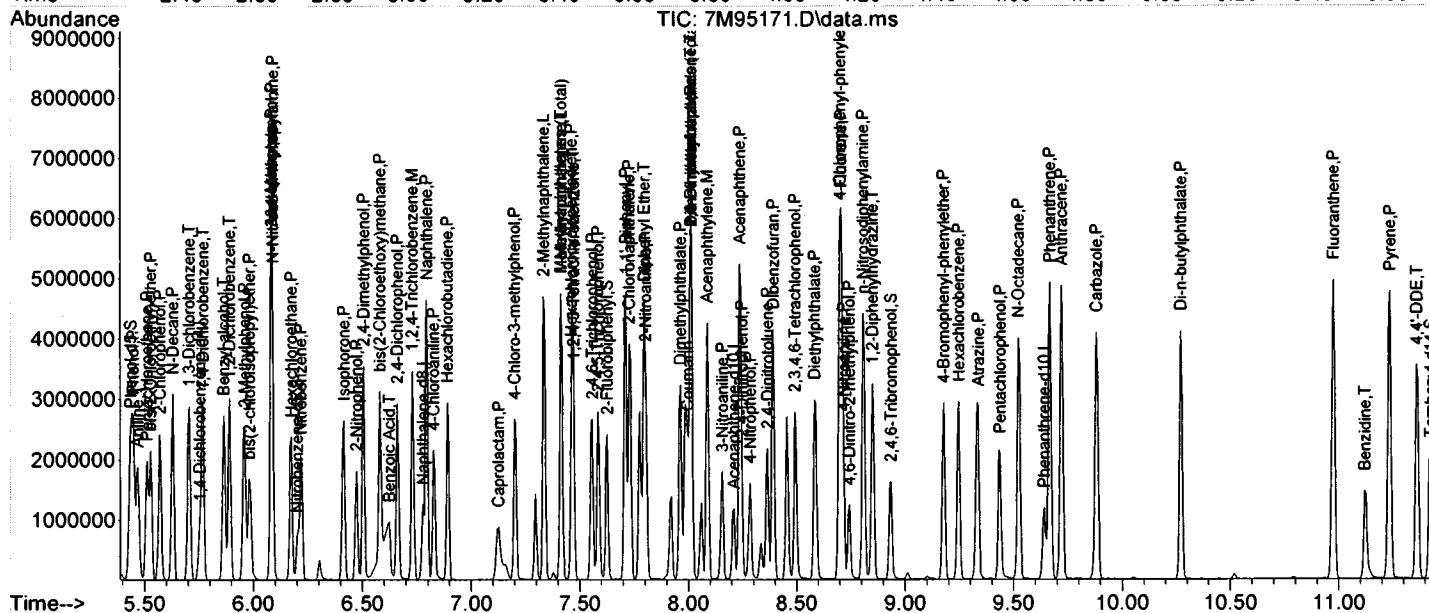
SampleID : CAL_BNA@160PPM
 Data File: 7M95171.D
 Acq On : 10/ 8/18 13:53

Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

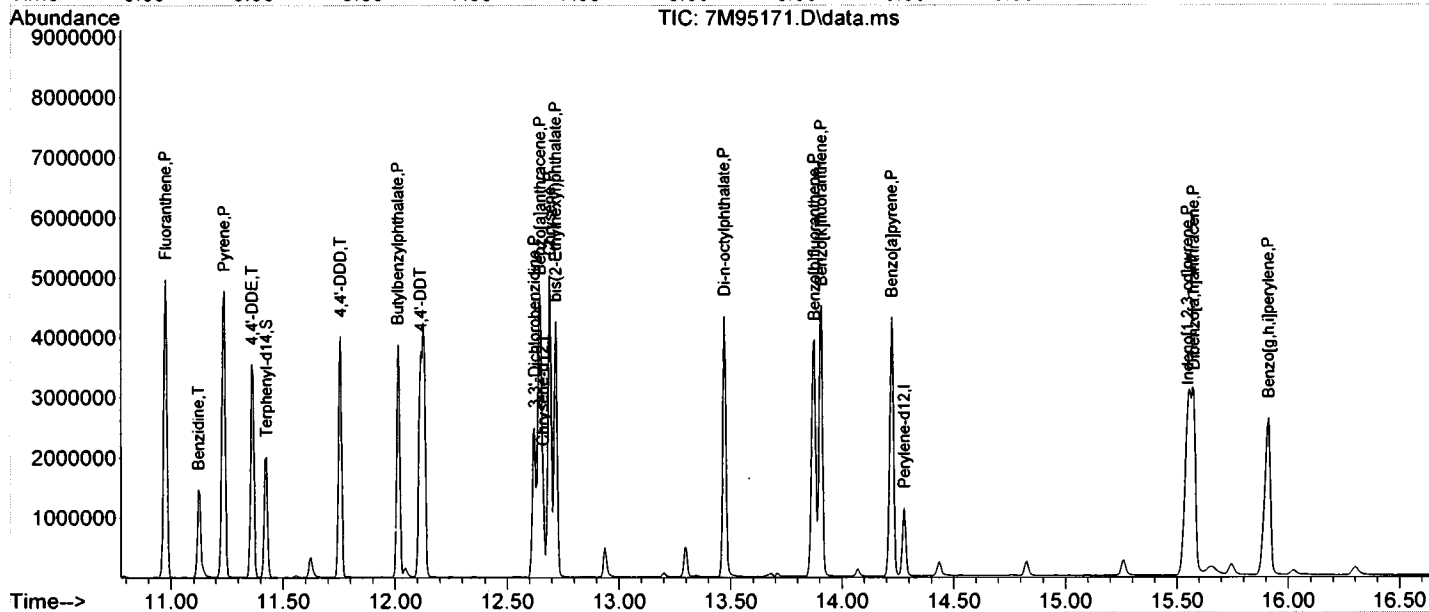
Qt Meth : 7M 1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43



TIC: 7M95171.D\data.ms



TIC: 7M95171.D\data.ms



SampleID : CAL BNA@196PPM

Operator : AH/JB

Qt Meth : 7M_1008.M

Data File: 7M95170.D

Sam Mult : 1 Vial# : 3

Qt On : 10/08/18 15:43

Acq On : 10/ 8/18 13:29

Misc : A,BNA

Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	76812	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.752	152	126580	40.00	ng	0.00
31) Naphthalene-d8	6.767	136	465835	40.00	ng	0.00
50) Acenaphthene-d10	8.189	164	270926	40.00	ng	0.00
77) Phenanthrene-d10	9.626	188	466920	40.00	ng	0.00
91) Chrysene-d12	12.660	240	452377	40.00	ng	0.01
103) Perylene-d12	14.268	264	405129	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.550	112	833529	188.71	ng	0.00
Spiked Amount 100.000			Recovery =	188.71%		
16) Phenol-d5	5.443	99	1153760	174.17	ng	0.02
Spiked Amount 100.000			Recovery =	174.17%		
32) Nitrobenzene-d5	6.201	128	154552	100.43	ng	0.00
Spiked Amount 50.000			Recovery =	200.86%		
55) 2-Fluorobiphenyl	7.606	172	856553	101.54	ng	0.00
Spiked Amount 50.000			Recovery =	203.08%		
80) 2,4,6-Tribromophenol	8.920	330	246074	186.89	ng	0.01
Spiked Amount 100.000			Recovery =	186.89%		
94) Terphenyl-d14	11.421	244	835461	108.92	ng	0.00
Spiked Amount 50.000			Recovery =	217.84%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	359234	181.5062	ng	91
9) Pyridine	2.964	79	978754	159.7190	ng	61
10) N-Nitrosodimethylamine	2.905	74	563778	158.8062	ng	65
12) Benzaldehyde	5.368	77	265247	85.6773	ng	73
13) Aniline	5.469	93	1113098	153.1232	ng	79
14) Pentachloroethane	5.512	117	274250	161.9016	ng	83
15) bis(2-Chloroethyl) ether	5.533	93	792302	149.6513	ng	72
17) Phenol	5.453	94	1114858	148.7899	ng	79
18) 2-Chlorophenol	5.576	128	856633	174.7062	ng	73
19) N-Decane	5.630	57	673611	110.0373	ng	81
20) 1,3-Dichlorobenzene	5.704	146	902046	166.7693	ng	98
22) 1,4-Dichlorobenzene	5.769	146	903914	176.1899	ng	97
23) 1,2-Dichlorobenzene	5.891	146	851662	173.3330	ng	98
24) Benzyl alcohol	5.870	108	562113	181.5434	ng	63
25) bis(2-chloroisopropyl)...	5.982	45	809597	101.0537	ng	96
26) 2-Methylphenol	5.961	108	754376	154.3087	ng	97
27) Acetophenone	6.084	105	933478	139.4650	ng	67
28) Hexachloroethane	6.169	117	340115	157.3524	ng	83
29) N-Nitroso-di-n-propyla...	6.089	70	451167	113.6245	ng	90
30) 3&4-Methylphenol	6.089	108	654267	132.9513	ng	97
33) Nitrobenzene	6.217	77	775834	122.6384	ng	73
34) Isophorone	6.410	82	1428008	131.9767	ng	84
35) 2-Nitrophenol	6.468	139	454649	179.2797	ng	79
36) 2,4-Dimethylphenol	6.500	107	767012	145.0344	ng	86
37) Benzoic Acid	6.629	105	967756	210.1114	ng	40
38) bis(2-Chloroethoxy)met...	6.575	93	948139	151.7612	ng	95
39) 2,4-Dichlorophenol	6.655	162	675259	161.8211	ng	88
40) 1,2,4-Trichlorobenzene	6.725	180	718938	165.9980	ng	97
41) Naphthalene	6.789	128	2304688	157.6488	ng	98
42) 4-Chloroaniline	6.821	127	707888m	155.8467	ng	
43) Hexachlorobutadiene	6.880	225	366343	145.6569	ng	96
44) Caprolactam	7.120	113	311670	206.1650	ng	56
45) 4-Chloro-3-methylphenol	7.190	107	668975	148.9652	ng	72
46) 2-Methylnaphthalene	7.318	142	1550532	162.6920	ng	99
47) 1-Methylnaphthalene	7.398	142	1508355	164.6813	ng	91
48) Methylnaphthalenes (To...	7.398	142	3058609m	327.0945	ng	
49) 1,1'-Biphenyl	7.692	154	1788825	157.4108	ng	93
51) 1,2,4,5-Tetrachloroben...	7.451	216	680095	176.7412	ng	98
52) Hexachlorocyclopentadiene	7.446	237	366202	181.6885	ng	97
53) 2,4,6-Trichlorophenol	7.542	196	472122	181.9675	ng	99
54) 2,4,5-Trichlorophenol	7.569	196	515590m	185.9253	ng	
56) 2-Chloronaphthalene	7.713	162	1407584	172.3873	ng	92
57) 1,4-Dimethylnaphthalene	7.996	156	1126733	186.6152	ng	89
58) Dimethylnaphthalenes (...)	7.996	156	1126733	186.6152	ng	89
59) Diphenyl Ether	7.777	170	1050095	183.6337	ng	76
60) 2-Nitroaniline	7.788	65	434226	112.7186	ng	45
61) Coumarin	7.980	146	601806	189.5653	ng	87
62) Acenaphthylene	8.071	152	2137566	185.6211	ng	97
63) Dimethylphthalate	7.948	163	1584030	164.8737	ng	98
64) 2,6-Dinitrotoluene	7.991	165	329791	154.4201	ng	65
65) Acenaphthene	8.221	153	1434479	175.7093	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM
 Data File: 7M95170.D
 Acq On : 10/ 8/18 13:29

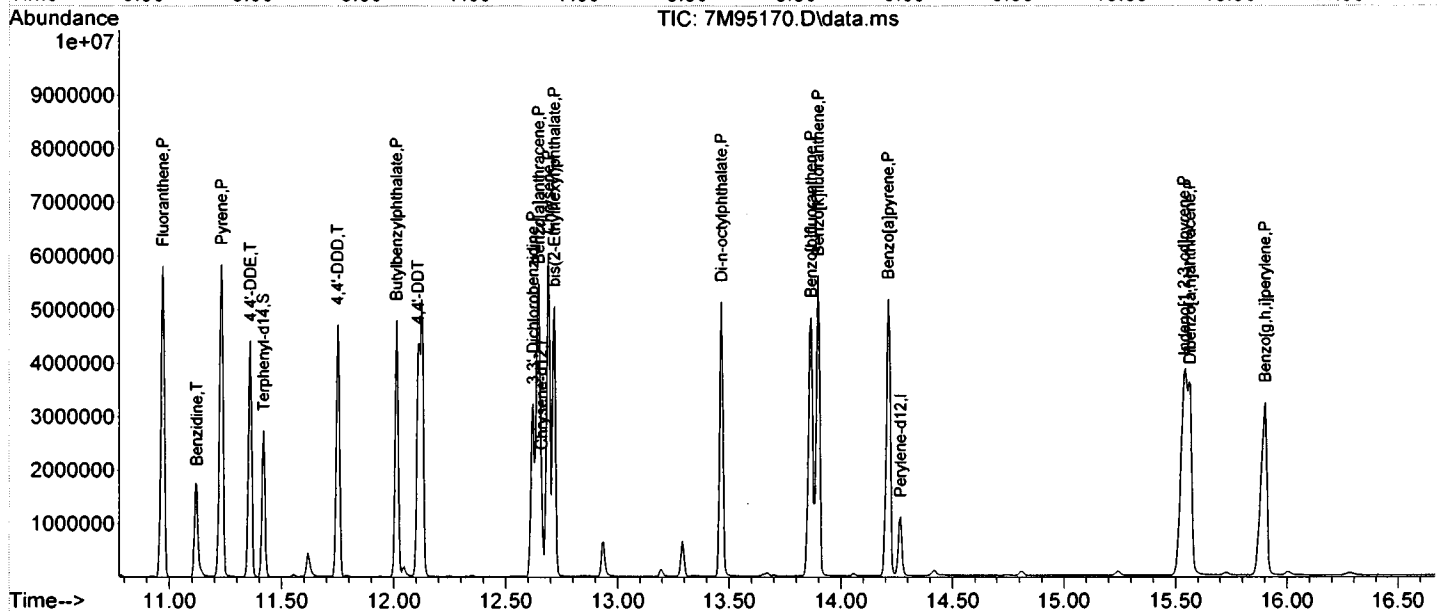
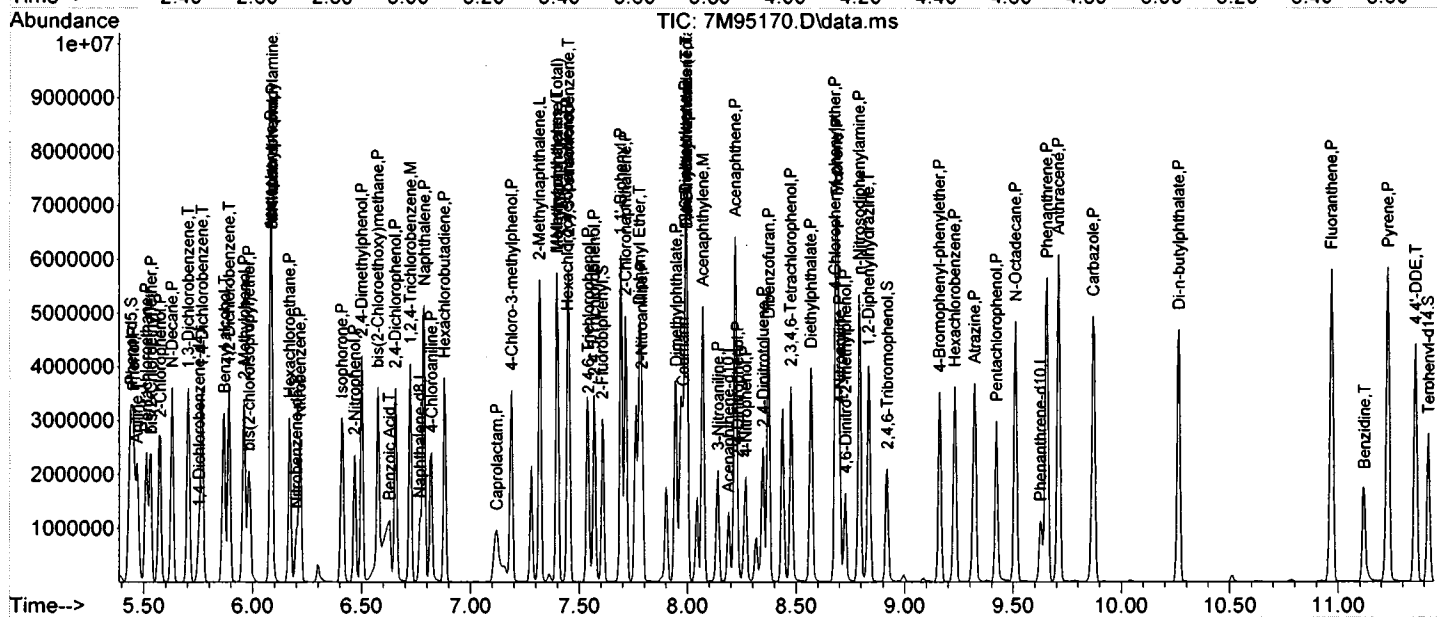
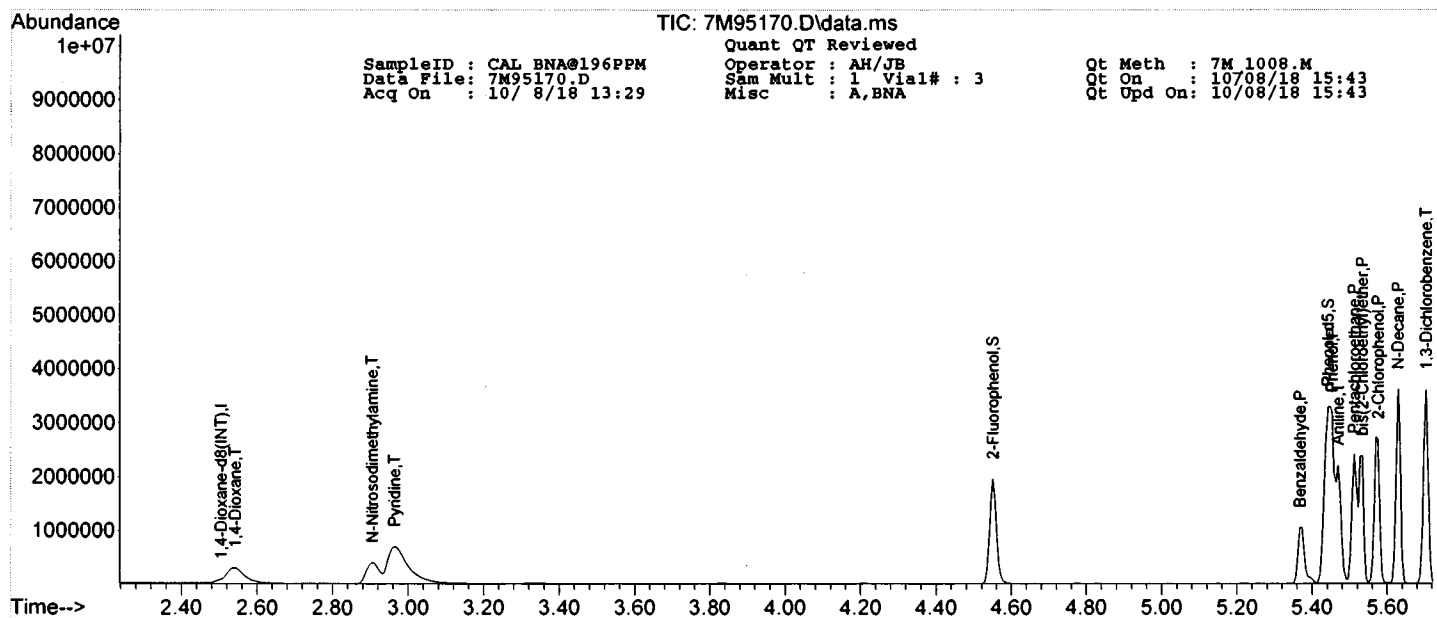
Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.140	138	377296	182.2809	ng	74
67) 2,4-Dinitrophenol	8.231	184	202399	147.9360	ng	29
68) Dibenzofuran	8.376	168	2011927	172.8561	ng	83
69) 2,4-Dinitrotoluene	8.349	165	517792	174.2989	ng	57
70) 4-Nitrophenol	8.269	65	299028	127.7911	ng	79
71) 2,3,4,6-Tetrachlorophenol	8.477	232	443750	185.3375	ng	83
72) Fluorene	8.691	166	1525863	158.4203	ng	99
73) 4-Chlorophenyl-phenyle...	8.680	204	730186	157.2629	ng	86
74) Diethylphthalate	8.568	149	1619588	169.2335	ng	96
75) 4-Nitroaniline	8.701	138	465093	186.4110	ng	69
76) Atrazine	9.321	200	511547	180.8146	ng	95
78) 4,6-Dinitro-2-methylph...	8.728	198	259022	144.6528	ng	69
79) n-Nitrosodiphenylamine	8.792	169	1441794	175.6914	ng	99
81) 1,2-Diphenylhydrazine	8.835	77	1580163	140.1477	ng	78
82) 4-Bromophenyl-phenylether	9.161	248	474669	179.5322	ng	83
83) Hexachlorobenzene	9.230	284	484690	188.4811	ng	67
84) N-Octadecane	9.513	57	813806	108.2014	ng	60
85) Pentachlorophenol	9.423	266	330678	177.1206	ng	96
86) Phenanthrene	9.658	178	2447189	172.6009	ng	99
87) Anthracene	9.711	178	2515556	172.0753	ng	97
88) Carbazole	9.871	167	2350977	177.9316	ng	97
89) Di-n-butylphthalate	10.267	149	2719641	158.9498	ng	97
90) Fluoranthene	10.972	202	2627842	167.3181	ng	94
92) Pyrene	11.234	202	2635055	176.8752	ng	90
93) Benzidine	11.121	184	784936	178.0820	ng	87
95) 4,4'-DDE	11.362	246	569926	203.1705	ng	93
96) 4,4'-DDD	11.752	235	990794	207.4978	ng	96
97) Butylbenzylphthalate	12.014	149	1243221	175.7388	ng	72
98) 4,4'-DDT	12.110	235	820798	200.8528	ng	98
99) 3,3'-Dichlorobenzidine	12.623	252	719960	233.2657	ng	96
100) Benzo[a]anthracene	12.649	228	2529340	184.5583	ng	97
101) Chrysene	12.692	228	2318553	179.7200	ng	98
102) bis(2-Ethylhexyl)phtha...	12.719	149	1678899	179.9113	ng	92
104) Di-n-octylphthalate	13.467	149	2886457	169.0753	ng	99
105) Benzo[b]fluoranthene	13.867	252	2524019m	189.1025	ng	
106) Benzo[k]fluoranthene	13.899	252	2251771m	174.3642	ng	
107) Benzo[a]pyrene	14.215	252	2372366	187.3786	ng	94
108) Indeno[1,2,3-cd]pyrene	15.539	276	2584440	205.6211	ng	90
109) Dibenzo[a,h]anthracene	15.566	278	2143717	175.9457	ng	92
110) Benzo[g,h,i]perylene	15.903	276	2160605	206.3428	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL BNA@0.5PPM
Data File: 7M95176.D
Acq On : 10/ 8/18 15:50

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 16:14
Qt Upd On: 10/07/18 16:40

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	80950	40.00	ng	0.05
21) 1,4-Dichlorobenzene-d4	5.747	152	138488	40.00	ng	0.04
31) Naphthalene-d8	6.762	136	512096	40.00	ng	0.04
50) Acenaphthene-d10	8.172	164	294601	40.00	ng	0.04
77) Phenanthrene-d10	9.615	188	507907	40.00	ng	0.04
91) Chrysene-d12	12.644	240	480570	40.00	ng	0.02
103) Perylene-d12	14.262	264	416727	40.00	ng	0.03
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
8) 1,4-Dioxane	2.552	88	718m	0.3881	ng	
9) Pyridine	0.000		0	N.D.	d	
10) N-Nitrosodimethylamine	0.000		0	N.D.	d	
12) Benzaldehyde	0.000		0	N.D.	d	
13) Aniline	5.464	93	2447m	0.3194	ng	
14) Pentachloroethane	0.000		0	N.D.	d	
15) bis(2-Chloroethyl)ether	5.523	93	2550	0.5388	ng	81
17) Phenol	0.000		0	N.D.	d	
18) 2-Chlorophenol	0.000		0	N.D.	d	
19) N-Decane	0.000		0	N.D.	d	
20) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
22) 1,4-Dichlorobenzene	0.000		0	N.D.	d	
23) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
24) Benzyl alcohol	0.000		0	N.D.	d	
25) bis(2-chloroisopropyl)...	0.000		0	N.D.	d	
26) 2-Methylphenol	5.950	108	2317	0.5336	ng	95
27) Acetophenone	0.000		0	N.D.	d	
28) Hexachloroethane	0.000		0	N.D.	d	
29) N-Nitroso-di-n-propyla...	6.078	70	1608	0.3189	ng	85
30) 3&4-Methylphenol	6.073	108	2319	0.4307	ng	100
33) Nitrobenzene	0.000		0	N.D.	d	
34) Isophorone	0.000		0	N.D.	d	
35) 2-Nitrophenol	0.000		0	N.D.	d	
36) 2,4-Dimethylphenol	6.490	107	2242	0.4045	ng	98
37) Benzoic Acid	0.000		0	N.D.	d	
38) bis(2-Chloroethoxy)met...	0.000		0	N.D.	d	
39) 2,4-Dichlorophenol	6.644	162	1744	0.4435	ng	92
40) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
41) Naphthalene	6.778	128	8097	0.5849	ng	97
42) 4-Chloroaniline	6.810	127	1975	0.3955	ng	86
43) Hexachlorobutadiene	0.000		0	N.D.	d	
44) Caprolactam	0.000		0	N.D.	d	
45) 4-Chloro-3-methylphenol	0.000		0	N.D.	d	
46) 2-Methylnaphthalene	0.000		0	N.D.	d	
47) 1-Methylnaphthalene	0.000		0	N.D.	d	
48) Methylnaphthalenes (To...	0.000		0	N.D.	d	
49) 1,1'-Biphenyl	0.000		0	N.D.	d	
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.	d	
52) Hexachlorocyclopentadiene	0.000		0	N.D.	d	
53) 2,4,6-Trichlorophenol	0.000		0	N.D.	d	
54) 2,4,5-Trichlorophenol	0.000		0	N.D.	d	
56) 2-Chloronaphthalene	0.000		0	N.D.	d	
57) 1,4-Dimethylnaphthalene	0.000		0	N.D.	d	
58) Dimethylnaphthalenes (...)	0.000		0	N.D.	d	
59) Diphenyl Ether	0.000		0	N.D.	d	
60) 2-Nitroaniline	0.000		0	N.D.	d	
61) Coumarin	0.000		0	N.D.	d	
62) Acenaphthylene	0.000		0	N.D.	d	
63) Dimethylphthalate	0.000		0	N.D.	d	
64) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
65) Acenaphthene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@0.5PPM

Operator : AH/JB

Qt Meth : 7M_1008.M

Data File: 7M95176.D

Sam Mult : 1 Vial# : 9

Qt On : 10/08/18 16:14

Acq On : 10/ 8/18 15:50

Misc : A,BNA

Qt Upd On: 10/07/18 16:40

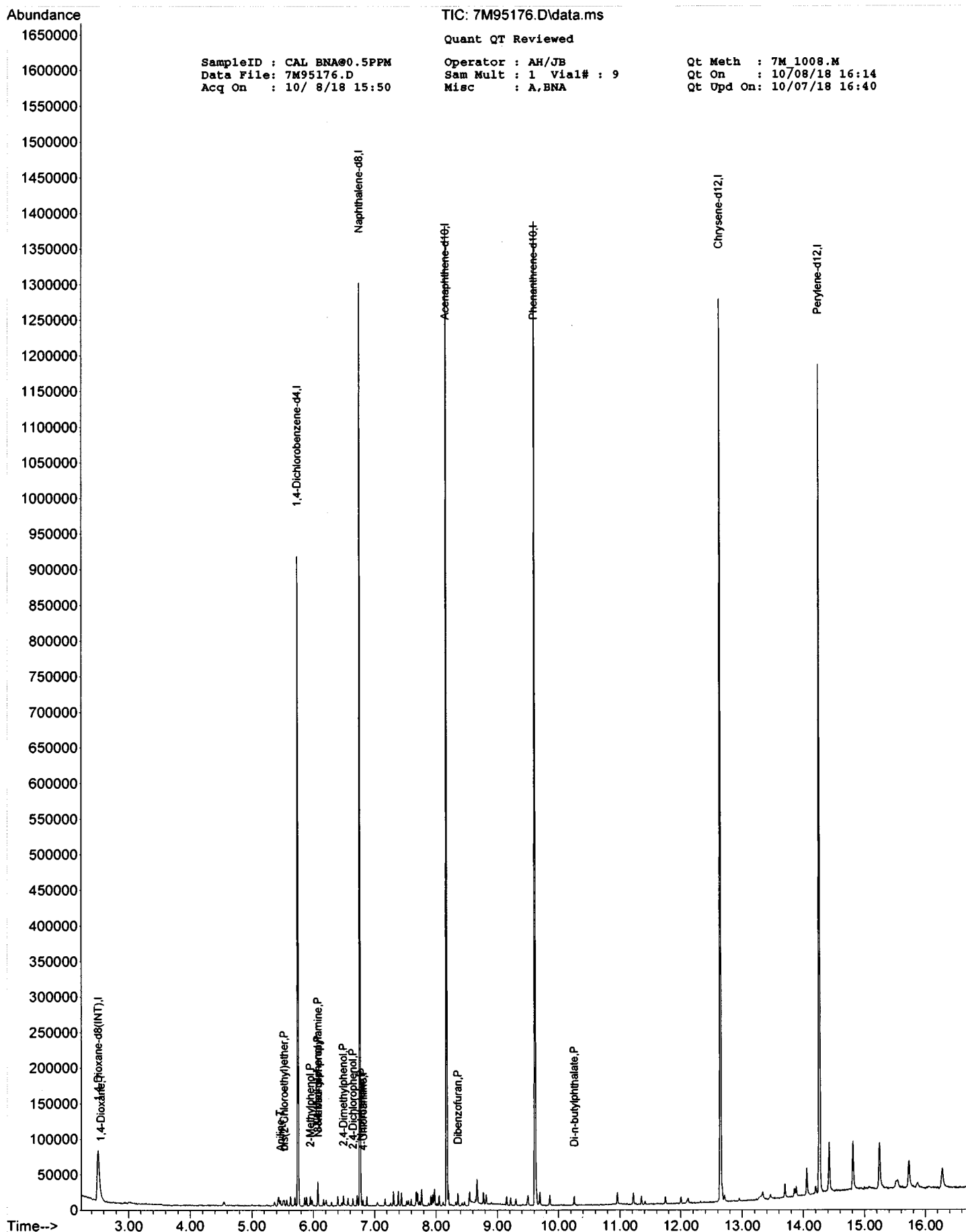
Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.	d	
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.354	168	6544	0.5444	ng	88
69) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
70) 4-Nitrophenol	0.000		0	N.D.	d	
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	d	
72) Fluorene	0.000		0	N.D.	d	
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D.	d	
74) Diethylphthalate	0.000		0	N.D.	d	
75) 4-Nitroaniline	0.000		0	N.D.	d	
76) Atrazine	0.000		0	N.D.	d	
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D.	d	
81) 1,2-Diphenylhydrazine	0.000		0	N.D.	d	
82) 4-Bromophenyl-phenylether	0.000		0	N.D.	d	
83) Hexachlorobenzene	0.000		0	N.D.	d	
84) N-Octadecane	0.000		0	N.D.	d	
85) Pentachlorophenol	0.000		0	N.D.	d	
86) Phenanthrene	0.000		0	N.D.	d	
87) Anthracene	0.000		0	N.D.	d	
88) Carbazole	0.000		0	N.D.	d	
89) Di-n-butylphthalate	10.256	149	6668	0.3583	ng	96
90) Fluoranthene	0.000		0	N.D.	d	
92) Pyrene	0.000		0	N.D.	d	
93) Benzidine	0.000		0	N.D.	d	
95) 4,4'-DDE	0.000		0	N.D.	d	
96) 4,4'-DDD	0.000		0	N.D.	d	
97) Butylbenzylphthalate	0.000		0	N.D.	d	
98) 4,4'-DDT	0.000		0	N.D.	d	
99) 3,3'-Dichlorobenzidine	0.000		0	N.D.	d	
100) Benzo[a]anthracene	0.000		0	N.D.	d	
101) Chrysene	0.000		0	N.D.	d	
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D.	d	
104) Di-n-octylphthalate	0.000		0	N.D.	d	
105) Benzo[b]fluoranthene	0.000		0	N.D.	d	
106) Benzo[k]fluoranthene	0.000		0	N.D.	d	
107) Benzo[a]pyrene	0.000		0	N.D.	d	
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
109) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
110) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

(#)= qualifier out of range (m) = manual integration (+) = signals summed



04		01		15		50		93		81																
Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time															
1	7M95177.D	CAL BNA@50PPM	10/08/18 16:13	2	7M95175.D	CAL BNA@20PPM	10/08/18 15:27	3	7M95169.D	CAL BNA@10PPM	10/08/18 13:05															
3	7M95173.D	CAL BNA@80PPM	10/08/18 14:40	6	7M95172.D	CAL BNA@120PPM	10/08/18 14:16	5	7M95171.D	CAL BNA@160PPM	10/08/18 13:29															
7	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50	8	7M95170.D	CAL BNA@196PPM	10/08/18 13:29	9	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50															
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9
1,4-Dioxane	1	0	Avg	0.9192	1.1824	0.9196	0.9532	0.9407	0.9409	0.9363	0.9544	0.7095	0.9402	2.54	1.00	1.00	13	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Qua	2.4474	2.9790	2.1569	2.5134	2.5477	2.5491	2.5516	2.6004	----	2.54	2.97	1.00	1.00	8.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitrosodimethylamine	1	0	Avg	1.3934	1.6205	1.2920	1.4062	1.4695	1.4580	1.4617	1.4979	----	1.45	2.91	1.00	1.00	6.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Fluorophenol	1	0	Avg	2.0854	2.3564	1.8446	2.0999	2.1739	2.2007	2.1903	2.2146	----	2.15	4.55	0.995	0.998	6.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzaldehyde	1	0	Avg	1.1489	1.2212	1.2224	1.4526	1.0744	0.8985	0.7892	----	----	1.12	5.37	0.967	0.998	20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Aniline	1	0	Avg	3.0158	2.4540	2.5073	3.1152	3.0647	2.9985	2.9629	2.9573	2.4182	2.83	5.46	1.00	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7127	0.8200	0.6369	0.7036	0.7320	0.7330	0.7309	0.7286	----	0.725	5.51	1.00	1.00	6.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethyl)ether	1	0	Qua	2.1655	2.5532	1.9671	2.2064	2.1783	2.1559	2.1425	2.1050	2.5200	2.22	5.52	1.00	1.00	8.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.0106	3.2708	2.6449	3.0642	3.1043	3.0946	3.0604	3.0654	----	3.04	5.43	1.00	1.00	5.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol	1	0	Avg	2.9869	3.4311	2.6666	3.0210	3.0582	3.0368	2.9832	2.9620	----	3.02	5.44	1.00	1.00	6.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Chlorophenol	1	0	Avg	2.2163	2.4976	1.9300	2.2065	2.2761	2.2808	2.2609	2.2759	----	2.24	5.57	1.00	1.00	6.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Decane	1	0	Avg	1.9136	2.4041	1.7781	1.9477	1.9392	1.8766	1.8327	1.7897	----	1.94	5.63	0.999	1.00	10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,3-Dichlorobenzene	1	0	Avg	2.3621	2.8113	2.1153	2.3971	2.4165	2.4233	2.3833	2.3966	----	2.41	5.70	1.00	1.00	7.9	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,4-Dichlorobenzene	1	0	Avg	1.4240	1.6867	1.2490	1.4235	1.4815	1.4796	1.4760	1.4573	----	1.46	5.76	1.00	1.00	8.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2-Dichlorobenzene	1	0	Avg	1.3427	1.5938	1.1702	1.3627	1.3950	1.3939	1.4008	1.3731	----	1.38	5.89	1.00	1.00	8.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzyl alcohol	1	0	Avg	0.8500	0.9775	0.7418	0.8633	0.8989	0.9130	0.9099	0.9062	----	0.881	5.86	0.999	0.999	7.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-chloroisopropyl) ether	1	0	Avg	1.3124	1.5928	1.1806	1.3526	1.3516	1.3488	1.3254	1.3052	----	1.35	5.98	1.00	1.00	8.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylphenol	1	0	Avg	1.1566	1.2817	1.0234	1.1764	1.2176	1.2159	1.2227	1.2162	1.3384	1.21	5.95	1.00	1.00	7.2	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.7507	2.0988	1.5919	1.8050	1.7571	1.6742	1.6014	1.5050	----	1.72	6.08	0.995	1.00	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachloroethane	1	0	Avg	0.5202	0.5834	0.4495	0.5245	0.5433	0.5509	0.5531	0.5483	----	0.534	6.17	1.00	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
N-Nitroso-di-n-propylamine	1	0	Avg	0.8294	1.0297	0.7640	0.8685	0.8351	0.7886	0.7628	0.7274	0.9288	0.837	6.08	0.997	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3,4-Methylenedioxyphenol	1	0	Avg	1.2200	1.3508	1.0683	1.2493	1.2386	1.1750	1.1318	1.0548	1.3396	1.20	6.08	0.995	1.00	8.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1226	0.1262	0.1069	0.1185	0.1308	0.1305	0.1331	0.1354	----	0.126	6.20	0.999	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene	1	0	Avg	0.3283	0.3783	0.2821	0.3301	0.3383	0.3379	0.3390	0.3398	----	0.334	6.21	1.00	1.00	7.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Isophorone	1	0	Avg	0.6068	0.6678	0.5430	0.6173	0.6262	0.6258	0.6248	0.6256	----	0.617	6.40	1.00	1.00	5.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Nitrophenol	1	0	Qua	0.1725	0.1643	0.1401	0.1699	0.1868	0.1943	0.1949	0.1991	----	0.178	6.46	0.998	0.999	11	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dimethylphenol	1	0	Avg	0.3278	0.3596	0.2840	0.3273	0.3355	0.3329	0.3377	0.3360	0.3502	0.332	6.49	1.00	1.00	6.3	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.3299	0.1827	0.1959	0.2907	0.3704	0.4048	0.4084	0.4239	----	0.326	6.56	0.993	0.998	29	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
bis(2-Chloroethoxy)methane	1	0	Avg	0.4156	0.4624	0.3686	0.4196	0.4205	0.4212	0.4195	0.4153	----	0.418	6.56	1.00	1.00	6.0	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dichlorophenol	1	0	Avg	0.2776	0.2845	0.2332	0.2767	0.2880	0.2936	0.2947	0.2958	0.2724	0.280	6.64	1.00	1.00	7.0	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.3019	0.3601	0.2675	0.3055	0.3116	0.3169	0.3160	0.3149	----	0.312	6.71	1.00	1.00	8.1	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Naphthalene	1	0	Avg	1.0377	1.1829	0.8976	1.0574	1.0617	1.0503	1.0371	1.0096	1.2649	1.07	6.77	0.999	1.00	9.8	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3966	0.3224	0.3214	0.4134	0.3970	0.3669	0.3347	0.3101	0.3085	0.353	6.80	0.990	0.998	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1545	0.1790	0.1353	0.1563	0.1583	0.1614	0.1597	0.1604	----	0.158	6.87	1.00	1.00	7.5	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Caprolactam	1	0	Avg	0.1138	0.0993	0.0963	0.1139	0.1210	0.1238	0.1255	0.1365	----	0.116	7.07	0.996	0.999	12	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloro-3-methylphenol	1	0	Avg	0.2705	0.2910	0.2336	0.2725	0.2866	0.2895	0.2922	0.2930	----	0.279	7.17	1.00	1.00	7.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2-Methylnaphthalene	1																									

Flags
a - failed the min rf criteria
c - failed the minimum correlation coefficient criteria (if applicable)

Note:
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Instrument: GCMS_7

Data File: Cal Identifier: Analysis Date/Time										Data File: Cal Identifier: Analysis Date/Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Compound	Hexachlorocyclopenta	2,4,6-Trichlorophenol	2,4,5-Trichlorophenol	2-Fluorobiphenyl	2-Chloronaphthalene	1,4-Dimethylnaphthalene	Dimethylnaphthalenes	Diphenyl Ether	2-Nitroaniline	Coumarin	Acenaphthylene	Dimethylbthalate	2,6-Dinitrotoluene	Acenaphthene	3-Nitroaniline	2,4-Dinitrophenol	Dibenzofuran	2,4-Dinitrotoluene	4-Nitrophenol	2,3,4,6-Tetrachlorophe	Fluorene	4-Chlorophenyl-phenyl	Diethylbthalate	4-Nitroaniline	Atrazine	4,6-Dinitro-2-methylph	n-Nitrosodiphenylamin	2,4,6-Tribromophenol	1,2-Diphenylhydrazine	4-Bromophenyl-phenyl	Hexachlorobenzene	N-Octadecane	Pentachlorophenol	Phenanthrene	Anthracene	Carbazole	Di-n-butylbthalate	Fluoranthene	Pyrene	Benidine	Terphenyl-d14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

Flags

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Note:

Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																			
1	7M95177.D	CAL BNA@50PPM	10/08/18 16:13	2	7M95175.D	CAL BNA@2PPM	10/08/18 15:27	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9											
3	7M95169.D	CAL BNA@10PPM	10/08/18 13:05	4	7M95174.D	CAL BNA@20PPM	10/08/18 15:03	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
5	7M95173.D	CAL BNA@80PPM	10/08/18 14:40	6	7M95172.D	CAL BNA@120PPM	10/08/18 14:16	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
7	7M95171.D	CAL BNA@160PPM	10/08/18 13:53	8	7M95170.D	CAL BNA@196PPM	10/08/18 13:29	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
9	7M95176.D	CAL BNA@0.5PPM	10/08/18 15:50					50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0												
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8	LV9	
4,4'-DDE	1	0	Avg	0.2340	0.2542	0.1951	0.2291	0.2450	0.2496	0.2537	0.2571	----	0.240	11.35	0.999	1.00	8.6	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
4,4'-DDD	1	0	Avg	0.3980	0.3964	0.3285	0.3932	0.4249	0.4332	0.4418	0.4469	----	0.408	11.75	0.998	0.999	9.4	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0		
Butylbenzylphthalate	1	0	Qua	0.5024	0.4324	0.4348	0.4871	0.5433	0.5551	0.5581	0.5608	----	0.509	12.00	1.00	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Qua	0.2937	----	0.1946	0.2496	0.3381	0.3555	0.3604	0.3702	----	0.309	12.10	0.998	0.999	21	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3338	0.2373	0.2798	0.3422	0.3514	0.3325	0.3247	0.3248	----	0.316	12.61	0.999	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthracene	1	0	Avg	1.0642	1.2050	0.9376	1.0668	1.1231	1.1287	1.1357	1.1410	----	1.10	12.63	1.00	1.00	7.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9916	1.0527	0.8673	1.0014	1.0392	1.0569	1.0505	1.0459	----	1.01	12.68	1.00	1.00	6.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6840	0.5790	0.5824	0.6487	0.7450	0.7529	0.7508	0.7574	----	0.688	12.71	1.00	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2965	0.9298	1.0326	1.2104	1.4208	1.4801	1.4701	1.4540	----	1.29	13.46	0.999	0.999	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Qua	1.1258	1.0867	0.9346	1.0683	1.2193	1.2557	1.2075	1.2714	----	1.15	13.86	0.998	0.999	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.1389	1.0704	0.8837	1.1185	1.1216	1.1457	1.1945	1.1343	----	1.10	13.89	0.999	0.999	8.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	1.0983	1.0051	0.8668	1.0234	1.1416	1.1679	1.1814	1.1350	----	1.08	14.21	1.00	1.00	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1504	1.0578	0.9153	1.0934	1.2048	1.2696	1.2854	1.3019	----	1.16	15.54	0.998	0.999	12	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofluoranthracen	1	0	Avg	0.9529	0.8842	0.7667	0.9094	1.0071	1.0586	1.0674	1.0798	----	0.966	15.56	0.999	1.00	11	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzofluoranthene	1	0	Avg	0.9508	0.9261	0.7800	0.9221	1.0008	1.0524	1.0567	1.0883	----	0.972	15.89	0.999	1.00	10	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Avg Rsd: 9.492

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

SampleID : CAL_BNA@50PPM
Data File: 7M95177.D
Acq On : 10/ 8/18 16:13

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 16:28
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	79420	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	134473	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	495463	40.00	ng	0.00
50) Acenaphthene-d10	8.173	164	286738	40.00	ng	-0.01
77) Phenanthrene-d10	9.615	188	488913	40.00	ng	0.00
91) Chrysene-d12	12.649	240	483764	40.00	ng	0.00
103) Perylene-d12	14.273	264	413657	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	207033	45.33	ng	0.00
Spiked Amount 100.000			Recovery =	45.33%		
16) Phenol-d5	5.432	99	298883	43.64	ng	0.00
Spiked Amount 100.000			Recovery =	43.64%		
32) Nitrobenzene-d5	6.196	128	37994	23.21	ng	0.00
Spiked Amount 50.000			Recovery =	46.42%		
55) 2-Fluorobiphenyl	7.590	172	219549	24.59	ng	-0.01
Spiked Amount 50.000			Recovery =	49.18%		
80) 2,4,6-Tribromophenol	8.899	330	54891	56.71	ng	-0.01
Spiked Amount 100.000			Recovery =	56.71%		
94) Terphenyl-d14	11.410	244	198434	24.19	ng	0.00
Spiked Amount 50.000			Recovery =	48.38%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	91256	48.6272	ng	90
9) Pyridine	2.969	79	242967	42.1344	ng	61
10) N-Nitrosodimethylamine	2.905	74	138339	37.6880	ng	66
12) Benzaldehyde	5.368	77	114062	33.6387	ng	75
13) Aniline	5.464	93	299396m	39.8339	ng	
14) Pentachloroethane	5.507	117	70755	44.6781	ng	83
15) bis(2-Chloroethyl)ether	5.523	93	214983	44.0056	ng	74
17) Phenol	5.443	94	296527	38.2752	ng	76
18) 2-Chlorophenol	5.566	128	220023	43.3991	ng	77
19) N-Decane	5.630	57	189977	30.4874	ng	84
20) 1,3-Dichlorobenzene	5.699	146	234499	41.9303	ng	98
22) 1,4-Dichlorobenzene	5.763	146	239369	43.9189	ng	97
23) 1,2-Dichlorobenzene	5.886	146	225698	43.2386	ng	96
24) Benzyl alcohol	5.859	108	142893	53.8573	ng	67
25) bis(2-chloroisopropyl)...	5.977	45	220608	25.9200	ng	94
26) 2-Methylphenol	5.950	108	194430	43.3181	ng	97
27) Acetophenone	6.078	105	294282	41.3861	ng	67
28) Hexachloroethane	6.169	117	87454	38.0853	ng	86
29) N-Nitroso-di-n-propyla...	6.078	70	139429	29.5337	ng	89
30) 3&4-Methylphenol	6.078	108	205076	39.2268	ng	98
33) Nitrobenzene	6.212	77	203326	30.2184	ng	72
34) Isophorone	6.399	82	375852	32.6591	ng	85
35) 2-Nitrophenol	6.463	139	106843	39.6116	ng	79
36) 2,4-Dimethylphenol	6.490	107	203044	37.3950	ng	87
37) Benzoic Acid	6.565	105	204339	50.4268	ng	43
38) bis(2-Chloroethoxy)met...	6.565	93	257422	38.7396	ng	96
39) 2,4-Dichlorophenol	6.645	162	171962	43.2826	ng	87
40) 1,2,4-Trichlorobenzene	6.714	180	187013	40.5980	ng	98
41) Naphthalene	6.773	128	642691	45.8550	ng	99
42) 4-Chloroaniline	6.805	127	246877m	51.1016	ng	
43) Hexachlorobutadiene	6.869	225	95716	35.7807	ng	96
44) Caprolactam	7.067	113	70501	43.8466	ng	58
45) 4-Chloro-3-methylphenol	7.168	107	167571	35.0828	ng	73
46) 2-Methylnaphthalene	7.302	142	431855	42.6034	ng	99
47) 1-Methylnaphthalene	7.382	142	412833	42.3776	ng	91
48) Methylnaphthalenes (To...	7.382	142	844995m	84.9619	ng	
49) 1,1'-Biphenyl	7.676	154	493540	40.8329	ng	93
51) 1,2,4,5-Tetrachloroben...	7.435	216	184622	45.3333	ng	98
52) Hexachlorocyclopentadiene	7.430	237	86283	58.1151	ng	100
53) 2,4,6-Trichlorophenol	7.521	196	117733m	42.8749	ng	
54) 2,4,5-Trichlorophenol	7.553	196	125203	42.6593	ng	99
56) 2-Chloronaphthalene	7.697	162	381729	44.1725	ng	89
57) 1,4-Dimethylnaphthalene	7.975	156	336709	52.6922	ng	86
58) Dimethylnaphthalenes (...)	7.975	156	336709	52.6922	ng	86
59) Diphenyl Ether	7.761	170	281232	46.4680	ng	76
60) 2-Nitroaniline	7.767	65	116388	28.5465	ng	48
61) Coumarin	7.948	146	157315	46.8207	ng	84
62) Acenaphthylene	8.050	152	567690	46.5784	ng	98
63) Dimethylphthalate	7.916	163	413168	40.6331	ng	98
64) 2,6-Dinitrotoluene	7.970	165	94526	41.8198	ng	59
65) Acenaphthene	8.199	153	391790	45.3439	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95177.D Sam Mult : 1 Vial# : 10 Qt On : 10/08/18 16:28
 Acq On : 10/ 8/18 16:13 Misc : A,BNA Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.114	138	107344	49.0007	ng	74
67) 2,4-Dinitrophenol	8.205	184	34202	27.6422	ng	56
68) Dibenzofuran	8.354	168	533718	45.0039	ng	84
69) 2,4-Dinitrotoluene	8.322	165	122630	39.0033	ng	58
70) 4-Nitrophenol	8.237	65	71415	28.8366	ng	85
71) 2,3,4,6-Tetrachlorophenol	8.456	232	104208	41.1236	ng	84
72) Fluorene	8.669	166	440724	43.2342	ng	100
73) 4-Chlorophenyl-phenyle...	8.664	204	200072	40.7141	ng	84
74) Diethylphthalate	8.547	149	419755	41.4422	ng	96
75) 4-Nitroaniline	8.669	138	120518	45.6404	ng	67
76) Atrazine	9.300	200	126241	42.1613	ng	95
78) 4,6-Dinitro-2-methylph...	8.701	198	48249	31.1469	ng	69
79) n-Nitrosodiphenylamine	8.771	169	380175	44.2427	ng	99
81) 1,2-Diphenylhydrazine	8.814	77	432030	36.5939	ng	85
82) 4-Bromophenyl-phenylether	9.145	248	114249	41.2681	ng	85
83) Hexachlorobenzene	9.214	284	117738	43.7251	ng	69
84) N-Octadecane	9.497	57	233961	29.7075	ng	66
85) Pentachlorophenol	9.407	266	69369	43.7770	ng	97
86) Phenanthrene	9.642	178	651080	43.8552	ng	99
87) Anthracene	9.695	178	671550	43.8706	ng	99
88) Carbazole	9.855	167	601318	43.4630	ng	97
89) Di-n-butylphthalate	10.251	149	714929	39.9045	ng	97
90) Fluoranthene	10.961	202	673087	40.9285	ng	92
92) Pyrene	11.218	202	684987	42.9959	ng	93
93) Benzidine	11.111	184	214188	38.2008	ng	87
95) 4,4'-DDE	11.351	246	141506	47.1720	ng	95
96) 4,4'-DDD	11.747	235	240700	47.1382	ng	96
97) Butylbenzylphthalate	12.003	149	303851	40.1649	ng	75
98) 4,4'-DDT	12.104	235	177614	40.6430	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	201859	46.7367	ng	96
100) Benzo[a]anthracene	12.633	228	643545	43.9109	ng	99
101) Chrysene	12.676	228	599672	43.4671	ng	99
102) bis(2-Ethylhexyl)phtha...	12.713	149	413643	41.4502	ng	94
104) Di-n-octylphthalate	13.461	149	670427	38.4609	ng	100
105) Benzo[b]fluoranthene	13.862	252	582139m	42.7154	ng	
106) Benzo[k]fluoranthene	13.894	252	588897m	44.6607	ng	
107) Benzo[a]pyrene	14.215	252	567904	43.9305	ng	95
108) Indeno[1,2,3-cd]pyrene	15.540	276	594866	46.3525	ng	87
109) Dibenzo[a,h]anthracene	15.561	278	492754	51.8691	ng	94
110) Benzo[g,h,i]perylene	15.892	276	491669	45.9875	ng	80

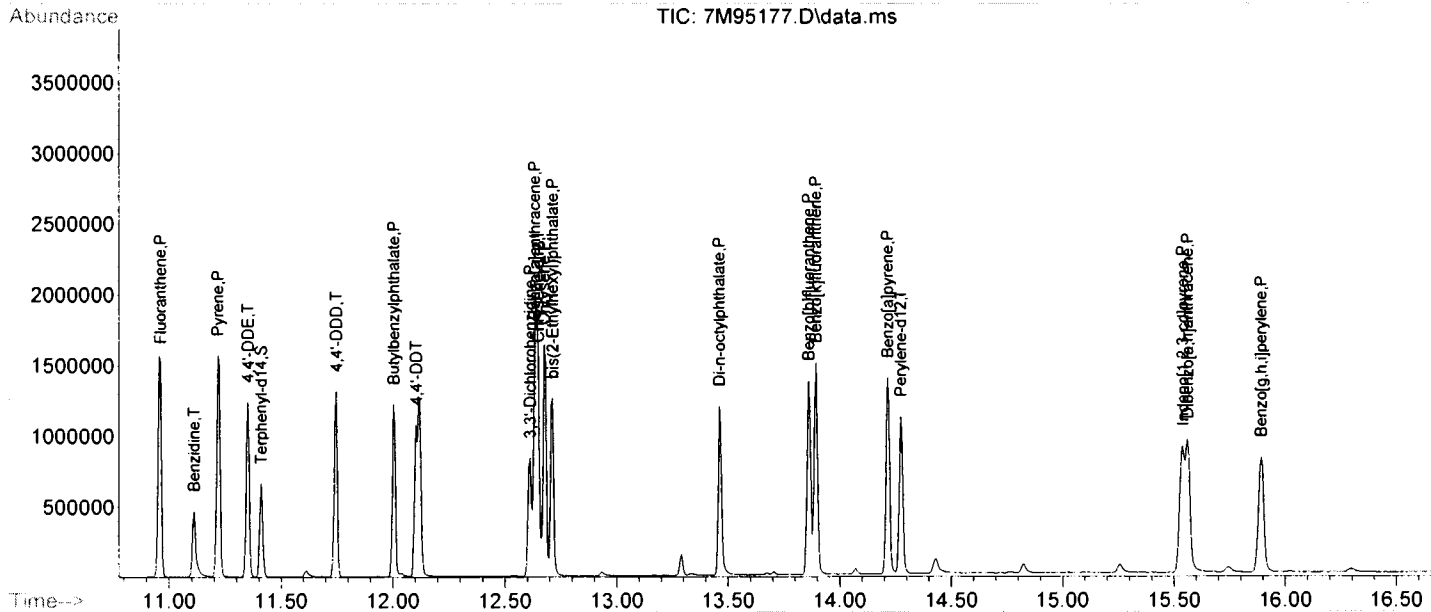
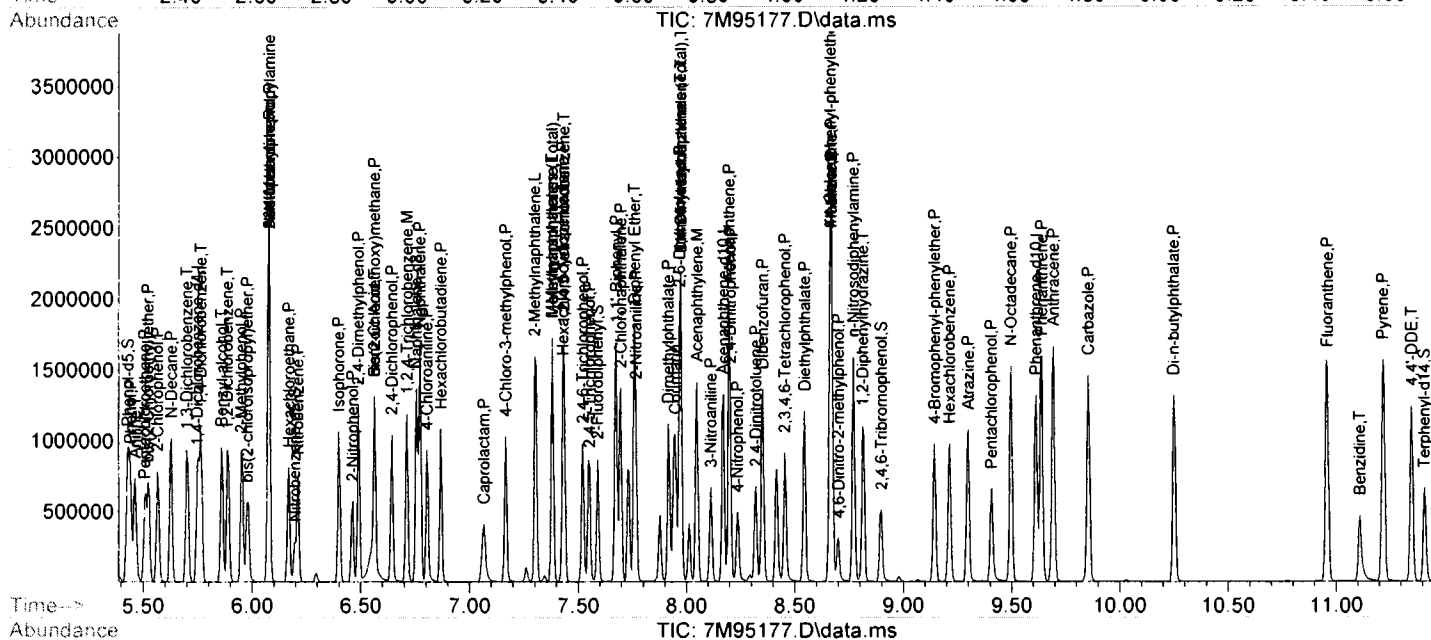
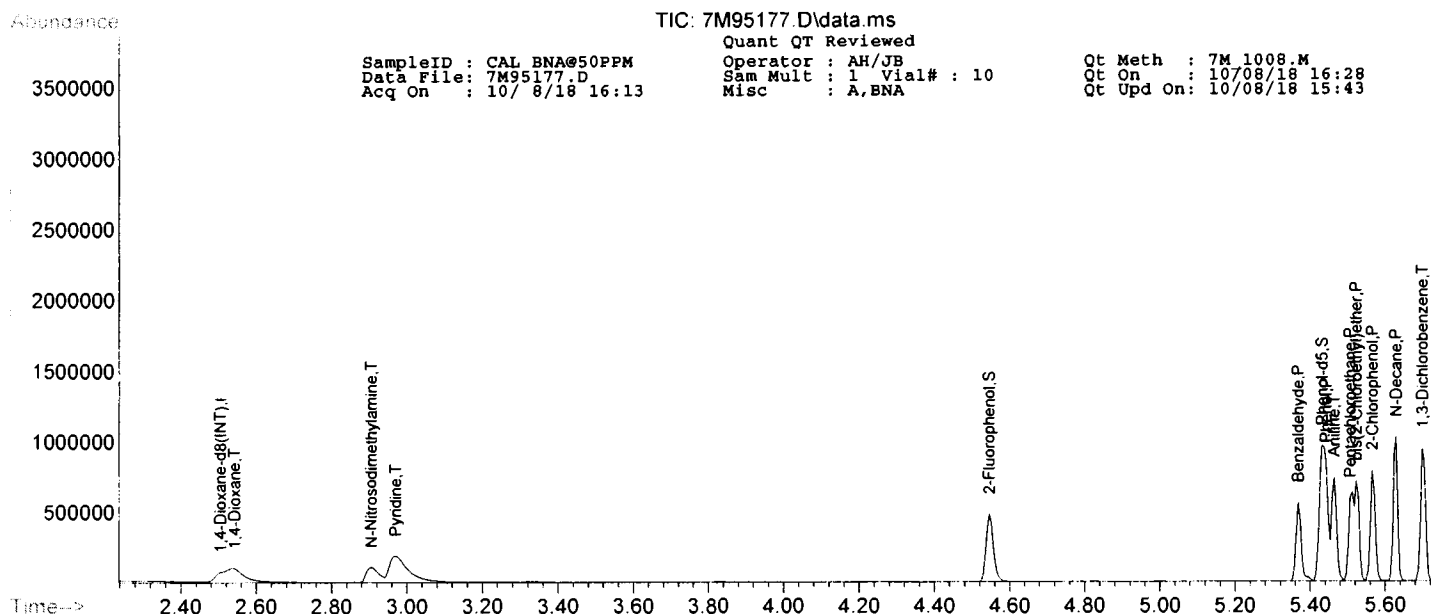
(#) = qualifier out of range (m) = manual integration (+) = signals summed

TIC: 7M95177.D\data.ms

SampleID : CAL BNA@50PPM
Data File: 7M95177.D
Acq On : 10/ 8/18 16:13

Quant QT Reviewed
Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A, BNA

```
Qt Meth   : 7M 1008.M
Qt On      : 10/08/18 16:28
Qt Upd On : 10/08/18 15:43
```



SampleID : CAL BNA@2PPM
Data File: 7M95175.D
Acq On : 10/ 8/18 15:27

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:45
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	82999	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	140993	40.00	ng	0.00
31) Naphthalene-d8	6.762	136	521955	40.00	ng	0.00
50) Acenaphthene-d10	8.178	164	299110	40.00	ng	0.00
77) Phenanthrene-d10	9.620	188	516763	40.00	ng	0.00
91) Chrysene-d12	12.644	240	500060	40.00	ng	0.00
103) Perylene-d12	14.252	264	434960	40.00	ng	0.00

System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	9779m	2.05	ng	0.00
Spiked Amount 100.000			Recovery	=	2.05%	
16) Phenol-d5	5.426	99	13574	1.90	ng	0.00
Spiked Amount 100.000			Recovery	=	1.90%	
32) Nitrobenzene-d5	6.196	128	1648	0.96	ng	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
55) 2-Fluorobiphenyl	7.601	172	10786	1.16	ng	0.00
Spiked Amount 50.000			Recovery	=	2.32%	
80) 2,4,6-Tribromophenol	8.904	330	1739	2.07	ng	0.00
Spiked Amount 100.000			Recovery	=	2.07%	
94) Terphenyl-d14	11.410	244	8691	1.02	ng	0.00
Spiked Amount 50.000			Recovery	=	2.04%	

Target Compounds						Qvalue
8) 1,4-Dioxane	2.547	88	4907m	2.5830	ng	
9) Pyridine	2.990	79	12363	2.1228	ng	53
10) N-Nitrosodimethylamine	2.916	74	6725	1.7531	ng	65
12) Benzaldehyde	5.368	77	5068	1.3822	ng	73
13) Aniline	5.464	93	10184	1.2965	ng	92
14) Pentachloroethane	5.507	117	3403	2.1384	ng	77
15) bis(2-Chloroethyl)ether	5.523	93	10596	2.1794	ng	71
17) Phenol	5.437	94	14239	1.7587	ng	78
18) 2-Chlorophenol	5.565	128	10365	1.9563	ng	73
19) N-Decane	5.624	57	9977	1.5409	ng	88
20) 1,3-Dichlorobenzene	5.699	146	11667	1.9962	ng	90
22) 1,4-Dichlorobenzene	5.763	146	11891	2.0808	ng	98
23) 1,2-Dichlorobenzene	5.886	146	11236	2.0530	ng	98
24) Benzyl alcohol	5.859	108	6891	2.7402	ng	63
25) bis(2-chloroisopropyl)...	5.977	45	11229	1.2583	ng	93
26) 2-Methylphenol	5.950	108	9036	2.0392	ng	99
27) Acetophenone	6.073	105	14796	1.9846	ng	75
28) Hexachloroethane	6.169	117	4113	1.7083	ng	84
29) N-Nitroso-di-n-propyla...	6.078	70	7259	1.4161	ng	89
30) 3&4-Methylphenol	6.073	108	9523	1.7373	ng	96
33) Nitrobenzene	6.206	77	9873	1.3929	ng	83
34) Isophorone	6.399	82	17430	1.4377	ng	84
35) 2-Nitrophenol	6.463	139	4288	1.5091	ng	81
36) 2,4-Dimethylphenol	6.490	107	9386	1.6607	ng	92
37) Benzoic Acid	6.516	105	4768	1.1938	ng	40
38) bis(2-Chloroethoxy)met...	6.564	93	12070	1.7242	ng	97
39) 2,4-Dichlorophenol	6.645	162	7427	1.8502	ng	90
40) 1,2,4-Trichlorobenzene	6.714	180	9398	1.9366	ng	96
41) Naphthalene	6.778	128	30872	2.1842	ng	99
42) 4-Chloroaniline	6.810	127	8415	1.6534	ng	95
43) Hexachlorobutadiene	6.874	225	4672	1.6578	ng	95
44) Caprolactam	7.045	113	2593	1.5308	ng	65
45) 4-Chloro-3-methylphenol	7.168	107	7595	1.5094	ng	84
46) 2-Methylnaphthalene	7.312	142	20637	1.9326	ng	98
47) 1-Methylnaphthalene	7.392	142	20337	1.9816	ng	91
48) Methylnaphthalenes (To...	7.312	142	41029m	3.9160	ng	
49) 1,1'-Biphenyl	7.681	154	24292	1.9078	ng	96
51) 1,2,4,5-Tetrachloroben...	7.441	216	9230	2.1726	ng	96
52) Hexachlorocyclopentadiene	7.441	237	2871	2.3093	ng	96
53) 2,4,6-Trichlorophenol	7.526	196	5664	1.9773	ng	97
54) 2,4,5-Trichlorophenol	7.553	196	5112	1.6697	ng	98
56) 2-Chloronaphthalene	7.702	162	18561	2.0590	ng	90
57) 1,4-Dimethylnaphthalene	7.980	156	17040	2.5563	ng	85
58) Dimethylnaphthalenes (...)	7.980	156	17040	2.5563	ng	85
59) Diphenyl Ether	7.766	170	13961	2.2114	ng	81
60) 2-Nitroaniline	7.772	65	4948	1.1634	ng	71
61) Coumarin	7.953	146	7458	2.1279	ng	91
62) Acenaphthylene	8.055	152	27348	2.1511	ng	99
63) Dimethylphthalate	7.921	163	20185	1.9030	ng	96
64) 2,6-Dinitrotoluene	7.975	165	3727	1.5807	ng	65
65) Acenaphthene	8.204	153	18845	2.0908	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File : 7M95175.D Sam Mult : 1 Vial# : 8 Qt On : 10/08/18 15:45
 Acq On : 10/ 8/18 15:27 Misc : A,BNA Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.119	138	3828	1.6751	ng	74
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.359	168	26456	2.1666	ng	86
69) 2,4-Dinitrotoluene	8.327	165	3757	1.1455	ng	62
70) 4-Nitrophenol	8.242	65	2078	0.8044	ng	99
71) 2,3,4,6-Tetrachlorophenol	8.466	232	4265	1.6135	ng	86
72) Fluorene	8.680	166	20910	1.9664	ng	100
73) 4-Chlorophenyl-phenyle...	8.675	204	9338	1.8217	ng	82
74) Diethylphthalate	8.552	149	19096	1.8074	ng	95
75) 4-Nitroaniline	8.669	138	3976	1.4434	ng	80
76) Atrazine	9.300	200	5195	1.6632	ng	95
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D. d		
79) n-Nitrosodiphenylamine	8.776	169	16706	1.8394	ng	100
81) 1,2-Diphenylhydrazine	8.824	77	20705	1.6592	ng	81
82) 4-Bromophenyl-phenylether	9.150	248	5662	1.9350	ng	80
83) Hexachlorobenzene	9.219	284	5574	1.9585	ng	71
84) N-Octadecane	9.503	57	11270	1.3539	ng	67
85) Pentachlorophenol	0.000		0	N.D. d		
86) Phenanthrene	9.642	178	31508	2.0079	ng	99
87) Anthracene	9.695	178	29620	1.8307	ng	97
88) Carbazole	9.861	167	27209	1.8607	ng	97
89) Di-n-butylphthalate	10.256	149	28117	1.4848	ng	97
90) Fluoranthene	10.961	202	30466	1.7527	ng	97
92) Pyrene	11.223	202	30783	1.8692	ng	89
93) Benzidine	11.111	184	3798	0.6284	ng	88
95) 4,4'-DDE	11.351	246	6356	2.0498	ng	95
96) 4,4'-DDD	11.746	235	9912	1.8779	ng	95
97) Butylbenzylphthalate	12.008	149	10812	1.3826	ng	68
98) 4,4'-DDT	12.104	235	3868	0.8563	ng	95
99) 3,3'-Dichlorobenzidine	12.612	252	5935	1.2571	ng	99
100) Benzo[a]anthracene	12.633	228	30129	1.9888	ng	99
101) Chrysene	12.676	228	26321	1.8457	ng	98
102) bis(2-Ethylhexyl)phtha...	12.713	149	14479	1.4036	ng	94
104) Di-n-octylphthalate	13.456	149	20222	1.1033	ng	97
105) Benzo[b]fluoranthene	13.846	252	23634	1.6492	ng	95
106) Benzo[k]fluoranthene	13.878	252	23280	1.6790	ng	93
107) Benzo[a]pyrene	14.193	252	21859	1.6081	ng	94
108) Indeno[1,2,3-cd]pyrene	15.507	276	23007	1.7049	ng	93
109) Dibenzo[a,h]anthracene	15.529	278	19231	2.1975	ng	92
110) Benzo[g,h,i]perylene	15.855	276	20141	1.7916	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

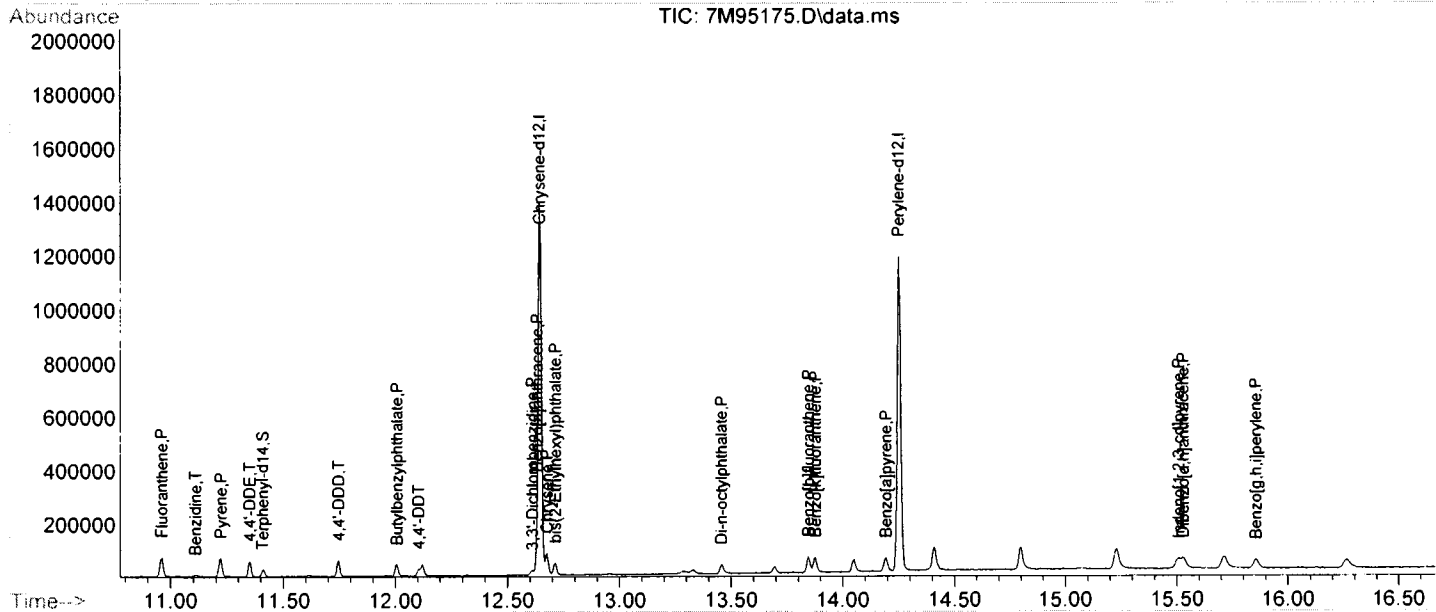
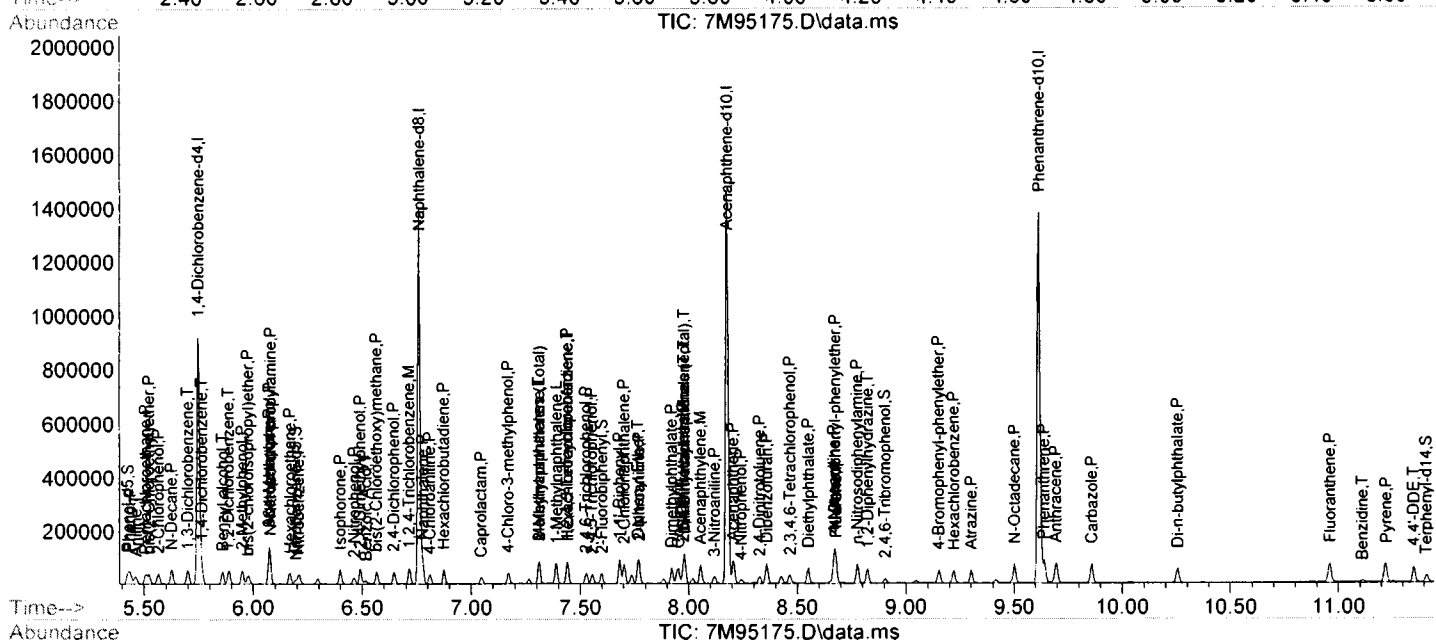
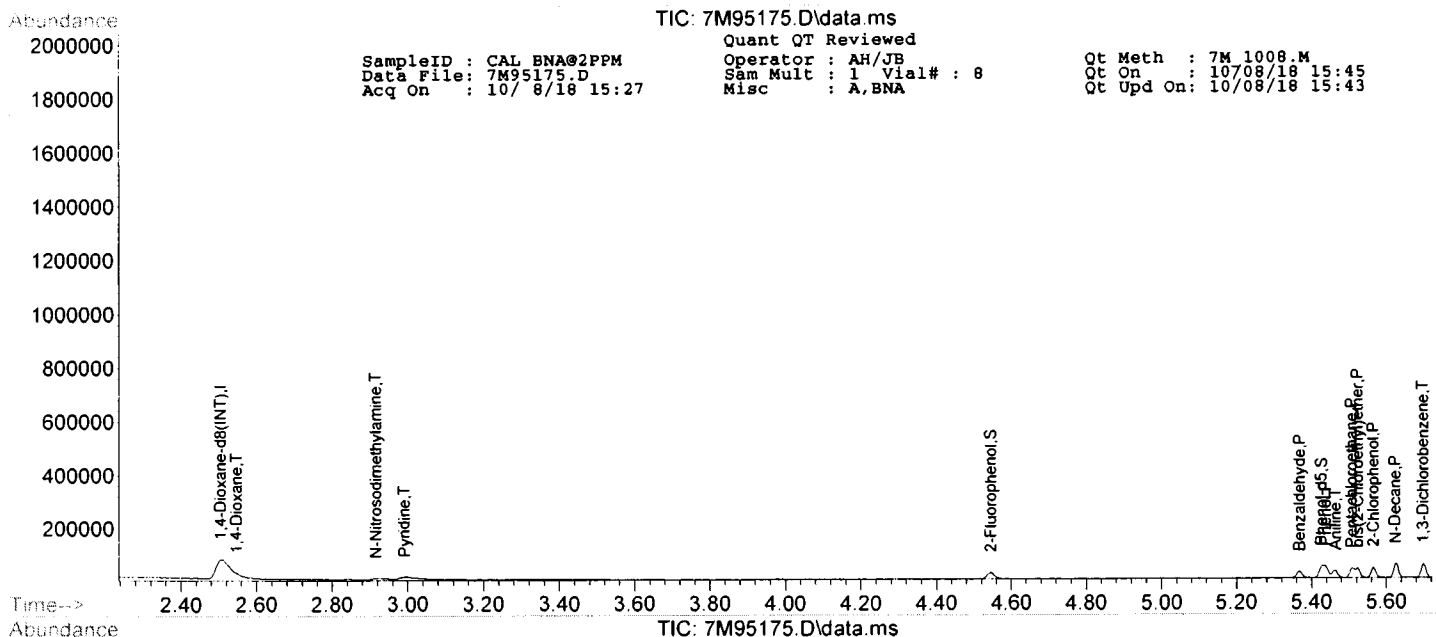
TIC: 7M95175.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@2PPM
Data File: 7M95175.D
Acq On : 10/ 8/18 15:27

Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA

```
Qt Meth   : 7M 1008.M
Qt On     : 10/08/18 15:45
Qt Upd On: 10/08/18 15:43
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SampleID : CAL_BNA@10PPM
Data File: 7M95169.D
Acq On : 10/ 8/18 13:05

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 13:23
Qt Upd On: 10/08/18 12:13

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	80619	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	137139	40.00	ng	0.00
31) Naphthalene-d8	6.773	136	504127	40.00	ng	-0.02
50) Acenaphthene-d10	8.204	164	290829	40.00	ng	-0.03
77) Phenanthrene-d10	9.642	188	495869	40.00	ng	-0.02
91) Chrysene-d12	12.655	240	480420	40.00	ng	-0.02
103) Perylene-d12	14.279	264	431710	40.00	ng	-0.05
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	37178	8.02	ng	0.00
Spiked Amount 100.000			Recovery	=	8.02%	
16) Phenol-d5	5.426	99	53308	7.67	ng	-0.01
Spiked Amount 100.000			Recovery	=	7.67%	
32) Nitrobenzene-d5	6.196	128	6742	4.05	ng	-0.01
Spiked Amount 50.000			Recovery	=	8.10%	
55) 2-Fluorobiphenyl	7.627	172	39318	4.34	ng	-0.02
Spiked Amount 50.000			Recovery	=	8.68%	
80) 2,4,6-Tribromophenol	8.931	330	8670	10.40	ng	-0.03
Spiked Amount 100.000			Recovery	=	10.40%	
94) Terphenyl-d14	11.420	244	34071	4.18	ng	-0.01
Spiked Amount 50.000			Recovery	=	8.36%	
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.547	88	18536	9.9931	ng	81
9) Pyridine	2.980	79	43473	7.6484	ng	61
10) N-Nitrosodimethylamine	2.910	74	26041	6.9889	ng	68
12) Benzaldehyde	5.368	77	25638	7.2430	ng	72
13) Aniline	5.464	93	50534	6.6234	ng	81
14) Pentachloroethane	5.507	117	12838	8.2578	ng	85
15) bis(2-Chloroethyl)ether	5.523	93	39648	8.3341	ng	75
17) Phenol	5.437	94	53746	6.8343	ng	78
18) 2-Chlorophenol	5.565	128	38899	7.5586	ng	75
19) N-Decane	5.629	57	35839	5.6939	ng	88
20) 1,3-Dichlorobenzene	5.699	146	42634	7.5099	ng	98
22) 1,4-Dichlorobenzene	5.763	146	42824	7.7045	ng	98
23) 1,2-Dichlorobenzene	5.891	146	40122	7.5370	ng	99
24) Benzyl alcohol	5.859	108	25434	10.2386	ng	69
25) bis(2-chloroisopropyl)...	5.977	45	40478	4.6634	ng	95
26) 2-Methylphenol	5.950	108	35089	8.0683	ng	94
27) Acetophenone	6.078	105	54578	7.5263	ng	69
28) Hexachloroethane	6.169	117	15414	6.5821	ng	85
29) N-Nitroso-di-n-propyla...	6.078	70	26196	5.2788	ng	85
30) 3,4-Methylphenol	6.078	108	36629	6.8702	ng	97
33) Nitrobenzene	6.212	77	35564	5.1947	ng	79
34) Isophorone	6.404	82	68441	5.8449	ng	87
35) 2-Nitrophenol	6.468	139	17658	6.4341	ng	81
36) 2,4-Dimethylphenol	6.500	107	35804	6.5482	ng	83
37) Benzoic Acid	6.532	105	24698	6.3568	ng	41
38) bis(2-Chloroethoxy)met...	6.575	93	46462	6.8719	ng	97
39) 2,4-Dichlorophenol	6.655	162	29269	7.5056	ng	88
40) 1,2,4-Trichlorobenzene	6.730	180	33719	7.1941	ng	96
41) Naphthalene	6.789	128	113126	8.2358	ng	99
42) 4-Chloroaniline	6.826	127	40516m	8.2424	ng	
43) Hexachlorobutadiene	6.890	225	17062	6.2685	ng	95
44) Caprolactam	7.072	113	12143m	7.4223	ng	
45) 4-Chloro-3-methylphenol	7.195	107	29319	6.0328	ng	70
46) 2-Methylnaphthalene	7.334	142	75262	7.2971	ng	98
47) 1-Methylnaphthalene	7.414	142	73580	7.4232	ng	91
48) Methylnaphthalenes (To...	7.334	142	148958m	14.7199	ng	
49) 1,1'-Biphenyl	7.708	154	90256	7.3390	ng	96
51) 1,2,4,5-Tetrachloroben...	7.467	216	33284	8.0578	ng	95
52) Hexachlorocyclopentadiene	7.462	237	13211	10.5462	ng	92
53) 2,4,6-Trichlorophenol	7.553	196	19974	7.1716	ng	99
54) 2,4,5-Trichlorophenol	7.579	196	21112	7.0921	ng	99
56) 2-Chloronaphthalene	7.729	162	70098	7.9974	ng	92
57) 1,4-Dimethylnaphthalene	8.012	156	61589	9.5026	ng	84
58) Dimethylnaphthalenes (...)	8.012	156	61589	9.5026	ng	84
59) Diphenyl Ether	7.798	170	50925	8.2960	ng	76
60) 2-Nitroaniline	7.798	65	20381	4.9285	ng	71
61) Coumarin	7.980	146	29233	8.5781	ng	84
62) Acenaphthylene	8.082	152	101017	8.1718	ng	99
63) Dimethylphthalate	7.953	163	73965	7.1718	ng	98
64) 2,6-Dinitrotoluene	8.001	165	15882	6.9276	ng	65
65) Acenaphthene	8.236	153	69587	7.9404	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95169.D Sam Mult : 1 Vial# : 2 Qt On : 10/08/18 13:23
 Acq On : 10/ 8/18 13:05 Misc : A,BNA Qt Upd On: 10/08/18 12:13

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.146	138	17359	7.8126	ng	80
67) 2,4-Dinitrophenol	8.236	184	3419	2.8236	ng	43
68) Dibenzofuran	8.386	168	95780	8.0528	ng	85
69) 2,4-Dinitrotoluene	8.354	165	18202	5.7078	ng	64
70) 4-Nitrophenol	8.274	65	10981	4.3716	ng	93
71) 2,3,4,6-Tetrachlorophenol	8.493	232	16885	6.5696	ng	84
72) Fluorene	8.707	166	79042	7.6448	ng	99
73) 4-Chlorophenyl-phenyle...	8.701	204	35941	7.2110	ng	81
74) Diethylphthalate	8.578	149	75473	7.3466	ng	98
75) 4-Nitroaniline	8.696	138	19336	7.2196	ng	73
76) Atrazine	9.326	200	21578m	7.1051	ng	
78) 4,6-Dinitro-2-methylph...	8.733	198	4959	3.3279	ng	57
79) n-Nitrosodiphenylamine	8.803	169	65757	7.5451	ng	99
81) 1,2-Diphenylhydrazine	8.851	77	76130	6.3579	ng	79
82) 4-Bromophenyl-phenylether	9.177	248	19989	7.1190	ng	86
83) Hexachlorobenzene	9.246	284	20829	7.6269	ng	64
84) N-Octadecane	9.524	57	42610	5.3346	ng	72
85) Pentachlorophenol	9.433	266	10077	6.7058	ng	93
86) Phenanthrene	9.663	178	115332m	7.6595	ng	
87) Anthracene	9.716	178	117735	7.5834	ng	99
88) Carbazole	9.877	167	106611	7.5977	ng	98
89) Di-n-butylphthalate	10.272	149	121483	6.6856	ng	97
90) Fluoranthene	10.972	202	116270	6.9709	ng	95
92) Pyrene	11.233	202	119006	7.5219	ng	90
93) Benzidine	11.121	184	37967	6.5816	ng	87
95) 4,4'-DDE	11.362	246	23434	7.8663	ng	94
96) 4,4'-DDD	11.752	235	39456	7.7808	ng	94
97) Butylbenzylphthalate	12.008	149	52231	6.9523	ng	75
98) 4,4'-DDT	12.110	235	23383	5.3879	ng	93
99) 3,3'-Dichlorobenzidine	12.617	252	33611	7.4655	ng	97
100) Benzo[a]anthracene	12.639	228	112618	7.7377	ng	100
101) Chrysene	12.681	228	104171	7.6034	ng	98
102) bis(2-Ethylhexyl)phtha...	12.719	149	69951	7.0584	ng	95
104) Di-n-octylphthalate	13.472	149	111447	6.1261	ng	99
105) Benzo[b]fluoranthene	13.867	252	100877	7.0925	ng	96
106) Benzo[k]fluoranthene	13.899	252	95379	6.9309	ng	93
107) Benzo[a]pyrene	14.220	252	93552	6.9341	ng	93
108) Indeno[1,2,3-cd]pyrene	15.534	276	98792	7.3761	ng	85
109) Dibenzo[a,h]anthracene	15.561	278	82751	9.3371	ng	94
110) Benzo[g,h,i]perylene	15.887	276	84185	7.5448	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

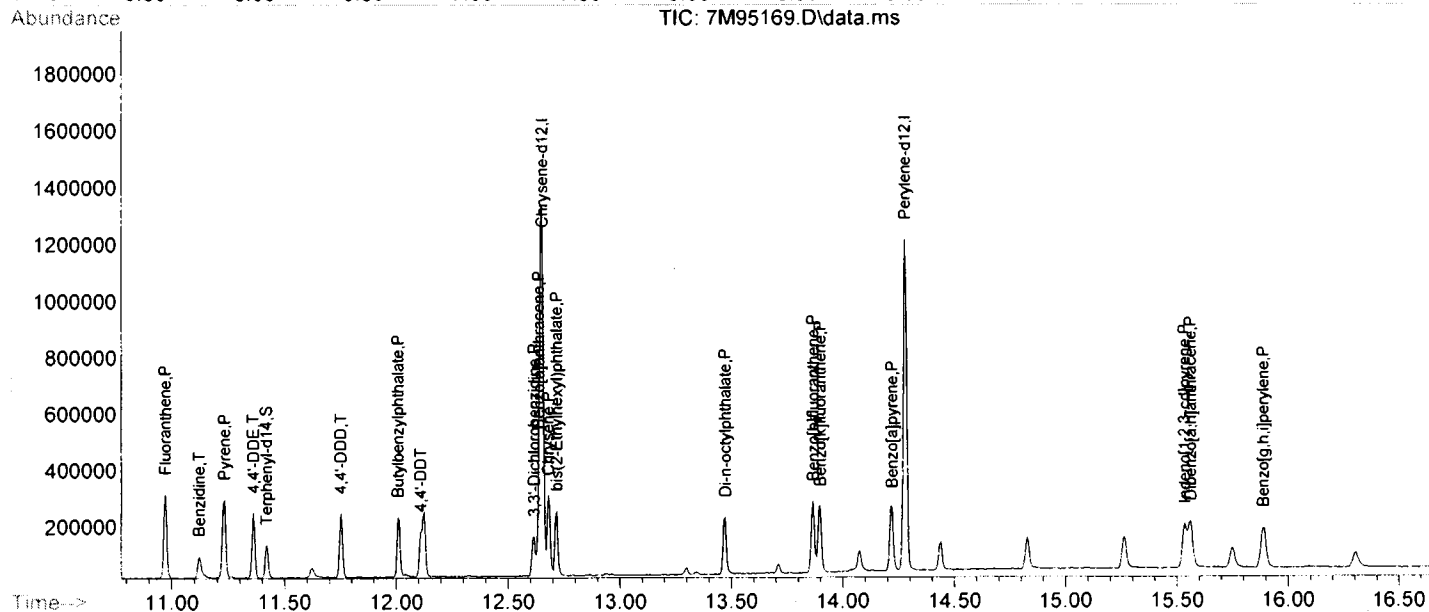
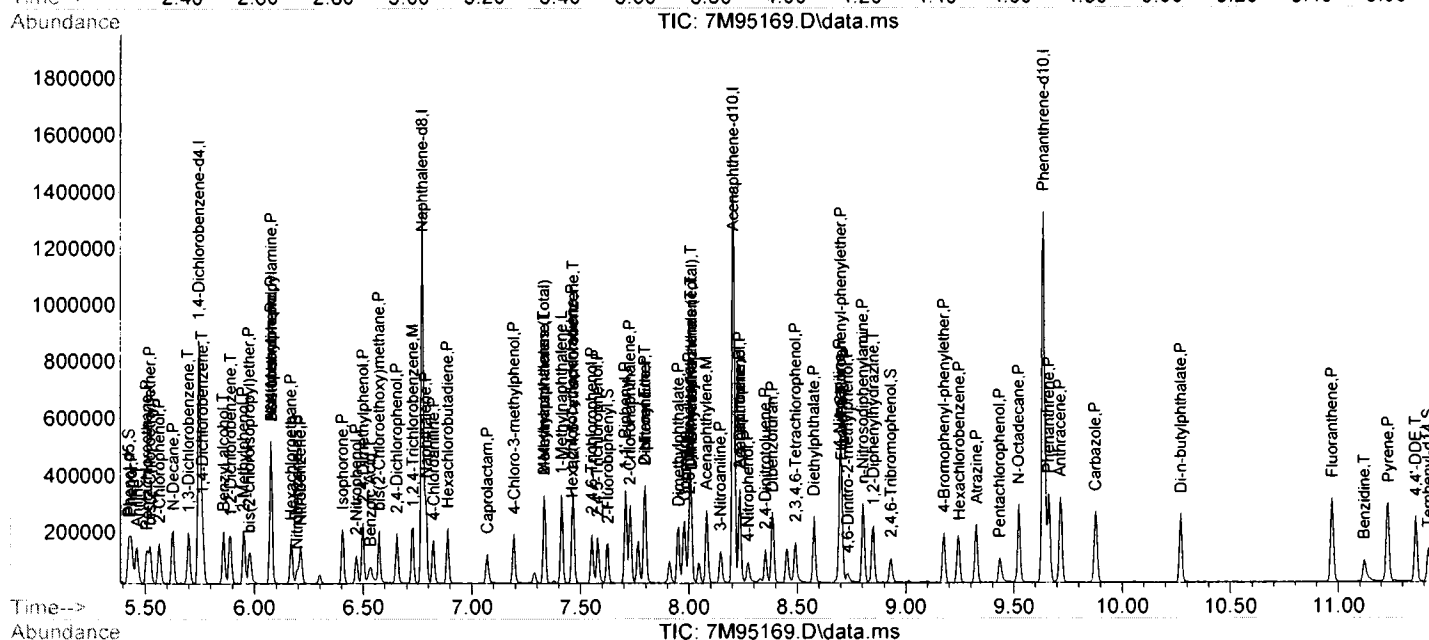
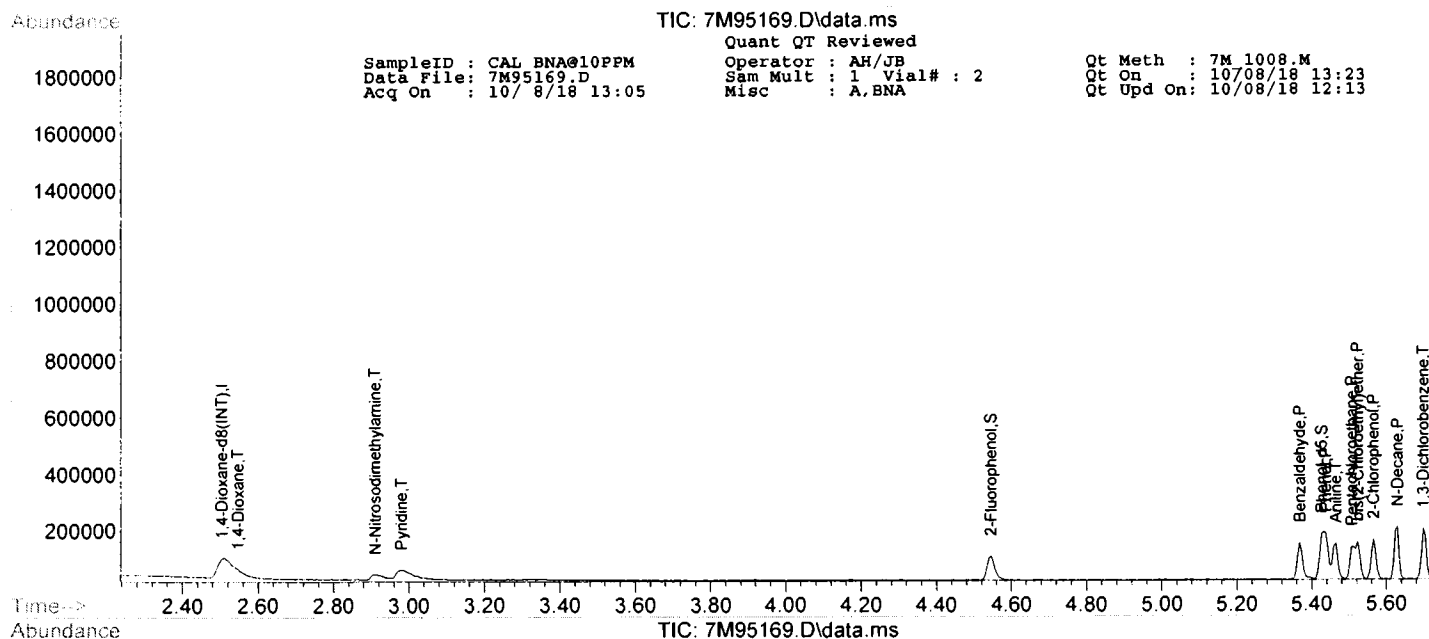
TIC: 7M95169.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@10PPM
Data File: 7M95169.D
Acq On : 10/ 8/18 13:05

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

```
Qt Meth   : 7M 1008.M
Qt On      : 10/08/18 13:23
Qt Upd On : 10/08/18 12:13
```



SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95174.D Sam Mult : 1 Vial# : 7 Qt On : 10/08/18 15:37
 Acq On : 10/ 8/18 15:03 Misc : A,BNA Qt Upd On: 10/07/18 16:40

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	80893	40.00	ng	0.05
21) 1,4-Dichlorobenzene-d4	5.747	152	137180	40.00	ng	0.04
31) Naphthalene-d8	6.762	136	506716	40.00	ng	0.04
50) Acenaphthene-d10	8.183	164	288424	40.00	ng	0.05
77) Phenanthrene-d10	9.620	188	491343	40.00	ng	0.04
91) Chrysene-d12	12.649	240	489782	40.00	ng	0.03
103) Perylene-d12	14.257	264	422072	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	84937	18.26	ng	0.03
Spiked Amount 100.000			Recovery =	18.26%		
16) Phenol-d5	5.427	99	123938m	17.77	ng	0.03
Spiked Amount 100.000			Recovery =	17.77%		
32) Nitrobenzene-d5	6.196	128	15014	8.97	ng	0.04
Spiked Amount 50.000			Recovery =	17.94%		
55) 2-Fluorobiphenyl	7.601	172	89825	10.00	ng	0.05
Spiked Amount 50.000			Recovery =	20.00%		
80) 2,4,6-Tribromophenol	8.910	330	21215	24.38	ng	0.05
Spiked Amount 100.000			Recovery =	24.38%		
94) Terphenyl-d14	11.415	244	78776	9.49	ng	0.04
Spiked Amount 50.000			Recovery =	18.98%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	38556	20.5639	ng	91
9) Pyridine	2.975	79	101662	17.6719	ng	61
10) N-Nitrosodimethylamine	2.910	74	56878	15.2132	ng	65
12) Benzaldehyde	5.368	77	58756m	16.7083	ng	
13) Aniline	5.464	93	126002m	16.4590	ng	
14) Pentachloroethane	5.507	117	28459	18.0778	ng	82
15) bis(2-Chloroethyl)ether	5.523	93	89241	18.4724	ng	74
17) Phenol	5.437	94	122191	15.4850	ng	78
18) 2-Chlorophenol	5.566	128	89249	17.2836	ng	76
19) N-Decane	5.630	57	78781	12.4570	ng	83
20) 1,3-Dichlorobenzene	5.699	146	96956m	17.0208	ng	
22) 1,4-Dichlorobenzene	5.763	146	97638	17.5609	ng	98
23) 1,2-Dichlorobenzene	5.886	146	93472	17.5537	ng	98
24) Benzyl alcohol	5.859	108	58533	22.9583	ng	68
25) bis(2-chloroisopropyl)...	5.977	45	92781	10.6860	ng	95
26) 2-Methylphenol	5.950	108	80695	18.2715	ng	96
27) Acetophenone	6.073	105	123806	17.0678	ng	72
28) Hexachloroethane	6.169	117	35981	15.3601	ng	87
29) N-Nitroso-di-n-propyla...	6.078	70	59572	12.1023	ng	89
30) 3&4-Methylphenol	6.073	108	85694	16.0680	ng	100
33) Nitrobenzene	6.212	77	83650	12.1560	ng	74
34) Isophorone	6.399	82	156413	13.2894	ng	88
35) 2-Nitrophenol	6.463	139	43048	15.6054	ng	78
36) 2,4-Dimethylphenol	6.490	107	82928	15.0461	ng	87
37) Benzoic Acid	6.543	105	73656	18.5468	ng	38
38) bis(2-Chloroethoxy)met...	6.570	93	106315	15.6441	ng	97
39) 2,4-Dichlorophenol	6.650	162	70127	17.7063	ng	86
40) 1,2,4-Trichlorobenzene	6.719	180	77422	16.4340	ng	97
41) Naphthalene	6.778	128	267911	19.1913	ng	99
42) 4-Chloroaniline	6.810	127	104762m	21.2033	ng	
43) Hexachlorobutadiene	6.880	225	39600	14.4746	ng	98
44) Caprolactam	7.061	113	28867	17.5545	ng	59
45) 4-Chloro-3-methylphenol	7.174	107	69045	14.1343	ng	75
46) 2-Methylnaphthalene	7.312	142	175587	16.9373	ng	100
47) 1-Methylnaphthalene	7.393	142	170850	17.1484	ng	91
48) Methylnaphthalenes (To...	7.312	142	346353m	34.0515	ng	
49) 1,1'-Biphenyl	7.686	154	205840	16.6519	ng	94
51) 1,2,4,5-Tetrachloroben...	7.446	216	76224	18.6071	ng	98
52) Hexachlorocyclopentadiene	7.441	237	32164	24.4464	ng	98
53) 2,4,6-Trichlorophenol	7.531	196	48505	17.5608	ng	98
54) 2,4,5-Trichlorophenol	7.558	196	48335	16.3725	ng	99
56) 2-Chloronaphthalene	7.708	162	158543	18.2388	ng	90
57) 1,4-Dimethylnaphthalene	7.986	156	139863	21.7595	ng	84
58) Dimethylnaphthalenes (...)	7.986	156	139863	21.7595	ng	84
59) Diphenyl Ether	7.772	170	117170	19.2468	ng	75
60) 2-Nitroaniline	7.777	65	48084	11.7246	ng	44
61) Coumarin	7.959	146	65066	19.2520	ng	84
62) Acenaphthylene	8.060	152	232982	19.0042	ng	99
63) Dimethylphthalate	7.927	163	173089	16.9230	ng	98
64) 2,6-Dinitrotoluene	7.975	165	38373	16.8776	ng	63
65) Acenaphthene	8.210	153	161689	18.6037	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM

Operator : AH/JB

Qt Meth : 7M_1008.M

Data File: 7M95174.D

Sam Mult : 1 Vial# : 7

Qt On : 10/08/18 15:37

Acq On : 10/ 8/18 15:03

Misc : A,BNA

Qt Upd On: 10/07/18 16:40

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.124	138	44421	20.1589	ng	68
67) 2,4-Dinitrophenol	8.215	184	9658	7.9821	ng	68
68) Dibenzofuran	8.360	168	222147	18.7714	ng	84
69) 2,4-Dinitrotoluene	8.327	165	47006	14.8632	ng	67
70) 4-Nitrophenol	8.247	65	25930	10.4090	ng	78
71) 2,3,4,6-Tetrachlorophenol	8.466	232	41795	16.3972	ng	85
72) Fluorene	8.680	166	180941	17.6462	ng	97
73) 4-Chlorophenyl-phenyle...	8.675	204	82098	16.6090	ng	83
74) Diethylphthalate	8.552	149	171367	16.8201	ng	98
75) 4-Nitroaniline	8.675	138	47882	18.0270	ng	71
76) Atrazine	9.305	200	51448	17.0819	ng	96
78) 4,6-Dinitro-2-methylph...	8.707	198	14835	9.9196	ng	59
79) n-Nitrosodiphenylamine	8.782	169	153095	17.7283	ng	98
81) 1,2-Diphenylhydrazine	8.824	77	178529	15.0470	ng	84
82) 4-Bromophenyl-phenylether	9.155	248	46861	16.8431	ng	79
83) Hexachlorobenzene	9.220	284	48117	17.7812	ng	73
84) N-Octadecane	9.503	57	96393	12.1791	ng	68
85) Pentachlorophenol	9.412	266	25384	16.7330	ng	99
86) Phenanthrene	9.647	178	264241	17.7106	ng	100
87) Anthracene	9.700	178	271313	17.6365	ng	100
88) Carbazole	9.861	167	246695	17.7428	ng	98
89) Di-n-butylphthalate	10.256	149	283562	15.7490	ng	97
90) Fluoranthene	10.961	202	274020	16.5800	ng	95
92) Pyrene	11.223	202	280151	17.3687	ng	89
93) Benzidine	11.111	184	104954	18.0744	ng	90
95) 4,4'-DDE	11.356	246	56107	18.4738	ng	95
96) 4,4'-DDD	11.746	235	96304	18.6283	ng	95
97) Butylbenzylphthalate	12.008	149	119288	15.5745	ng	67
98) 4,4'-DDT	12.104	235	61144	13.8195	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	83805	18.5046	ng	97
100) Benzo[a]anthracene	12.639	228	261261	17.6075	ng	100
101) Chrysene	12.676	228	245257	17.5590	ng	100
102) bis(2-Ethylhexyl)phtha...	12.713	149	158865	15.7239	ng	94
104) Di-n-octylphthalate	13.456	149	255448	14.3623	ng	100
105) Benzo[b]fluoranthene	13.851	252	225459m	16.2136	ng	
106) Benzo[k]fluoranthene	13.878	252	236059	17.5453	ng	96
107) Benzo[a]pyrene	14.193	252	215981	16.3742	ng	95
108) Indeno[1,2,3-cd]pyrene	15.507	276	230747	17.6216	ng	87
109) Dibenzo[a,h]anthracene	15.534	278	191936	21.4283	ng	91
110) Benzo[g,h,i]perylene	15.860	276	194600	17.8387	ng	81

(#)=qualifier out of range (m)=manual integration (+)=signals summed

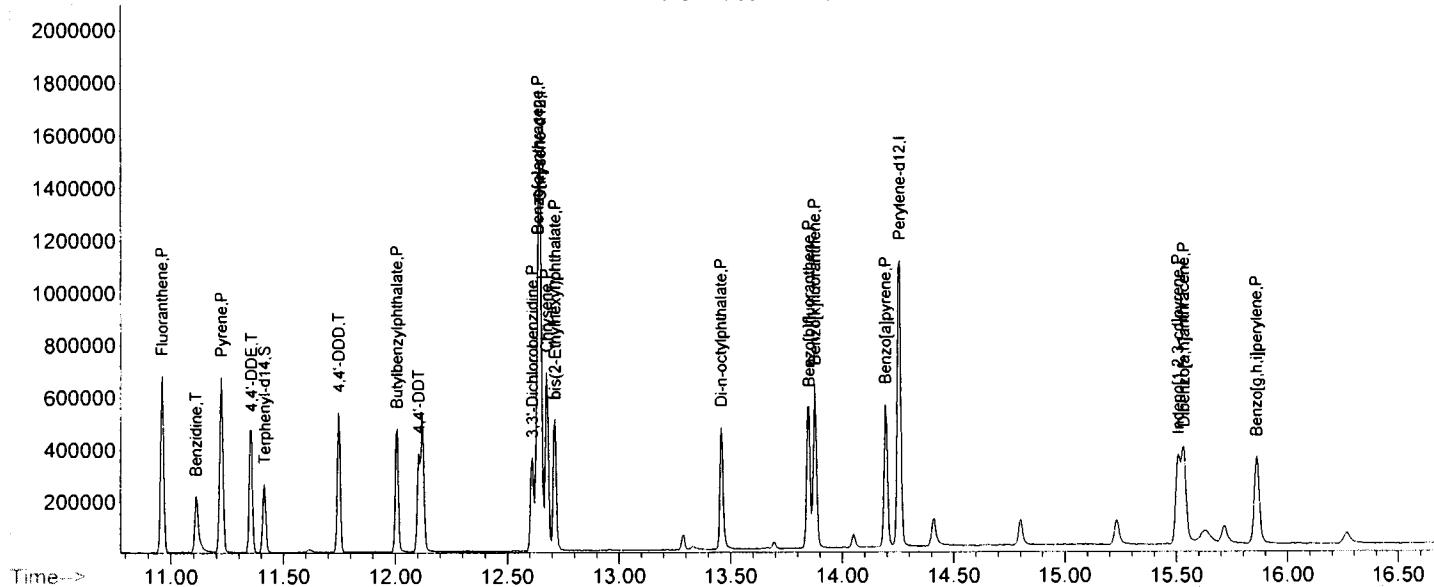
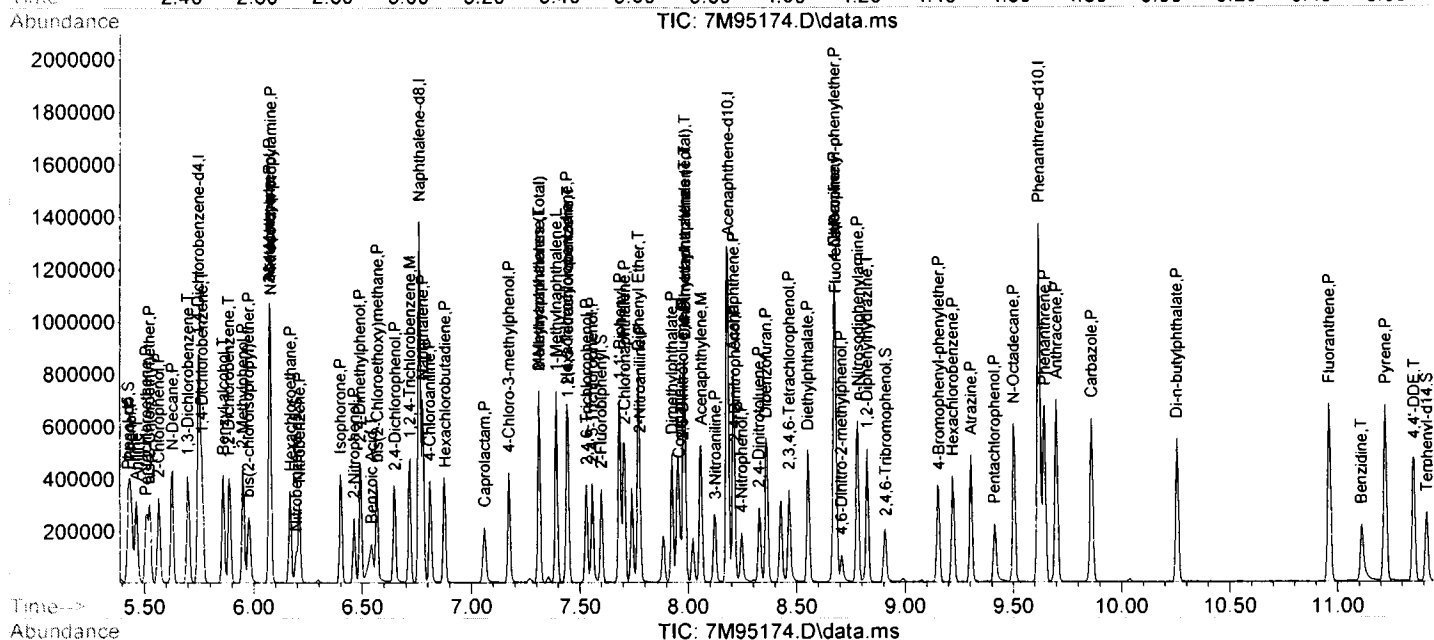
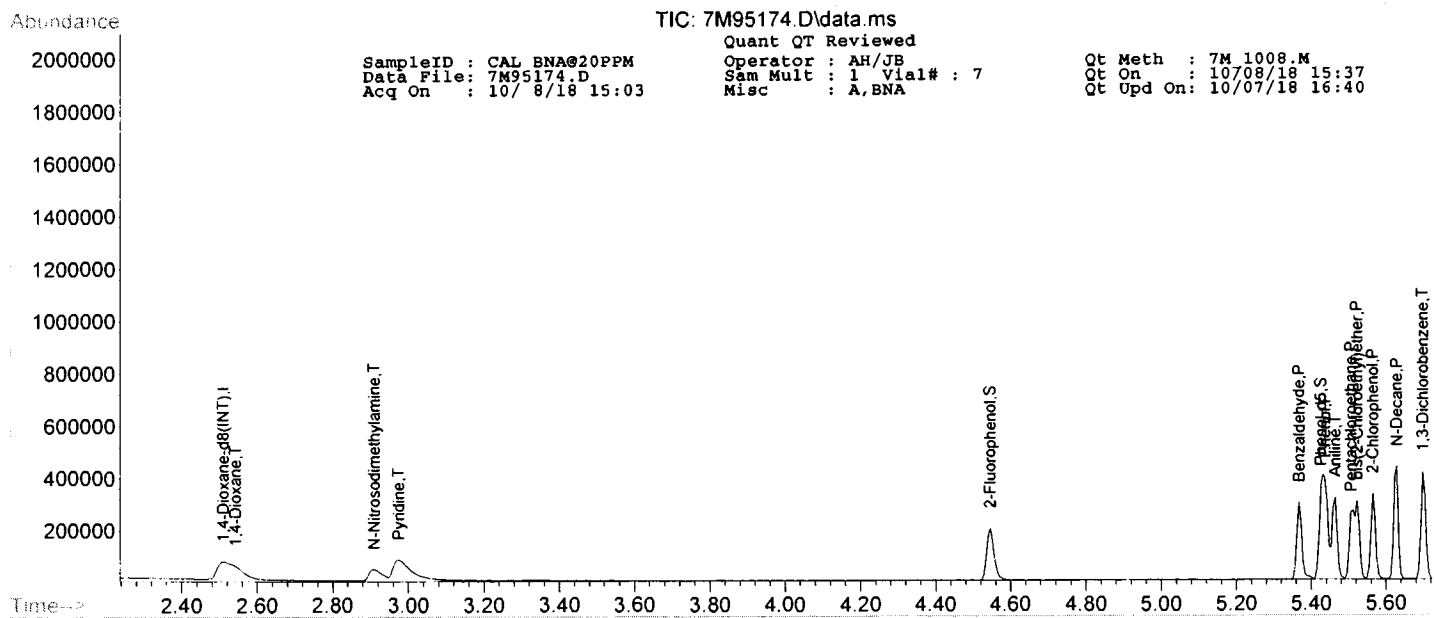
TIC: 7M95174.D\data.ms

Quant QT Reviewed

SampleID : CAL_BNA@20PPM
 Data File: 7M95174.D
 Acq On : 10/ 8/18 15:03

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 7M 1008.M
 Qt On : 10/08/18 15:37
 Qt Upd On: 10/07/18 16:40



SampleID : CAL_BNA@80PPM
Data File: 7M95173.D
Acq On : 10/ 8/18 14:40

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:44
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.510	96	80331	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.753	152	133398	40.00	ng	0.00
31) Naphthalene-d8	6.768	136	496038	40.00	ng	0.00
50) Acenaphthene-d10	8.183	164	282685	40.00	ng	0.00
77) Phenanthrene-d10	9.626	188	487063	40.00	ng	0.00
91) Chrysene-d12	12.655	240	479929	40.00	ng	0.00
103) Perylene-d12	14.268	264	425562	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.545	112	349270	75.61	ng	0.00
Spiked Amount 100.000			Recovery	=	75.61%	
16) Phenol-d5	5.432	99	498756	71.99	ng	0.00
Spiked Amount 100.000			Recovery	=	71.99%	
32) Nitrobenzene-d5	6.196	128	64907	39.61	ng	0.00
Spiked Amount 50.000			Recovery	=	79.22%	
55) 2-Fluorobiphenyl	7.606	172	362702	41.21	ng	0.00
Spiked Amount 50.000			Recovery	=	82.42%	
80) 2,4,6-Tribromophenol	8.915	330	95582	89.54	ng	0.00
Spiked Amount 100.000			Recovery	=	89.54%	
94) Terphenyl-d14	11.415	244	340013	41.78	ng	0.00
Spiked Amount 50.000			Recovery	=	83.56%	
Target Compounds						
8) 1,4-Dioxane	2.542	88	151135	78.0577	ng	90
9) Pyridine	2.969	79	409329	68.6502	ng	60
10) N-Nitrosodimethylamine	2.905	74	236099	63.5915	ng	67
12) Benzaldehyde	5.368	77	172619	51.3057	ng	74
13) Aniline	5.464	93	492390m	64.7683	ng	
14) Pentachloroethane	5.512	117	117614	71.6760	ng	83
15) bis(2-Chloroethyl)ether	5.528	93	349977	68.8720	ng	72
17) Phenol	5.443	94	491348	62.7031	ng	77
18) 2-Chlorophenol	5.571	128	365683	71.3122	ng	74
19) N-Decane	5.630	57	311566	49.2499	ng	83
20) 1,3-Dichlorobenzene	5.699	146	388240	68.6331	ng	96
22) 1,4-Dichlorobenzene	5.763	146	395277	73.1091	ng	96
23) 1,2-Dichlorobenzene	5.891	146	372195	71.8787	ng	98
24) Benzyl alcohol	5.859	108	239842	85.9471	ng	68
25) bis(2-chloroisopropyl)...	5.982	45	360622	42.7121	ng	94
26) 2-Methylphenol	5.956	108	324857	70.2779	ng	97
27) Acetophenone	6.078	105	468805	66.4614	ng	68
28) Hexachloroethane	6.169	117	144964	63.6390	ng	86
29) N-Nitroso-di-n-propyla...	6.084	70	222825	48.7666	ng	91
30) 3&4-Methylphenol	6.078	108	330463	63.7201	ng	100
33) Nitrobenzene	6.212	77	335711	49.8357	ng	75
34) Isophorone	6.404	82	621317	53.9258	ng	84
35) 2-Nitrophenol	6.463	139	185382	68.6499	ng	82
36) 2,4-Dimethylphenol	6.495	107	332873	60.7608	ng	86
37) Benzoic Acid	6.586	105	367472	86.4972	ng	41
38) bis(2-Chloroethoxy)met...	6.570	93	417207	62.7130	ng	96
39) 2,4-Dichlorophenol	6.650	162	285728	69.9875	ng	87
40) 1,2,4-Trichlorobenzene	6.720	180	309195	67.0442	ng	97
41) Naphthalene	6.784	128	1053360	73.1179	ng	99
42) 4-Chloroaniline	6.816	127	393940m	81.4480	ng	
43) Hexachlorobutadiene	6.880	225	157056	58.6428	ng	96
44) Caprolactam	7.088	113	120045	74.5729	ng	57
45) 4-Chloro-3-methylphenol	7.179	107	284378	59.4686	ng	75
46) 2-Methylnaphthalene	7.318	142	703401	69.3115	ng	99
47) 1-Methylnaphthalene	7.398	142	677418	69.4568	ng	91
48) Methylnaphthalenes (To...	7.318	142	1380665m	138.6611	ng	
49) 1,1'-Biphenyl	7.686	154	817775	67.5799	ng	96
51) 1,2,4,5-Tetrachloroben...	7.451	216	304277	75.7854	ng	99
52) Hexachlorocyclopentadiene	7.446	237	154306	93.6561	ng	99
53) 2,4,6-Trichlorophenol	7.537	196	196769	72.6849	ng	100
54) 2,4,5-Trichlorophenol	7.564	196	207651	71.7655	ng	98
56) 2-Chloronaphthalene	7.708	162	623092	73.1360	ng	92
57) 1,4-Dimethylnaphthalene	7.991	156	546954	86.8210	ng	85
58) Dimethylnaphthalenes (...)	7.991	156	546954	86.8210	ng	85
59) Diphenyl Ether	7.777	170	464394	77.8320	ng	74
60) 2-Nitroaniline	7.783	65	191797	47.7166	ng	43
61) Coumarin	7.964	146	258454	78.0250	ng	85
62) Acenaphthylene	8.066	152	937536	78.0268	ng	99
63) Dimethylphthalate	7.938	163	688769	68.7083	ng	98
64) 2,6-Dinitrotoluene	7.986	165	158899	71.3073	ng	59
65) Acenaphthene	8.215	153	645768	75.8097	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95173.D Sam Mult : 1 Vial# : 6 Qt On : 10/08/18 15:44
 Acq On : 10/ 8/18 14:40 Misc : A,BNA Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.130	138	176498	81.7234	ng	73
67) 2,4-Dinitrophenol	8.221	184	72475	57.0407	ng	47
68) Dibenzofuran	8.370	168	889421	75.3791	ng	83
69) 2,4-Dinitrotoluene	8.338	165	211535	68.2448	ng	59
70) 4-Nitrophenol	8.258	65	122737	50.2704	ng	81
71) 2,3,4,6-Tetrachlorophenol	8.472	232	180122	72.1007	ng	84
72) Fluorene	8.685	166	715948	71.2401	ng	99
73) 4-Chlorophenyl-phenyle...	8.680	204	330278	68.1742	ng	82
74) Diethylphthalate	8.563	149	695221	69.6230	ng	96
75) 4-Nitroaniline	8.685	138	199888	76.7832	ng	69
76) Atrazine	9.316	200	214031	72.5058	ng	96
78) 4,6-Dinitro-2-methylph...	8.717	198	96388	59.3556	ng	68
79) n-Nitrosodiphenylamine	8.787	169	621522	72.6041	ng	100
81) 1,2-Diphenylhydrazine	8.830	77	696008	59.1774	ng	82
82) 4-Bromophenyl-phenylether	9.161	248	197399	71.5738	ng	78
83) Hexachlorobenzene	9.225	284	197503	73.6266	ng	71
84) N-Octadecane	9.508	57	378277	48.2147	ng	65
85) Pentachlorophenol	9.417	266	127836	76.5782	ng	97
86) Phenanthrene	9.652	178	1072610	72.5228	ng	100
87) Anthracene	9.706	178	1100317	72.1539	ng	100
88) Carbazole	9.866	167	998668	72.4575	ng	97
89) Di-n-butylphthalate	10.261	149	1189360	66.6376	ng	97
90) Fluoranthene	10.967	202	1128530	68.8833	ng	93
92) Pyrene	11.228	202	1141203	72.2044	ng	90
93) Benzidine	11.116	184	396554	74.3531	ng	88
95) 4,4'-DDE	11.357	246	235169	79.0216	ng	94
96) 4,4'-DDD	11.752	235	407915	80.5236	ng	94
97) Butylbenzylphthalate	12.008	149	521567	69.4949	ng	73
98) 4,4'-DDT	12.110	235	324557	74.8611	ng	97
99) 3,3'-Dichlorobenzidine	12.612	252	337311	82.4438	ng	98
100) Benzo[a]anthracene	12.639	228	1078099	74.1495	ng	98
101) Chrysene	12.681	228	997510	72.8820	ng	100
102) bis(2-Ethylhexyl)phtha...	12.714	149	715154	72.2365	ng	93
104) Di-n-octylphthalate	13.461	149	1209334	67.4360	ng	99
105) Benzo[b]fluoranthene	13.862	252	1037783	74.0188	ng	95
106) Benzo[k]fluoranthene	13.894	252	954681	70.3756	ng	94
107) Benzo[a]pyrene	14.209	252	971691	73.0629	ng	95
108) Indeno[1,2,3-cd]pyrene	15.529	276	1025449	77.6687	ng	88
109) Dibenzo[a,h]anthracene	15.556	278	857228	81.6459	ng	93
110) Benzo[g,h,i]perylene	15.887	276	851832	77.4459	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

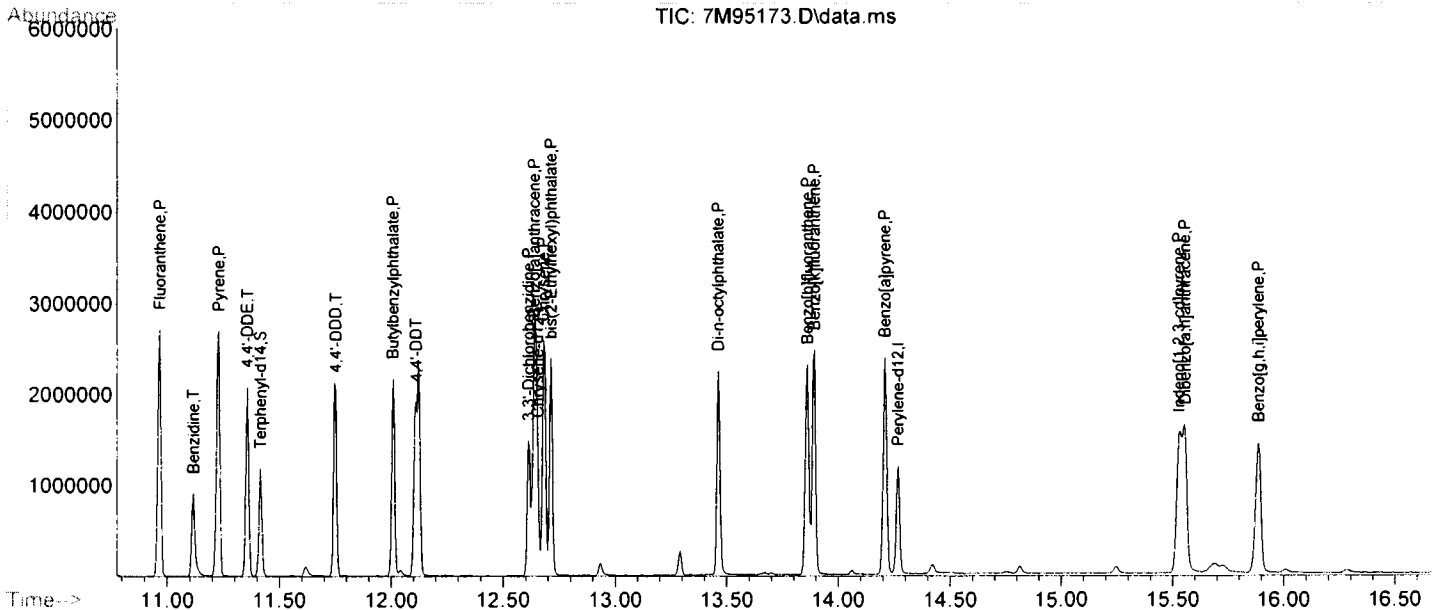
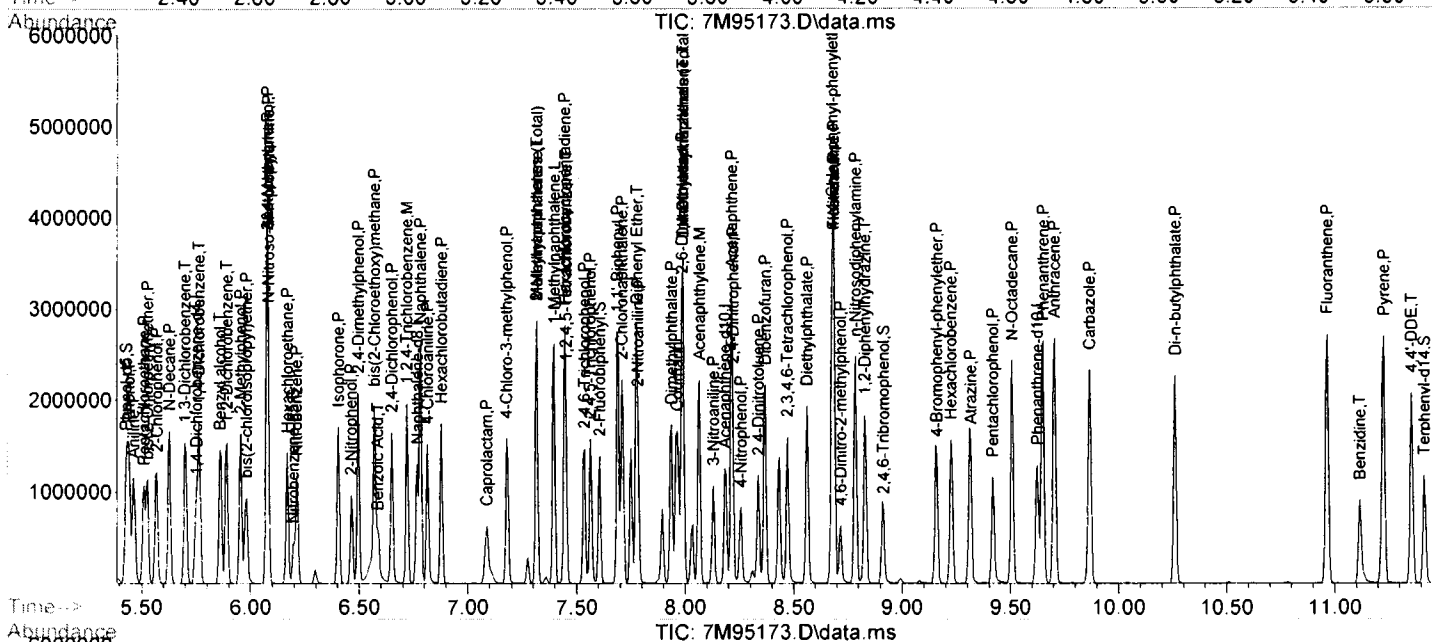
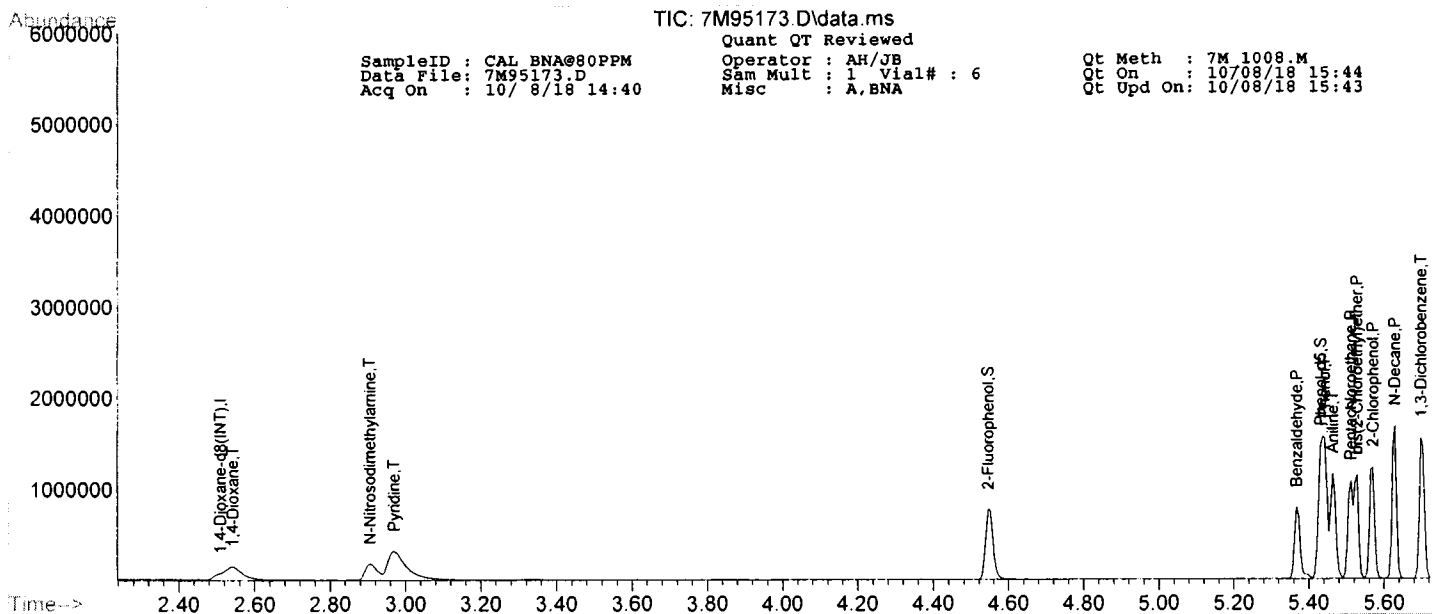
TIC: 7M95173.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@80PPM
Data File: 7M95173.D
Acq On : 10/ 8/18 14:40

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A, BNA

```
Qt Meth   : 7M 1008.M
Qt On      : 10/08/18 15:44
Qt Upd On : 10/08/18 15:43
```



SampleID : CAL_BNA@120PPM
Data File: 7M95172.D
Acq On : 10/ 8/18 14:16

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:43
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	82152	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.753	152	134996	40.00	ng	0.00
31) Naphthalene-d8	6.762	136	501928	40.00	ng	0.00
50) Acenaphthene-d10	8.178	164	287749	40.00	ng	0.00
77) Phenanthrene-d10	9.620	188	498911	40.00	ng	0.00
91) Chrysene-d12	12.655	240	487388	40.00	ng	0.00
103) Perylene-d12	14.295	264	430382	40.00	ng	0.04

System Monitoring Compounds						
11) 2-Fluorophenol	4.551	112	542384	114.81	ng	0.00
Spiked Amount 100.000			Recovery	=	114.81%	
16) Phenol-d5	5.437	99	762683	107.65	ng	0.01
Spiked Amount 100.000			Recovery	=	107.65%	
32) Nitrobenzene-d5	6.196	128	98291	59.28	ng	0.00
Spiked Amount 50.000			Recovery	=	118.56%	
55) 2-Fluorobiphenyl	7.596	172	562247	62.76	ng	0.00
Spiked Amount 50.000			Recovery	=	125.52%	
80) 2,4,6-Tribromophenol	8.910	330	153461	126.56	ng	0.00
Spiked Amount 100.000			Recovery	=	126.56%	
94) Terphenyl-d14	11.415	244	522557	63.23	ng	0.00
Spiked Amount 50.000			Recovery	=	126.46%	

Target Compounds						Qvalue
8) 1,4-Dioxane	2.542	88	231906	114.3497	ng	90
9) Pyridine	2.969	79	628257	100.4113	ng	61
10) N-Nitrosodimethylamine	2.905	74	359343	94.6410	ng	65
12) Benzaldehyde	5.368	77	221456	65.3701	ng	73
13) Aniline	5.464	93	739008m	95.0534	ng	
14) Pentachloroethane	5.512	117	180666	104.6196	ng	83
15) bis(2-Chloroethyl)ether	5.528	93	531347	98.9455	ng	73
17) Phenol	5.448	94	748440	93.3946	ng	76
18) 2-Chlorophenol	5.571	128	562119	107.1896	ng	74
19) N-Decane	5.630	57	462518	71.1825	ng	83
20) 1,3-Dichlorobenzene	5.704	146	597250	103.2415	ng	96
22) 1,4-Dichlorobenzene	5.763	146	599219	109.5176	ng	97
23) 1,2-Dichlorobenzene	5.891	146	564550	107.7359	ng	98
24) Benzyl alcohol	5.865	108	369770	122.8955	ng	63
25) bis(2-chloroisopropyl)...	5.982	45	546267	63.9341	ng	94
26) 2-Methylphenol	5.956	108	492435	101.0332	ng	96
27) Acetophenone	6.078	105	678037	94.9858	ng	68
28) Hexachloroethane	6.169	117	223127	96.7930	ng	85
29) N-Nitroso-di-n-propyla...	6.084	70	319378	71.1358	ng	90
30) 3&4-Methylphenol	6.084	108	475892	90.6755	ng	98
33) Nitrobenzene	6.212	77	508942	74.6649	ng	75
34) Isophorone	6.404	82	942394	80.8332	ng	83
35) 2-Nitrophenol	6.463	139	292633	107.0949	ng	80
36) 2,4-Dimethylphenol	6.495	107	501291	89.5741	ng	85
37) Benzoic Acid	6.602	105	609559	133.8724	ng	42
38) bis(2-Chloroethoxy)met...	6.570	93	634321	94.2299	ng	96
39) 2,4-Dichlorophenol	6.650	162	442226	103.6864	ng	87
40) 1,2,4-Trichlorobenzene	6.719	180	477181	102.2552	ng	97
41) Naphthalene	6.778	128	1581629	105.2726	ng	99
42) 4-Chloroaniline	6.810	127	552515m	112.8932	ng	
43) Hexachlorobutadiene	6.874	225	243070	89.6944	ng	96
44) Caprolactam	7.093	113	186462	114.4724	ng	57
45) 4-Chloro-3-methylphenol	7.179	107	435933	90.0918	ng	71
46) 2-Methylnaphthalene	7.312	142	1057555	102.9862	ng	99
47) 1-Methylnaphthalene	7.387	142	1032374	104.6089	ng	91
48) Methylnaphthalenes (To...	7.312	142	2089996m	207.4366	ng	
49) 1,1'-Biphenyl	7.681	154	1226961	100.2047	ng	94
51) 1,2,4,5-Tetrachloroben...	7.441	216	461928	113.0263	ng	98
52) Hexachlorocyclopentadiene	7.435	237	240608	129.0989	ng	99
53) 2,4,6-Trichlorophenol	7.526	196	321127	116.5341	ng	99
54) 2,4,5-Trichlorophenol	7.558	196	331601	112.5866	ng	99
56) 2-Chloronaphthalene	7.702	162	935055	107.8214	ng	92
57) 1,4-Dimethylnaphthalene	7.986	156	810145	126.3356	ng	86
58) Dimethylnaphthalenes (...)	7.986	156	810145	126.3356	ng	86
59) Diphenyl Ether	7.767	170	710945	117.0568	ng	77
60) 2-Nitroaniline	7.777	65	292981	71.6071	ng	42
61) Coumarin	7.964	146	403534	119.6794	ng	86
62) Acenaphthylene	8.060	152	1439961	117.7323	ng	99
63) Dimethylphthalate	7.932	163	1044295	102.3406	ng	98
64) 2,6-Dinitrotoluene	7.980	165	235690	103.9066	ng	59
65) Acenaphthene	8.210	153	973464	112.2683	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM
 Data File: 7M95172.D
 Acq On : 10/ 8/18 14:16

Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.124	138	258513	117.5921	ng	74
67) 2,4-Dinitrophenol	8.215	184	124496	91.9045	ng	38
68) Dibenzofuran	8.360	168	1342349	110.5941	ng	85
69) 2,4-Dinitrotoluene	8.333	165	332338	105.3310	ng	59
70) 4-Nitrophenol	8.253	65	191188	76.9283	ng	81
71) 2,3,4,6-Tetrachlorophenol	8.466	232	282587	111.1256	ng	83
72) Fluorene	8.680	166	1063389	103.9499	ng	100
73) 4-Chlorophenyl-phenyle...	8.669	204	497186	100.8204	ng	84
74) Diethylphthalate	8.557	149	1068494	105.1213	ng	96
75) 4-Nitroaniline	8.685	138	308969	116.5959	ng	68
76) Atrazine	9.310	200	331798	110.4228	ng	96
78) 4,6-Dinitro-2-methylph...	8.712	198	159910	91.0506	ng	62
79) n-Nitrosodiphenylamine	8.782	169	962262	109.7387	ng	100
81) 1,2-Diphenylhydrazine	8.824	77	1061543	88.1132	ng	80
82) 4-Bromophenyl-phenylether	9.156	248	302438	107.0551	ng	78
83) Hexachlorobenzene	9.220	284	309329	112.5755	ng	71
84) N-Octadecane	9.503	57	567155	70.5721	ng	63
85) Pentachlorophenol	9.412	266	204854	112.9838	ng	97
86) Phenanthrene	9.647	178	1652249	109.0613	ng	99
87) Anthracene	9.700	178	1681442	107.6430	ng	98
88) Carbazole	9.866	167	1540992	109.1502	ng	97
89) Di-n-butylphthalate	10.256	149	1824827	99.8136	ng	97
90) Fluoranthene	10.967	202	1734740	103.3707	ng	93
92) Pyrene	11.228	202	1745936	108.7755	ng	89
93) Benzidine	11.116	184	577572	111.5689	ng	86
95) 4,4'-DDE	11.357	246	365067	120.7926	ng	93
96) 4,4'-DDD	11.752	235	633460	123.1331	ng	95
97) Butylbenzylphthalate	12.008	149	811746	106.5038	ng	73
98) 4,4'-DDT	12.110	235	519878	118.0779	ng	97
99) 3,3'-Dichlorobenzidine	12.617	252	486288	123.8199	ng	96
100) Benzo[a]anthracene	12.644	228	1650442	111.7770	ng	97
101) Chrysene	12.687	228	1545396	111.1847	ng	99
102) bis(2-Ethylhexyl)phtha...	12.713	149	1100864	109.4947	ng	94
104) Di-n-octylphthalate	13.477	149	1911146	105.3775	ng	99
105) Benzo[b]fluoranthene	13.883	252	1621317m	114.3436	ng	
106) Benzo[k]fluoranthene	13.915	252	1479291m	107.8266	ng	
107) Benzo[a]pyrene	14.241	252	1508003	112.1192	ng	94
108) Indeno[1,2,3-cd]pyrene	15.572	276	1639331	122.7742	ng	90
109) Dibenzo[a,h]anthracene	15.593	278	1366922	118.5674	ng	94
110) Benzo[g,h,i]perylene	15.930	276	1358884	122.1618	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

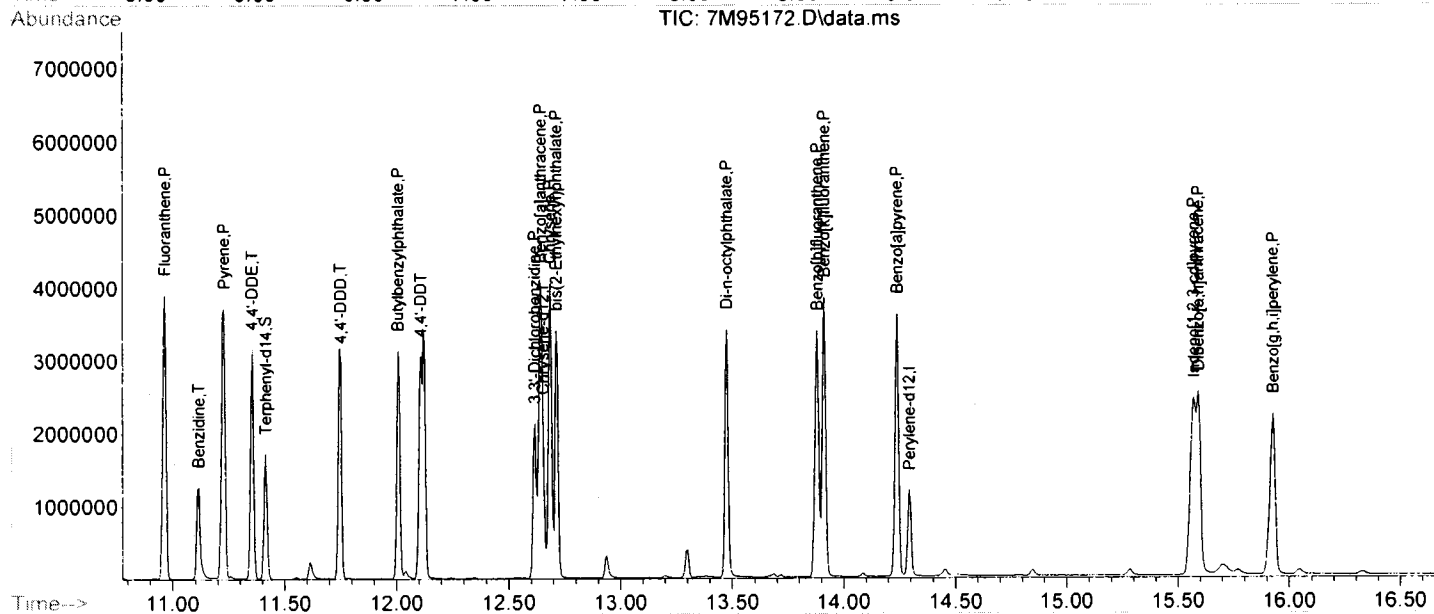
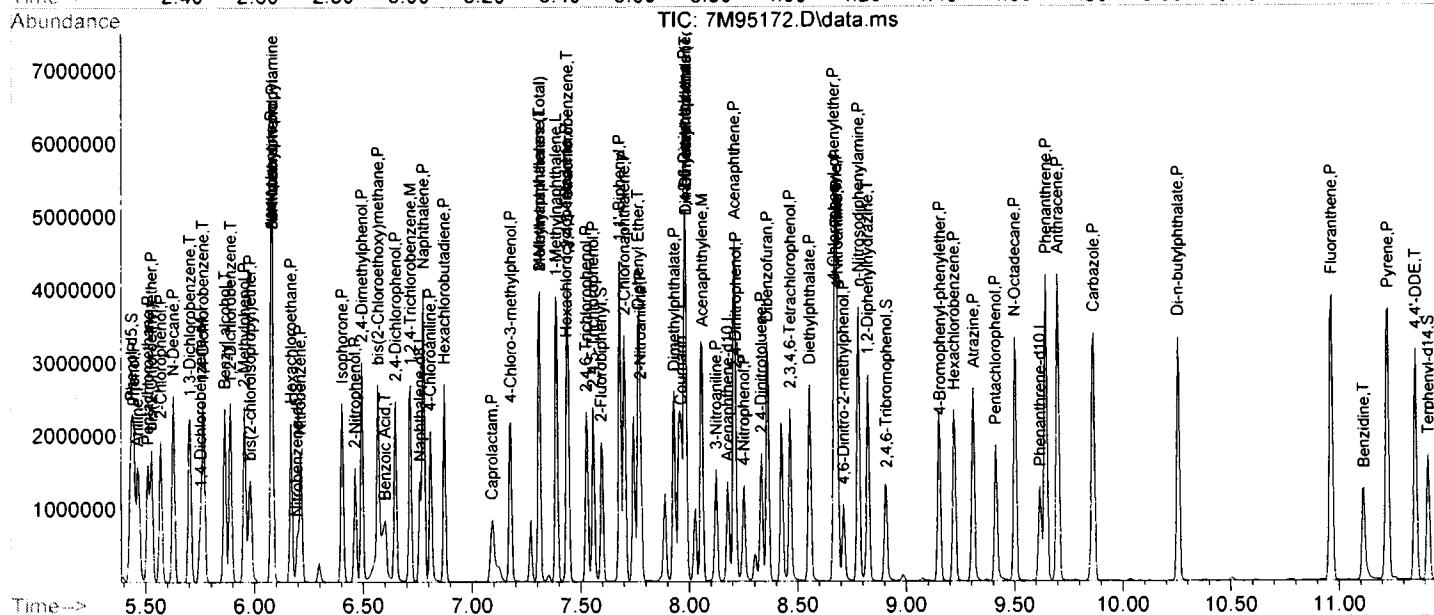
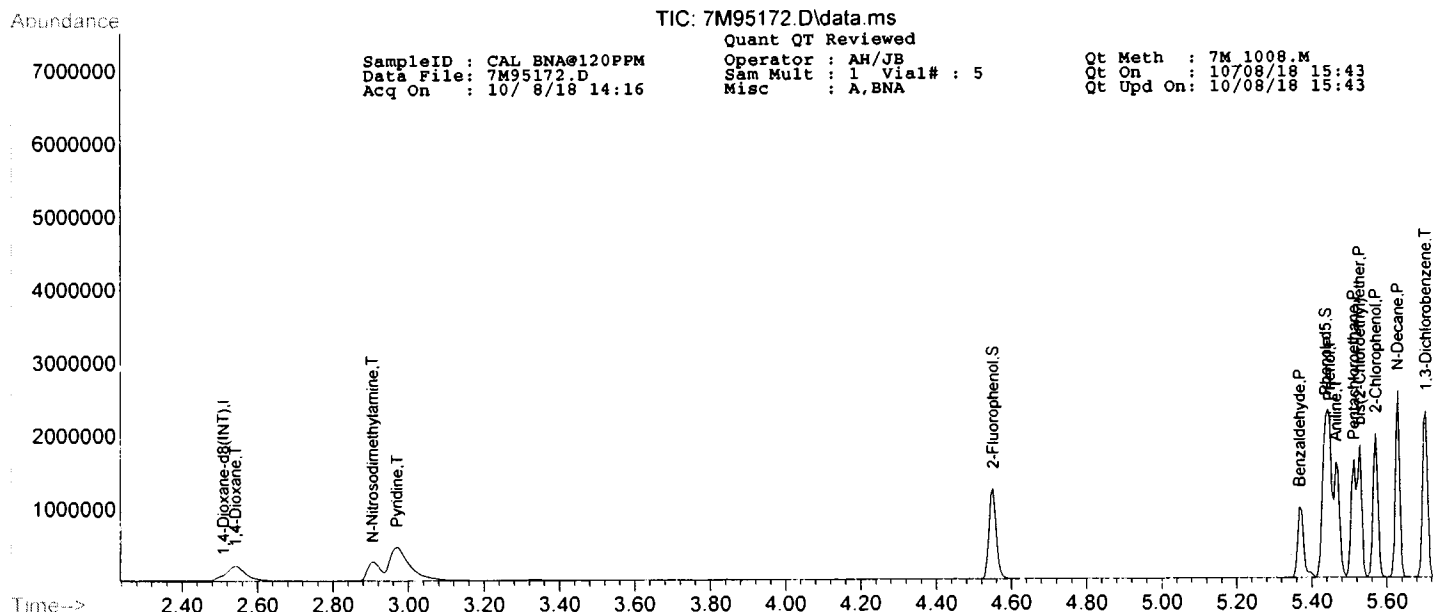
TIC: 7M95172.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@120PPM
Data File: 7M95172.D
Acq On : 10/ 8/18 14:16

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A, BNA

```
Qt Meth : 7M 1008.M
Qt On : 10/08/18 15:43
Qt Upd On: 10/08/18 15:43
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SampleID : CAL_BNA@160PPM
Data File: 7M95171.D
Acq On : 10/ 8/18 13:53

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:43
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	76070	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.752	152	123955	40.00	ng	0.00
31) Naphthalene-d8	6.778	136	459360	40.00	ng	0.02
50) Acenaphthene-d10	8.210	164	266448	40.00	ng	0.03
77) Phenanthrene-d10	9.642	188	461445	40.00	ng	0.02
91) Chrysene-d12	12.660	240	448112	40.00	ng	0.01
103) Perylene-d12	14.279	264	397716	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.550	112	666474	152.36	ng	0.00
Spiked Amount 100.000			Recovery	=	152.36%	
16) Phenol-d5	5.437	99	931222	141.94	ng	0.01
Spiked Amount 100.000			Recovery	=	141.94%	
32) Nitrobenzene-d5	6.201	128	122329	80.61	ng	0.00
Spiked Amount 50.000			Recovery	=	161.22%	
55) 2-Fluorobiphenyl	7.628	172	687062	82.82	ng	0.03
Spiked Amount 50.000			Recovery	=	165.64%	
80) 2,4,6-Tribromophenol	8.936	330	193421	158.84	ng	0.03
Spiked Amount 100.000			Recovery	=	158.84%	
94) Terphenyl-d14	11.426	244	659232	86.76	ng	0.01
Spiked Amount 50.000			Recovery	=	173.52%	
Target Compounds						
8) 1,4-Dioxane	2.542	88	284901	148.4183	ng	91
9) Pyridine	2.969	79	776420	130.8265	ng	61
10) N-Nitrosodimethylamine	2.905	74	444794	126.5126	ng	65
12) Benzaldehyde	5.368	77	240146	77.6129	ng	71
13) Aniline	5.469	93	901555m	125.2320	ng	
14) Pentachloroethane	5.512	117	222398	135.4957	ng	84
15) bis(2-Chloroethyl)ether	5.528	93	651919	127.2396	ng	74
17) Phenol	5.448	94	907753	122.3312	ng	77
18) 2-Chlorophenol	5.571	128	687953	141.6733	ng	76
19) N-Decane	5.630	57	557669	92.3054	ng	82
20) 1,3-Dichlorobenzene	5.704	146	725190	135.3801	ng	97
22) 1,4-Dichlorobenzene	5.769	146	731875	145.6773	ng	97
23) 1,2-Dichlorobenzene	5.891	146	694591	144.3591	ng	97
24) Benzyl alcohol	5.865	108	451176	155.0270	ng	67
25) bis(2-chloroisopropyl)...	5.982	45	657201	83.7688	ng	95
26) 2-Methylphenol	5.961	108	606245	130.4428	ng	96
27) Acetophenone	6.084	105	794025	121.1425	ng	68
28) Hexachloroethane	6.175	117	274283	129.5828	ng	88
29) N-Nitroso-di-n-propyla...	6.089	70	378220	94.7339	ng	91
30) 3&4-Methylphenol	6.084	108	561195	116.4535	ng	99
33) Nitrobenzene	6.217	77	622944	99.8586	ng	76
34) Isophorone	6.415	82	1148096	107.6028	ng	80
35) 2-Nitrophenol	6.474	139	358129	143.2100	ng	79
36) 2,4-Dimethylphenol	6.506	107	620651	119.9820	ng	86
37) Benzoic Acid	6.623	105	750486	172.2890	ng	41
38) bis(2-Chloroethoxy)met...	6.581	93	770813	125.1171	ng	95
39) 2,4-Dichlorophenol	6.661	162	541630	134.8444	ng	88
40) 1,2,4-Trichlorobenzene	6.730	180	580793	135.9915	ng	97
41) Naphthalene	6.794	128	1905776	134.9056	ng	98
42) 4-Chloroaniline	6.826	127	615062m	137.3191	ng	
43) Hexachlorobutadiene	6.890	225	293550	118.3598	ng	96
44) Caprolactam	7.125	113	230612	154.6966	ng	55
45) 4-Chloro-3-methylphenol	7.200	107	536973	121.2568	ng	75
46) 2-Methylnaphthalene	7.334	142	1280021	136.2013	ng	100
47) 1-Methylnaphthalene	7.414	142	1247882	138.1635	ng	91
48) Methylnaphthalenes (To...	7.414	142	2528236m	274.1863	ng	
49) 1,1'-Biphenyl	7.713	154	1489028	132.8766	ng	93
51) 1,2,4,5-Tetrachloroben...	7.473	216	556919	147.1630	ng	98
52) Hexachlorocyclopentadiene	7.462	237	298637	159.3977	ng	99
53) 2,4,6-Trichlorophenol	7.558	196	378389	148.2915	ng	100
54) 2,4,5-Trichlorophenol	7.585	196	400046	146.6838	ng	99
56) 2-Chloronaphthalene	7.729	162	1151374	143.3790	ng	92
57) 1,4-Dimethylnaphthalene	8.012	156	957395	161.2335	ng	88
58) Dimethylnaphthalenes (...)	8.012	156	957395	161.2335	ng	88
59) Diphenyl Ether	7.799	170	856156	152.2352	ng	74
60) 2-Nitroaniline	7.804	65	349895	92.3540	ng	48
61) Coumarin	7.996	146	487176	156.0366	ng	86
62) Acenaphthylene	8.087	152	1738379	153.4937	ng	98
63) Dimethylphthalate	7.964	163	1282684	135.7519	ng	98
64) 2,6-Dinitrotoluene	8.012	165	279600	133.1191	ng	60
65) Acenaphthene	8.237	153	1174450	146.2761	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@160PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95171.D Sam Mult : 1 Vial# : 4 Qt On : 10/08/18 15:43
 Acq On : 10/ 8/18 13:53 Misc : A,BNA Qt Upd On: 10/08/18 15:43

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.156	138	305912	150.2774	ng	73
67) 2,4-Dinitrophenol	8.247	184	158845	121.8928	ng	30
68) Dibenzofuran	8.392	168	1656816	145.8861	ng	85
69) 2,4-Dinitrotoluene	8.365	165	412025	141.0266	ng	57
70) 4-Nitrophenol	8.285	65	237620	103.2547	ng	83
71) 2,3,4,6-Tetrachlorophenol	8.493	232	352766	149.8131	ng	84
72) Fluorene	8.707	166	1270157	134.0883	ng	100
73) 4-Chlorophenyl-phenyle...	8.701	204	599978	131.3912	ng	82
74) Diethylphthalate	8.584	149	1308296	139.0036	ng	96
75) 4-Nitroaniline	8.717	138	375024	152.8371	ng	69
76) Atrazine	9.337	200	406699	146.1704	ng	96
78) 4,6-Dinitro-2-methylph...	8.744	198	202866	119.2720	ng	69
79) n-Nitrosodiphenylamine	8.808	169	1171229	144.4147	ng	100
81) 1,2-Diphenylhydrazine	8.851	77	1289869	115.7583	ng	79
82) 4-Bromophenyl-phenylether	9.177	248	377774	144.5793	ng	82
83) Hexachlorobenzene	9.246	284	380533	149.7334	ng	67
84) N-Octadecane	9.524	57	681052	91.6252	ng	61
85) Pentachlorophenol	9.439	266	260365	147.3459	ng	98
86) Phenanthrene	9.668	178	1996194	142.4626	ng	99
87) Anthracene	9.722	178	2059489	142.5498	ng	98
88) Carbazole	9.882	167	1891124	144.8263	ng	97
89) Di-n-butylphthalate	10.272	149	2215679	131.0321	ng	97
90) Fluoranthene	10.977	202	2136180	137.6271	ng	94
92) Pyrene	11.239	202	2140705	145.0601	ng	89
93) Benzidine	11.121	184	654052	143.0032	ng	91
95) 4,4'-DDE	11.362	246	454826	163.6822	ng	93
96) 4,4'-DDD	11.757	235	791896	167.4219	ng	96
97) Butylbenzylphthalate	12.014	149	1000407	142.7611	ng	74
98) 4,4'-DDT	12.115	235	646003	159.5843	ng	98
99) 3,3'-Dichlorobenzidine	12.623	252	582164	173.2059	ng	96
100) Benzo[a]anthracene	12.649	228	2035789	149.9592	ng	98
101) Chrysene	12.692	228	1883076	147.3538	ng	99
102) bis(2-Ethylhexyl)phtha...	12.719	149	1345888	145.5984	ng	93
104) Di-n-octylphthalate	13.472	149	2338806	139.5499	ng	99
105) Benzo[b]fluoranthene	13.878	252	1920988	146.6053	ng	95
106) Benzo[k]fluoranthene	13.910	252	1900387	149.8979	ng	94
107) Benzo[a]pyrene	14.225	252	1879552	151.2213	ng	94
108) Indeno[1,2,3-cd]pyrene	15.550	276	2044951	165.7313	ng	91
109) Dibenzo[a,h]anthracene	15.577	278	1698107	149.5014	ng	93
110) Benzo[g,h,i]perylene	15.913	276	1681208	163.5519	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

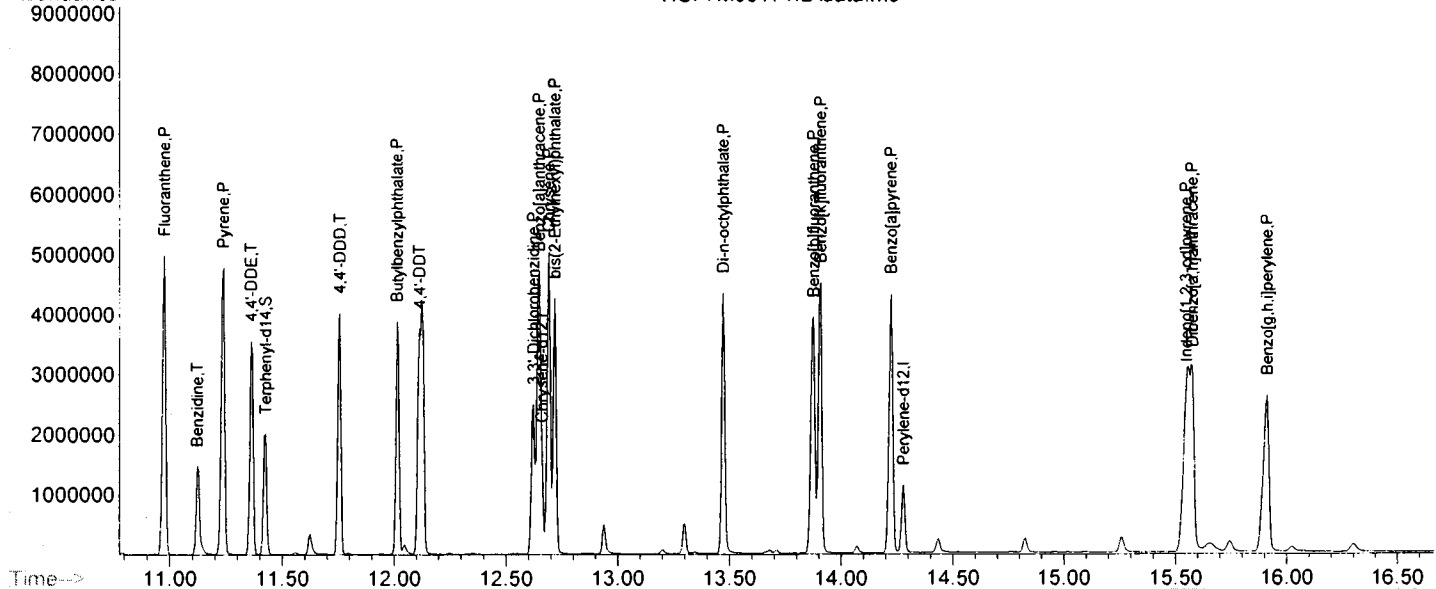
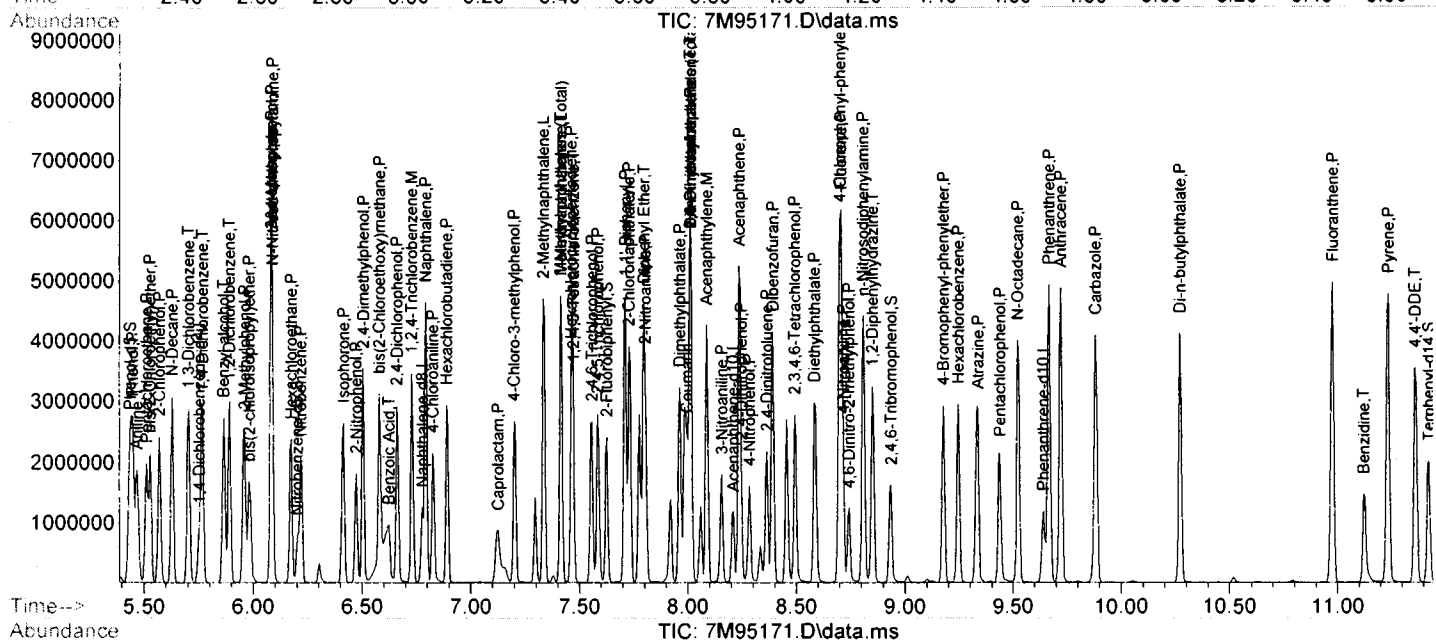
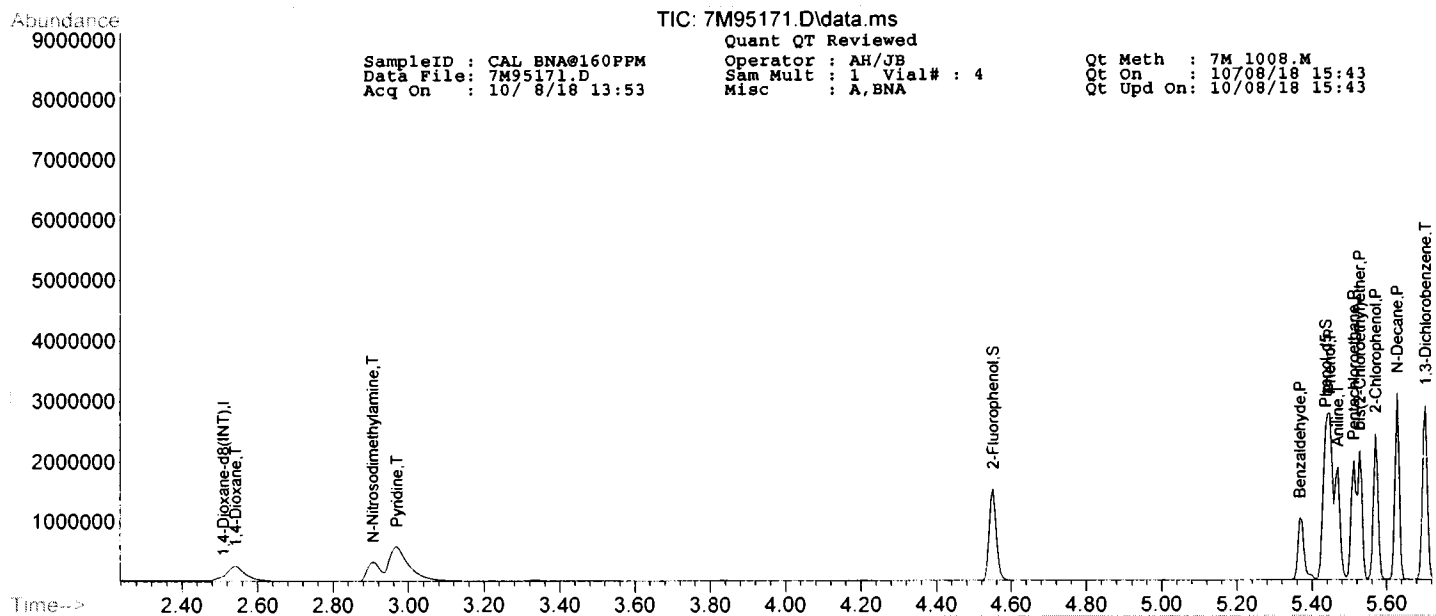
TIC: 7M95171.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@160PPM
 Data File: 7M95171.D
 Acq on : 10/ 8/18 13:53

Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

Qt Meth : 7M 1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43



SampleID : CAL BNA@196PPM
Data File: 7M95170.D
Acq On : 10/ 8/18 13:29

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 15:43
Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.504	96	76812	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.752	152	126580	40.00	ng	0.00
31) Naphthalene-d8	6.767	136	465835	40.00	ng	0.00
50) Acenaphthene-d10	8.189	164	270926	40.00	ng	0.00
77) Phenanthrene-d10	9.626	188	466920	40.00	ng	0.00
91) Chrysene-d12	12.660	240	452377	40.00	ng	0.01
103) Perylene-d12	14.268	264	405129	40.00	ng	0.01

System Monitoring Compounds						
11) 2-Fluorophenol	4.550	112	833529	188.71	ng	0.00
Spiked Amount 100.000			Recovery =	188.71%		
16) Phenol-d5	5.443	99	1153760	174.17	ng	0.02
Spiked Amount 100.000			Recovery =	174.17%		
32) Nitrobenzene-d5	6.201	128	154552	100.43	ng	0.00
Spiked Amount 50.000			Recovery =	200.86%		
55) 2-Fluorobiphenyl	7.606	172	856553	101.54	ng	0.00
Spiked Amount 50.000			Recovery =	203.08%		
80) 2,4,6-Tribromophenol	8.920	330	246074	186.89	ng	0.01
Spiked Amount 100.000			Recovery =	186.89%		
94) Terphenyl-d14	11.421	244	835461	108.92	ng	0.00
Spiked Amount 50.000			Recovery =	217.84%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) 1,4-Dioxane	2.542	88	359234	181.5062	ng	91
9) Pyridine	2.964	79	978754	159.7190	ng	61
10) N-Nitrosodimethylamine	2.905	74	563778	158.8062	ng	65
12) Benzaldehyde	5.368	77	265247	85.6773	ng	73
13) Aniline	5.469	93	1113098	153.1232	ng	79
14) Pentachloroethane	5.512	117	274250	161.9016	ng	83
15) bis(2-Chloroethyl)ether	5.533	93	792302	149.6513	ng	72
17) Phenol	5.453	94	1114858	148.7899	ng	79
18) 2-Chlorophenol	5.576	128	856633	174.7062	ng	73
19) N-Decane	5.630	57	673611	110.0373	ng	81
20) 1,3-Dichlorobenzene	5.704	146	902046	166.7693	ng	98
22) 1,4-Dichlorobenzene	5.769	146	903914	176.1899	ng	97
23) 1,2-Dichlorobenzene	5.891	146	851662	173.3330	ng	98
24) Benzyl alcohol	5.870	108	562113	181.5434	ng	63
25) bis(2-chloroisopropyl)...	5.982	45	809597	101.0537	ng	96
26) 2-Methylphenol	5.961	108	754376	154.3087	ng	97
27) Acetophenone	6.084	105	933478	139.4650	ng	67
28) Hexachloroethane	6.169	117	340115	157.3524	ng	83
29) N-Nitroso-di-n-propyla...	6.089	70	451167	113.6245	ng	90
30) 3&4-Methylphenol	6.089	108	654267	132.9513	ng	97
33) Nitrobenzene	6.217	77	775834	122.6384	ng	73
34) Isophorone	6.410	82	1428008	131.9767	ng	84
35) 2-Nitrophenol	6.468	139	454649	179.2797	ng	79
36) 2,4-Dimethylphenol	6.500	107	767012	145.0344	ng	86
37) Benzoic Acid	6.629	105	967756	210.1114	ng	40
38) bis(2-Chloroethoxy)met...	6.575	93	948139	151.7612	ng	95
39) 2,4-Dichlorophenol	6.655	162	675259	161.8211	ng	88
40) 1,2,4-Trichlorobenzene	6.725	180	718938	165.9980	ng	97
41) Naphthalene	6.789	128	2304688	157.6488	ng	98
42) 4-Chloroaniline	6.821	127	707888m	155.8467	ng	
43) Hexachlorobutadiene	6.880	225	366343	145.6569	ng	96
44) Caprolactam	7.120	113	311670	206.1650	ng	56
45) 4-Chloro-3-methylphenol	7.190	107	668975	148.9652	ng	72
46) 2-Methylnaphthalene	7.318	142	1550532	162.6920	ng	99
47) 1-Methylnaphthalene	7.398	142	1508355	164.6813	ng	91
48) Methylnaphthalenes (To...	7.398	142	3058609m	327.0945	ng	
49) 1,1'-Biphenyl	7.692	154	1788825	157.4108	ng	93
51) 1,2,4,5-Tetrachloroben...	7.451	216	680095	176.7412	ng	98
52) Hexachlorocyclopentadiene	7.446	237	366202	181.6885	ng	97
53) 2,4,6-Trichlorophenol	7.542	196	472122	181.9675	ng	99
54) 2,4,5-Trichlorophenol	7.569	196	515590m	185.9253	ng	
56) 2-Chloronaphthalene	7.713	162	1407584	172.3873	ng	92
57) 1,4-Dimethylnaphthalene	7.996	156	1126733	186.6152	ng	89
58) Dimethylnaphthalenes (...)	7.996	156	1126733	186.6152	ng	89
59) Diphenyl Ether	7.777	170	1050095	183.6337	ng	76
60) 2-Nitroaniline	7.788	65	434226	112.7186	ng	45
61) Coumarin	7.980	146	601806	189.5653	ng	87
62) Acenaphthylene	8.071	152	2137566	185.6211	ng	97
63) Dimethylphthalate	7.948	163	1584030	164.8737	ng	98
64) 2,6-Dinitrotoluene	7.991	165	329791	154.4201	ng	65
65) Acenaphthene	8.221	153	1434479	175.7093	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM
 Data File: 7M95170.D
 Acq On : 10/ 8/18 13:29

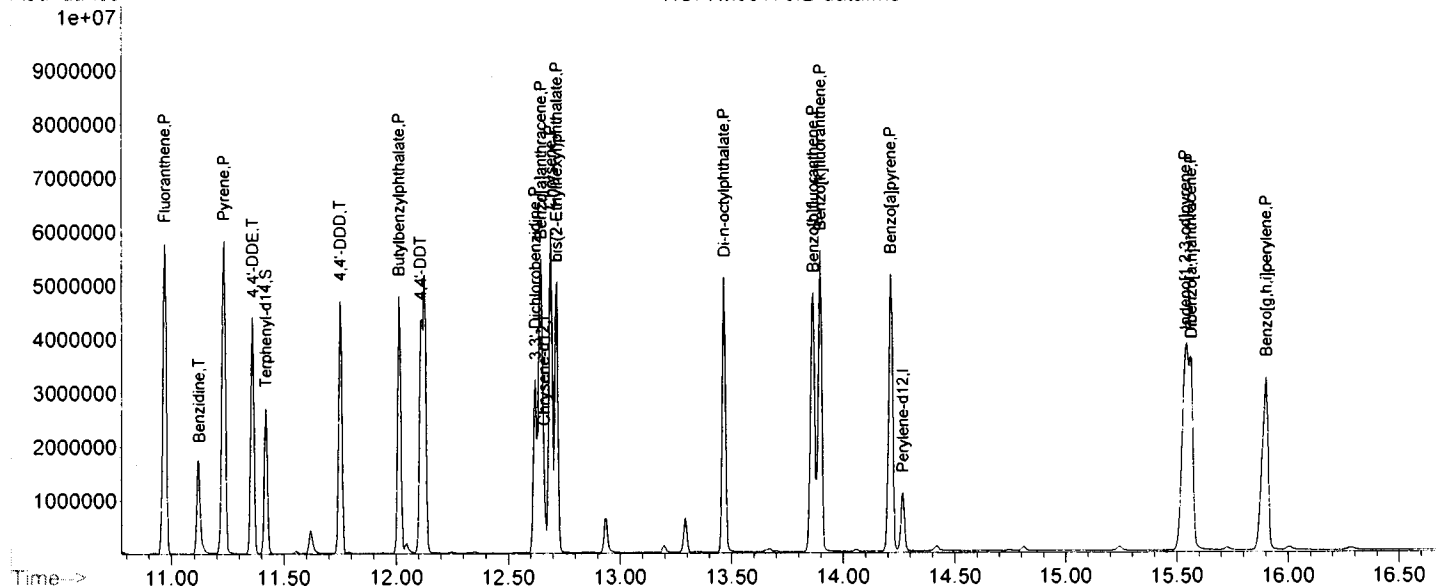
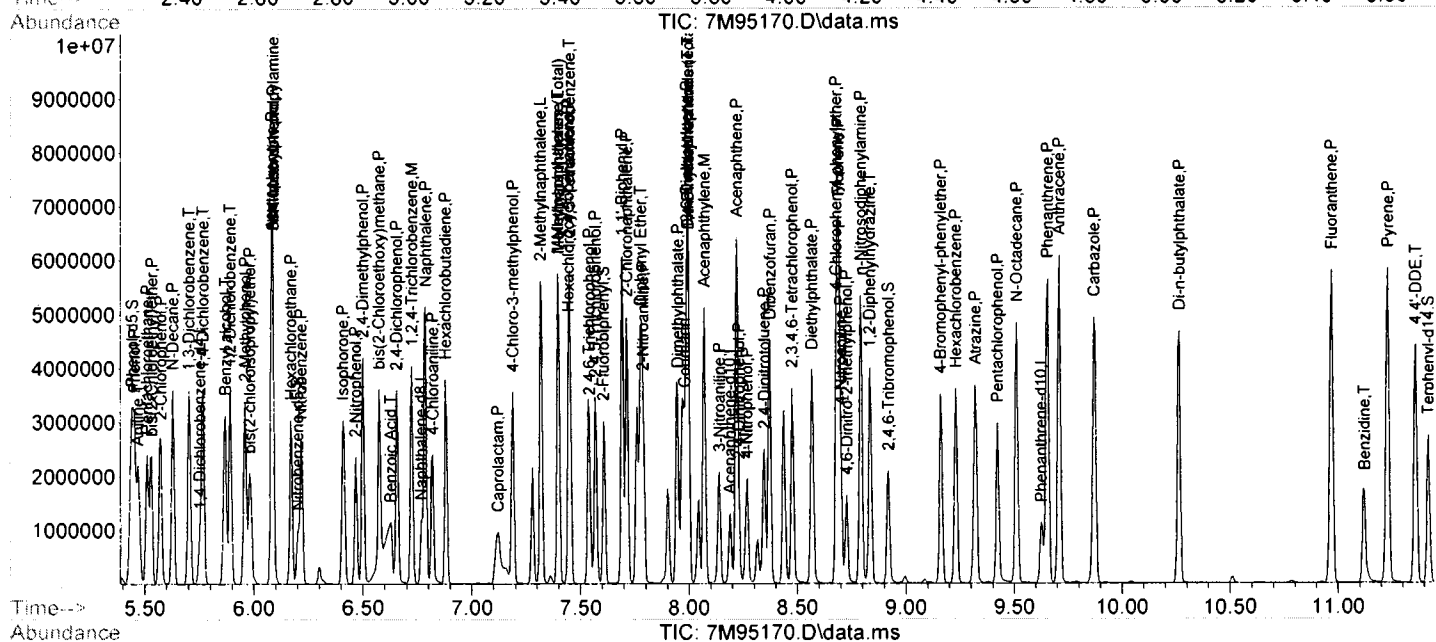
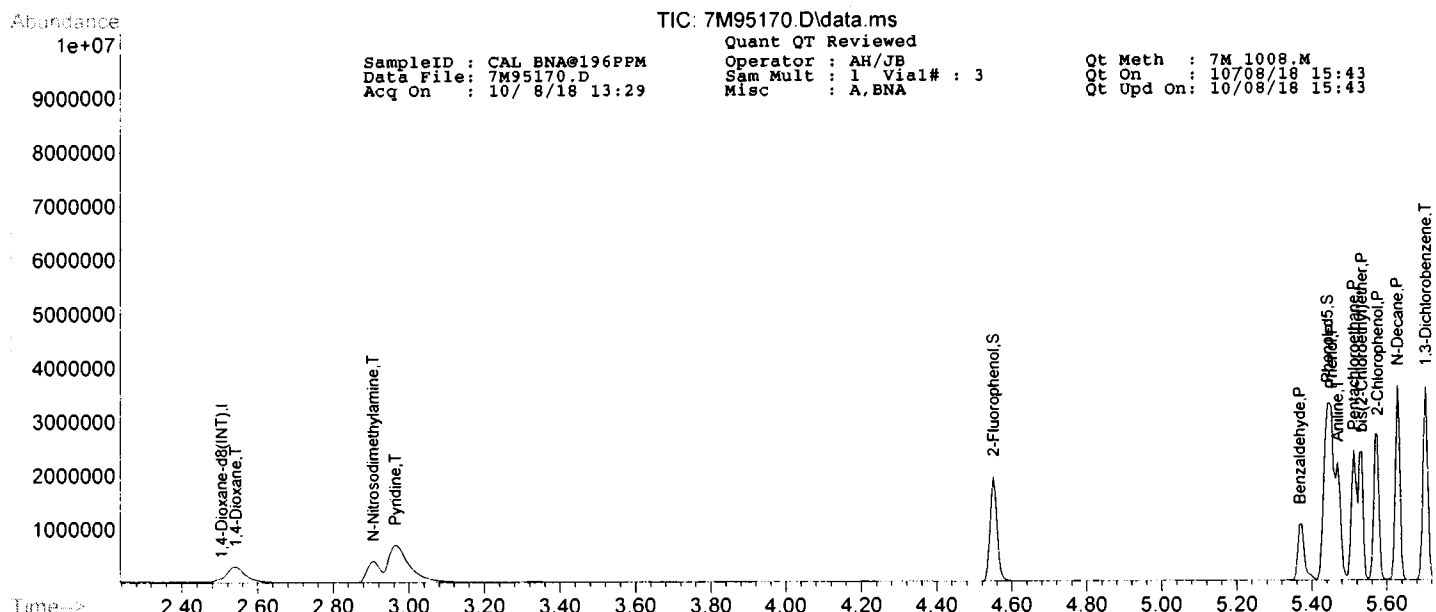
Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/08/18 15:43
 Qt Upd On: 10/08/18 15:43

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.140	138	377296	182.2809	ng	74
67) 2,4-Dinitrophenol	8.231	184	202399	147.9360	ng	29
68) Dibenzofuran	8.376	168	2011927	172.8561	ng	83
69) 2,4-Dinitrotoluene	8.349	165	517792	174.2989	ng	57
70) 4-Nitrophenol	8.269	65	299028	127.7911	ng	79
71) 2,3,4,6-Tetrachlorophenol	8.477	232	443750	185.3375	ng	83
72) Fluorene	8.691	166	1525863	158.4203	ng	99
73) 4-Chlorophenyl-phenyle...	8.680	204	730186	157.2629	ng	86
74) Diethylphthalate	8.568	149	1619588	169.2335	ng	96
75) 4-Nitroaniline	8.701	138	465093	186.4110	ng	69
76) Atrazine	9.321	200	511547	180.8146	ng	95
78) 4,6-Dinitro-2-methylph...	8.728	198	259022	144.6528	ng	69
79) n-Nitrosodiphenylamine	8.792	169	1441794	175.6914	ng	99
81) 1,2-Diphenylhydrazine	8.835	77	1580163	140.1477	ng	78
82) 4-Bromophenyl-phenylether	9.161	248	474669	179.5322	ng	83
83) Hexachlorobenzene	9.230	284	484690	188.4811	ng	67
84) N-Octadecane	9.513	57	813806	108.2014	ng	60
85) Pentachlorophenol	9.423	266	330678	177.1206	ng	96
86) Phenanthrene	9.658	178	2447189	172.6009	ng	99
87) Anthracene	9.711	178	2515556	172.0753	ng	97
88) Carbazole	9.871	167	2350977	177.9316	ng	97
89) Di-n-butylphthalate	10.267	149	2719641	158.9498	ng	97
90) Fluoranthene	10.972	202	2627842	167.3181	ng	94
92) Pyrene	11.234	202	2635055	176.8752	ng	90
93) Benzidine	11.121	184	784936	178.0820	ng	87
95) 4,4'-DDE	11.362	246	569926	203.1705	ng	93
96) 4,4'-DDD	11.752	235	990794	207.4978	ng	96
97) Butylbenzylphthalate	12.014	149	1243221	175.7388	ng	72
98) 4,4'-DDT	12.110	235	820798	200.8528	ng	98
99) 3,3'-Dichlorobenzidine	12.623	252	719960	233.2657	ng	96
100) Benzo[a]anthracene	12.649	228	2529340	184.5583	ng	97
101) Chrysene	12.692	228	2318553	179.7200	ng	98
102) bis(2-Ethylhexyl)phtha...	12.719	149	1678899	179.9113	ng	92
104) Di-n-octylphthalate	13.467	149	2886457	169.0753	ng	99
105) Benzo[b]fluoranthene	13.867	252	2524019m	189.1025	ng	
106) Benzo[k]fluoranthene	13.899	252	2251771m	174.3642	ng	
107) Benzo[a]pyrene	14.215	252	2372366	187.3786	ng	94
108) Indeno[1,2,3-cd]pyrene	15.539	276	2584440	205.6211	ng	90
109) Dibenzo[a,h]anthracene	15.566	278	2143717	175.9457	ng	92
110) Benzo[g,h,i]perylene	15.903	276	2160605	206.3428	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL_BNA@0.5PPM
Data File: 7M95176.D
Acq On : 10/ 8/18 15:50

Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/08/18 16:14
Qt Upd On: 10/07/18 16:40

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	80950	40.00	ng	0.05
21) 1,4-Dichlorobenzene-d4	5.747	152	138488	40.00	ng	0.04
31) Naphthalene-d8	6.762	136	512096	40.00	ng	0.04
50) Acenaphthene-d10	8.172	164	294601	40.00	ng	0.04
77) Phenanthrene-d10	9.615	188	507907	40.00	ng	0.04
91) Chrysene-d12	12.644	240	480570	40.00	ng	0.02
103) Perylene-d12	14.262	264	416727	40.00	ng	0.03

System Monitoring Compounds

11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery	=	0.00%	
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
8) 1,4-Dioxane	2.552	88	718m	0.3881	ng	
9) Pyridine	0.000		0	N.D.	d	
10) N-Nitrosodimethylamine	0.000		0	N.D.	d	
12) Benzaldehyde	0.000		0	N.D.	d	
13) Aniline	5.464	93	2447m	0.3194	ng	
14) Pentachloroethane	0.000		0	N.D.	d	
15) bis(2-Chloroethyl)ether	5.523	93	2550	0.5388	ng	81
17) Phenol	0.000		0	N.D.	d	
18) 2-Chlorophenol	0.000		0	N.D.	d	
19) N-Decane	0.000		0	N.D.	d	
20) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
22) 1,4-Dichlorobenzene	0.000		0	N.D.	d	
23) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
24) Benzyl alcohol	0.000		0	N.D.	d	
25) bis(2-chloroisopropyl)...	0.000		0	N.D.	d	
26) 2-Methylphenol	5.950	108	2317	0.5336	ng	95
27) Acetophenone	0.000		0	N.D.	d	
28) Hexachloroethane	0.000		0	N.D.	d	
29) N-Nitroso-di-n-propyla...	6.078	70	1608	0.3189	ng	85
30) 3&4-Methylphenol	6.073	108	2319	0.4307	ng	100
33) Nitrobenzene	0.000		0	N.D.	d	
34) Isophorone	0.000		0	N.D.	d	
35) 2-Nitrophenol	0.000		0	N.D.	d	
36) 2,4-Dimethylphenol	6.490	107	2242	0.4045	ng	98
37) Benzoic Acid	0.000		0	N.D.	d	
38) bis(2-Chloroethoxy)met...	0.000		0	N.D.	d	
39) 2,4-Dichlorophenol	6.644	162	1744	0.4435	ng	92
40) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
41) Naphthalene	6.778	128	8097	0.5849	ng	97
42) 4-Chloroaniline	6.810	127	1975	0.3955	ng	86
43) Hexachlorobutadiene	0.000		0	N.D.	d	
44) Caprolactam	0.000		0	N.D.	d	
45) 4-Chloro-3-methylphenol	0.000		0	N.D.	d	
46) 2-Methylnaphthalene	0.000		0	N.D.	d	
47) 1-Methylnaphthalene	0.000		0	N.D.	d	
48) Methylnaphthalenes (To...	0.000		0	N.D.	d	
49) 1,1'-Biphenyl	0.000		0	N.D.	d	
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.	d	
52) Hexachlorocyclopentadiene	0.000		0	N.D.	d	
53) 2,4,6-Trichlorophenol	0.000		0	N.D.	d	
54) 2,4,5-Trichlorophenol	0.000		0	N.D.	d	
56) 2-Chloronaphthalene	0.000		0	N.D.	d	
57) 1,4-Dimethylnaphthalene	0.000		0	N.D.	d	
58) Dimethylnaphthalenes (...)	0.000		0	N.D.	d	
59) Diphenyl Ether	0.000		0	N.D.	d	
60) 2-Nitroaniline	0.000		0	N.D.	d	
61) Coumarin	0.000		0	N.D.	d	
62) Acenaphthylene	0.000		0	N.D.	d	
63) Dimethylphthalate	0.000		0	N.D.	d	
64) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
65) Acenaphthene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@0.5PPM

Operator : AH/JB

Qt Meth : 7M_1008.M

Data File: 7M95176.D

Sam Mult : 1 Vial# : 9

Qt On : 10/08/18 16:14

Acq On : 10/ 8/18 15:50

Misc : A,BNA

Qt Upd On: 10/07/18 16:40

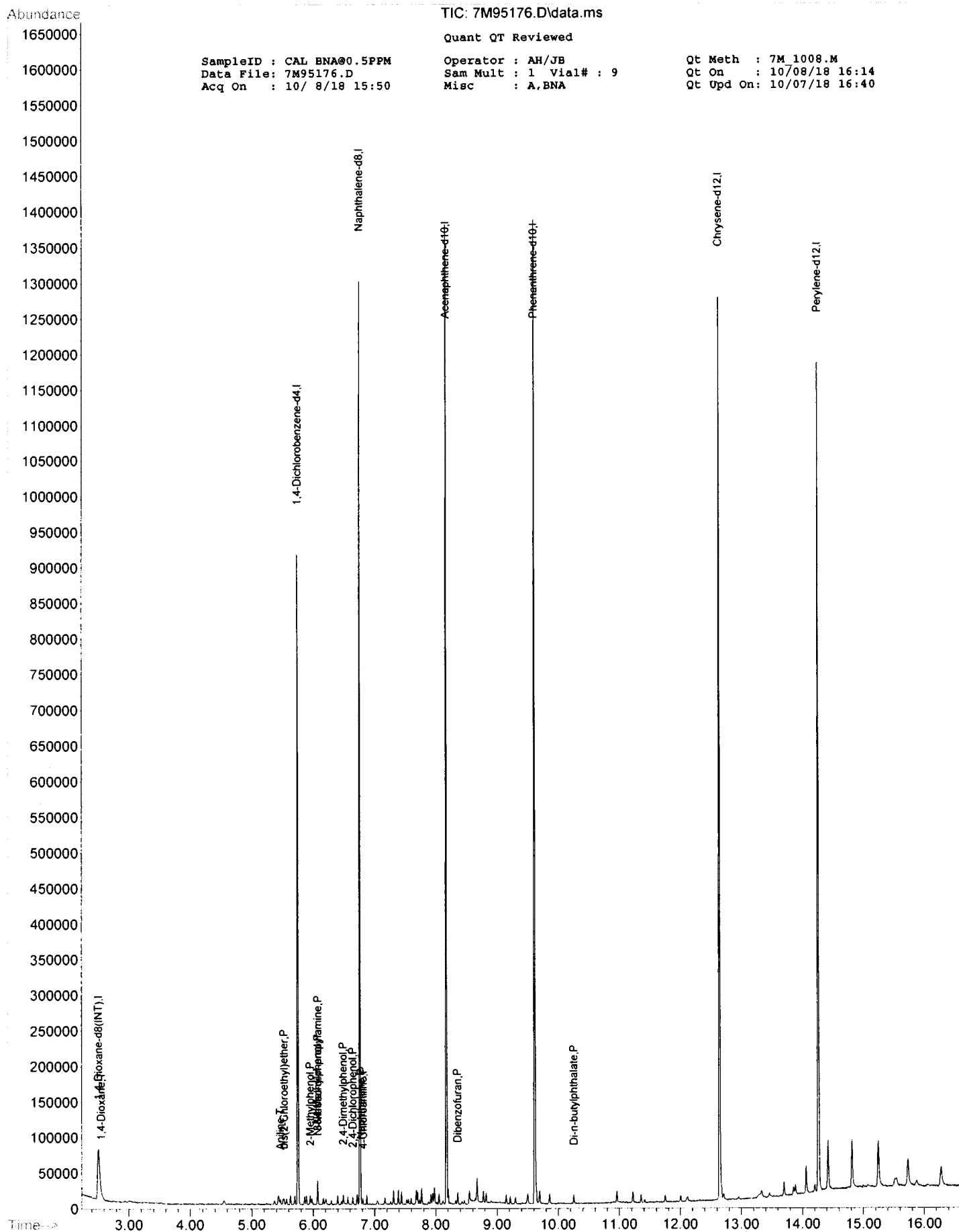
Data Path : G:\GcMsData\2018\GCMS_7\Data\10-08-18\

Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	0.000		0	N.D.	d	
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.354	168	6544	0.5444	ng	88
69) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
70) 4-Nitrophenol	0.000		0	N.D.	d	
71) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	d	
72) Fluorene	0.000		0	N.D.	d	
73) 4-Chlorophenyl-phenyle...	0.000		0	N.D.	d	
74) Diethylphthalate	0.000		0	N.D.	d	
75) 4-Nitroaniline	0.000		0	N.D.	d	
76) Atrazine	0.000		0	N.D.	d	
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	0.000		0	N.D.	d	
81) 1,2-Diphenylhydrazine	0.000		0	N.D.	d	
82) 4-Bromophenyl-phenylether	0.000		0	N.D.	d	
83) Hexachlorobenzene	0.000		0	N.D.	d	
84) N-Octadecane	0.000		0	N.D.	d	
85) Pentachlorophenol	0.000		0	N.D.	d	
86) Phenanthrene	0.000		0	N.D.	d	
87) Anthracene	0.000		0	N.D.	d	
88) Carbazole	0.000		0	N.D.	d	
89) Di-n-butylphthalate	10.256	149	6668	0.3583	ng	96
90) Fluoranthene	0.000		0	N.D.	d	
92) Pyrene	0.000		0	N.D.	d	
93) Benzidine	0.000		0	N.D.	d	
95) 4,4'-DDE	0.000		0	N.D.	d	
96) 4,4'-DDD	0.000		0	N.D.	d	
97) Butylbenzylphthalate	0.000		0	N.D.	d	
98) 4,4'-DDT	0.000		0	N.D.	d	
99) 3,3'-Dichlorobenzidine	0.000		0	N.D.	d	
100) Benzo[a]anthracene	0.000		0	N.D.	d	
101) Chrysene	0.000		0	N.D.	d	
102) bis(2-Ethylhexyl)phtha...	0.000		0	N.D.	d	
104) Di-n-octylphthalate	0.000		0	N.D.	d	
105) Benzo[b]fluoranthene	0.000		0	N.D.	d	
106) Benzo[k]fluoranthene	0.000		0	N.D.	d	
107) Benzo[a]pyrene	0.000		0	N.D.	d	
108) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
109) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
110) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1,4-Dioxane	1	0		51.4668	50	103		70	130
Pyridine	1	0		52.259	50	105		50	150
N-Nitrosodimethylamine	1	0		48.9708	50	98		70	130
Benzaldehyde	1	0		55.4946	50	111		50	150
Aniline	1	0		54.5775	50	109		50	150
Pentachloroethane	1	0		44.7698	50	90		70	130
bis(2-Chloroethyl)ether	1	0		47.7301	50	95		70	130
Phenol	1	0		50.9419	50	102		70	130
2-Chlorophenol	1	0		48.4264	50	97		70	130
1,3-Dichlorobenzene	1	0		50.252	50	101		70	130
1,4-Dichlorobenzene	1	0		47.078	50	94		70	130
1,2-Dichlorobenzene	1	0		46.4331	50	93		70	130
Benzyl alcohol	1	0		49.6557	50	99		70	130
bis(2-chloroisopropyl)ether	1	0		50.7678	50	102		70	130
2-Methylphenol	1	0		47.8923	50	96		70	130
Acetophenone	1	0		57.7012	50	115		70	130
Hexachloroethane	1	0		49.4969	50	99		70	130
N-Nitroso-di-n-propylamine	1	0		51.7346	50	103		70	130
3,4-Methylphenol	1	0		52.4486	50	105		70	130
Nitrobenzene	1	0		49.0439	50	98		70	130
Isophorone	1	0		50.3672	50	101		70	130
2-Nitrophenol	1	0		50.2522	50	101		70	130
2,4-Dimethylphenol	1	0		46.529	50	93		70	130
Benzoic Acid	1	0		39.8333	50	80		70	130
bis(2-Chloroethoxy)methane	1	0		47.1075	50	94		70	130
2,4-Dichlorophenol	1	0		48.2222	50	96		70	130
1,2,4-Trichlorobenzene	1	0		48.648	50	97		70	130
Naphthalene	1	0		49.0863	50	98		70	130
4-Chloroaniline	1	0		58.7346	50	117		50	150
Hexachlorobutadiene	1	0		48.2677	50	97		70	130
Caprolactam	1	0		56.4717	50	113		70	130
4-Chloro-3-methylphenol	1	0		50.3804	50	101		70	130
2-Methylnaphthalene	1	0		51.2824	50	103		70	130
1-Methylnaphthalene	1	0		98.7855	100	99		70	130
1,1'-Biophenyl	1	0		43.9331	50	88		70	130
1,2,4,5-Tetrachlorobenzene	1	0		54.4212	50	109		70	130
Hexachlorocyclopentadiene	1	0		53.6628	50	107		70	130
2,4,6-Trichlorophenol	1	0		50.782	50	102		70	130
2,4,5-Trichlorophenol	1	0		46.282	50	93		70	130
2-Chloronaphthalene	1	0		49.9814	50	100		70	130
1,4-Dimethylnaphthalene	1	0		45.6665	50	91		70	130
Diohenyl Ether	1	0		56.0516	50	112		70	130
2-Nitroaniline	1	0		50.9477	50	102		70	130
Acenaphthylene	1	0		52.1734	50	104		70	130
Dimethylphthalate	1	0		48.1165	50	96		70	130
2,6-Dinitrotoluene	1	0		51.386	50	103		70	130
Acenaphthene	1	0		47.7432	50	95		70	130
3-Nitroaniline	1	0		46.9825	50	94		70	130
2,4-Dinitrophenol	1	0		47.6929	50	95		70	130
Dibenzofuran	1	0		45.7083	50	91		70	130
2,4-Dinitrotoluene	1	0		43.4551	50	87		70	130
4-Nitrophenol	1	0		41.2325	50	82		70	130
2,3,4,6-Tetrachlorophenol	1	0		46.4572	50	93		70	130
Fluorene	1	0		48.2485	50	96		70	130
4-Chlorophenyl-phenylether	1	0		46.1471	50	92		70	130
Diethylphthalate	1	0		46.3645	50	93		70	130
4-Nitroaniline	1	0		48.1837	50	96		70	130
Atrazine	1	0		53.5459	50	107		70	130
4,6-Dinitro-2-methylphenol	1	0		53.2635	50	107		70	130
n-Nitrosodiphenylamine	1	0		48.574	50	97		70	130
1,2-Diphenylhydrazine	1	0		47.8874	50	96		70	130
4-Bromophenyl-phenylether	1	0		50.9105	50	102		70	130
Hexachlorobenzene	1	0		48.9094	50	98		70	130
Pentachlorophenol	1	0		41.6395	50	83		70	130
Phenanthrene	1	0		49.6542	50	99		70	130
Anthracene	1	0		49.6683	50	99		70	130
Carbazole	1	0		49.4302	50	99		70	130
Di-n-butylphthalate	1	0		44.2218	50	88		70	130
Fluoranthene	1	0		50.2506	50	101		70	130
Pvrene	1	0		46.4769	50	93		70	130
Benzidine	1	0		57.1102	50	114		50	150
Butylbenzylphthalate	1	0		47.9084	50	96		70	130
3,3'-Dichlorobenzidine	1	0		45.0962	50	90		50	150
Benzofalanthracene	1	0		45.6564	50	91		70	130
Chrysene	1	0		46.4332	50	93		70	130
bis(2-Ethylhexyl)phthalate	1	0		45.2971	50	91		70	130
Di-n-octylphthalate	1	0		45.7512	50	92		70	130
Benzobifluoranthene	1	0		49.7677	50	100		70	130
Benzokifluoranthene	1	0		47.8789	50	96		70	130
Benzofalovrene	1	0		48.2138	50	96		70	130
Indeno[1,2,3-cd]povrene	1	0		49.1008	50	98		70	130
Dibenzofalanthracene	1	0		50.515	50	101		70	130
Benzofalilpervlene	1	0		49.0606	50	98		70	130

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1,4-Dioxane	1	0		59.3533	50	119		70	130
Pvridine	1	0		54.1245	50	108		50	150
N-Nitrosodimethylamine	1	0		53.9846	50	108		70	130
Benzaldehyd	1	0		49.7228	50	99		50	150
Aniline	1	0		53.7967	50	108		50	150
Pentachloroethane	1	0		45.8888	50	92		70	130
bis(2-Chloroethyl)ether	1	0		50.4534	50	101		70	130
Phenol	1	0		50.4839	50	101		70	130
2-Chlorophenol	1	0		50.8063	50	102		70	130
1,3-Dichlorobenzene	1	0		51.1665	50	102		70	130
1,4-Dichlorobenzene	1	0		49.7361	50	99		70	130
1,2-Dichlorobenzene	1	0		51.7096	50	103		70	130
Benzyl alcohol	1	0		52.2288	50	104		70	130
bis(2-chloroisopropyl)ether	1	0		51.0273	50	102		70	130
2-Methylphenol	1	0		51.3344	50	103		70	130
Acetophenone	1	0		57.9681	50	116		70	130
Hexachloroethane	1	0		49.6171	50	99		70	130
N-Nitroso-di-n-propylamine	1	0		49.577	50	99		70	130
3,4-Methylphenol	1	0		49.7829	50	100		70	130
Nitrobenzene	1	0		50.1882	50	100		70	130
Isophorone	1	0		52.8078	50	106		70	130
2-Nitrophenol	1	0		51.283	50	103		70	130
2,4-Dimethylphenol	1	0		47.6453	50	95		70	130
Benzoic Acid	1	0		36.4874	50	73		70	130
bis(2-Chloroethoxy)methane	1	0		49.1327	50	98		70	130
2,4-Dichlorophenol	1	0		50.6285	50	101		70	130
1,2,4-Trichlorobenzene	1	0		48.7759	50	98		70	130
Naphthalene	1	0		49.6642	50	99		70	130
4-Chloroaniline	1	0		55.3812	50	111		50	150
Hexachlorobutadiene	1	0		49.6399	50	99		70	130
Caprolactam	1	0		53.1664	50	106		70	130
4-Chloro-3-methylphenol	1	0		50.7167	50	101		70	130
2-Methylnaphthalene	1	0		53.2273	50	106		70	130
1-Methylnaphthalene	1	0		109.7703	100	110		70	130
1,1'-Biophenyl	1	0		47.021	50	94		70	130
1,2,4,5-Tetrachlorobenzene	1	0		54.2904	50	109		70	130
Hexachlorocyclopentadiene	1	0		56.2755	50	113		70	130
2,4,6-Trichlorophenol	1	0		49.4801	50	99		70	130
2,4,5-Trichlorophenol	1	0		51.2639	50	103		70	130
2-Chloronaphthalene	1	0		49.6404	50	99		70	130
1,4-Dimethylnaphthalene	1	0		50.9786	50	102		70	130
Diphenyl Ether	1	0		57.1354	50	114		70	130
2-Nitroaniline	1	0		50.2821	50	101		70	130
Acenaphthylene	1	0		55.6911	50	111		70	130
Dimethylnaphthalene	1	0		50.4142	50	101		70	130
2,6-Dinitrotoluene	1	0		50.7318	50	101		70	130
Acenaphthene	1	0		51.6014	50	103		70	130
3-Nitroaniline	1	0		49.7332	50	99		70	130
2,4-Dinitrophenol	1	0		46.6904	50	93		70	130
Dibenzofuran	1	0		48.4955	50	97		70	130
2,4-Dinitrotoluene	1	0		47.8013	50	96		70	130
4-Nitrophenol	1	0		47.2323	50	94		70	130
2,3,4,6-Tetrachlorophenol	1	0		46.8993	50	94		70	130
Fluorene	1	0		52.4011	50	105		70	130
4-Chlorophenyl-phenylether	1	0		50.0193	50	100		70	130
Diethylnaphthalene	1	0		49.1952	50	98		70	130
4-Nitroaniline	1	0		49.082	50	98		70	130
Atrazine	1	0		60.6311	50	121		70	130
4,6-Dinitro-2-methylphenol	1	0		51.1379	50	102		70	130
n-Nitrosodiphenylamine	1	0		49.7536	50	100		70	130
1,2-Diphenylhydrazine	1	0		50.1854	50	100		70	130
4-Bromophenyl-phenylether	1	0		51.5012	50	103		70	130
Hexachlorobenzene	1	0		50.6266	50	101		70	130
Pentachlorophenol	1	0		44.8725	50	90		70	130
Phenanthrene	1	0		49.7203	50	99		70	130
Anthracene	1	0		51.4172	50	103		70	130
Carbazole	1	0		51.3588	50	103		70	130
Di-n-butylphthalate	1	0		46.885	50	94		70	130
Fluoranthene	1	0		51.2439	50	102		70	130
Pvrene	1	0		50.3488	50	101		70	130
Benzydine	1	0		63.9769	50	128		50	150
Butylbenzylphthalate	1	0		49.039	50	98		70	130
3,3'-Dichlorobenzidine	1	0		45.2724	50	91		50	150
Benzo(a)anthracene	1	0		50.0775	50	100		70	130
Chrysene	1	0		51.0665	50	102		70	130
bis(2-Ethylhexyl)phthalate	1	0		45.6343	50	91		70	130
Di-n-octylphthalate	1	0		48.0704	50	96		70	130
Benzo(b)fluoranthene	1	0		50.9607	50	102		70	130
Benzo(k)fluoranthene	1	0		51.859	50	104		70	130
Benzo(a)pyrene	1	0		50.8246	50	102		70	130
Indeno(1,2,3-cd)pyrene	1	0		46.8882	50	94		70	130
Dibenzo(a,h)anthracene	1	0		45.2331	50	90		70	130
Benzo(a,h,i)perylene	1	0		44.7686	50	90		70	130

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1,4-Dioxane	1	0		52.6384	50	105		70	130
Pyridine	1	0		52.9388	50	106		50	150
N-Nitrosodimethylamine	1	0		51.4193	50	103		70	130
Benzaldehyde	1	0		45.6675	50	91		50	150
Aniline	1	0		61.3826	50	123		50	150
Pentachloroethane	1	0		48.1069	50	96		70	130
bis(2-Chloroethyl)ether	1	0		52.4571	50	105		70	130
Phenol	1	0		52.9981	50	106		70	130
2-Chlorophenol	1	0		52.8029	50	106		70	130
1,3-Dichlorobenzene	1	0		52.5815	50	105		70	130
1,4-Dichlorobenzene	1	0		52.3868	50	105		70	130
1,2-Dichlorobenzene	1	0		52.8745	50	106		70	130
Benzyl alcohol	1	0		52.3911	50	105		70	130
bis(2-chloroisopropyl)ether	1	0		53.5524	50	107		70	130
2-Methylphenol	1	0		51.8557	50	104		70	130
Acetophenone	1	0		54.8365	50	110		70	130
Hexachloroethane	1	0		52.4016	50	105		70	130
N-Nitroso-di-n-propylamine	1	0		53.315	50	107		70	130
3,4-Methylenediphenol	1	0		54.8233	50	110		70	130
Nitrobenzene	1	0		52.3013	50	105		70	130
Isophorone	1	0		54.4178	50	109		70	130
2-Nitrophenol	1	0		53.0312	50	106		70	130
2,4-Dimethylphenol	1	0		52.1434	50	104		70	130
Benzoic Acid	1	0		44.7556	50	90		70	130
bis(2-Chloroethoxy)methane	1	0		52.1897	50	104		70	130
2,4-Dichlorophenol	1	0		53.723	50	107		70	130
1,2,4-Trichlorobenzene	1	0		51.7061	50	103		70	130
Naphthalene	1	0		51.4069	50	103		70	130
4-Chloroaniline	1	0		55.2991	50	111		50	150
Hexachlorobutadiene	1	0		52.3943	50	105		70	130
Caprolactam	1	0		54.4498	50	109		70	130
4-Chloro-3-methylphenol	1	0		52.5935	50	105		70	130
2-Methylnaphthalene	1	0		54.7131	50	109		70	130
1-Methylnaphthalene	1	0		106.1468	100	106		70	130
1,1'-Biophenyl	1	0		47.9985	50	96		70	130
1,2,4,5-Tetrachlorobenzene	1	0		54.4278	50	109		70	130
Hexachlorocyclopentadiene	1	0		58.9801	50	118		70	130
2,4,6-Trichlorophenol	1	0		52.6013	50	105		70	130
2,4,5-Trichlorophenol	1	0		54.8719	50	110		70	130
2-Chloronaphthalene	1	0		53.0924	50	106		70	130
1,4-Dimethylnaphthalene	1	0		49.9212	50	100		70	130
Diphenyl Ether	1	0		54.0463	50	108		70	130
2-Nitroaniline	1	0		55.143	50	110		70	130
Acenaphthylene	1	0		57.4337	50	115		70	130
Dimethylphthalate	1	0		53.1584	50	106		70	130
2,6-Dinitrotoluene	1	0		57.0097	50	114		70	130
Acenaphthene	1	0		54.2619	50	109		70	130
3-Nitroaniline	1	0		58.9176	50	118		70	130
2,4-Dinitrophenol	1	0		52.3078	50	105		70	130
Dibenzofuran	1	0		52.5652	50	105		70	130
2,4-Dinitrotoluene	1	0		52.4456	50	105		70	130
4-Nitrophenol	1	0		54.6938	50	109		70	130
2,3,4,6-Tetrachlorophenol	1	0		52.4355	50	105		70	130
Fluorene	1	0		55.2269	50	110		70	130
4-Chlorophenyl-phenylether	1	0		54.0852	50	108		70	130
Diethylphthalate	1	0		52.9993	50	106		70	130
4-Nitroaniline	1	0		52.736	50	105		70	130
Atrazine	1	0		55.9951	50	112		70	130
4,6-Dinitro-2-methylphenol	1	0		56.9094	50	114		70	130
n-Nitrosodiphenylamine	1	0		53.2396	50	106		70	130
1,2-Diphenylhydrazine	1	0		54.756	50	110		70	130
4-Bromophenyl-phenylether	1	0		52.7876	50	106		70	130
Hexachlorobenzene	1	0		51.9031	50	104		70	130
Pentachlorophenol	1	0		47.9137	50	96		70	130
Phenanthrene	1	0		52.8	50	106		70	130
Anthracene	1	0		53.2876	50	107		70	130
Carbazole	1	0		52.8752	50	106		70	130
Di-n-butylphthalate	1	0		54.5948	50	109		70	130
Fluoranthene	1	0		53.3151	50	107		70	130
Pyrene	1	0		53.1225	50	106		70	130
Benzidine	1	0		56.2767	50	113		50	150
Butylbenzylphthalate	1	0		50.5946	50	101		70	130
3,3'-Dichlorobenzidine	1	0		50.1718	50	100		50	150
Benzo[a]anthracene	1	0		52.9904	50	106		70	130
Chrysene	1	0		52.5941	50	105		70	130
bis(2-Ethylhexyl)phthalate	1	0		50.5671	50	101		70	130
Di-n-octylphthalate	1	0		49.06	50	98		70	130
Benzo[b]fluoranthene	1	0		52.5134	50	105		70	130
Benzo[k]fluoranthene	1	0		53.3864	50	107		70	130
Benzo[a]pyrene	1	0		53.272	50	107		70	130
Indeno[1,2,3-cd]pyrene	1	0		52.2998	50	105		70	130
Dibenzofluoranthene	1	0		52.1803	50	104		70	130
Benzo[a]h. iloperylene	1	0		52.1189	50	104		70	130

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1,4-Dioxane	1	0		51.2417	50	102		70	130
Pyridine	1	0		52.1172	50	104		50	150
N-Nitrosodimethylamine	1	0		52.228	50	104		70	130
Benzaldehyde	1	0		51.8692	50	104		50	150
Aniline	1	0		62.1202	50	124		50	150
Pentachloroethane	1	0		47.6535	50	95		70	130
bis(2-Chloroethyl)ether	1	0		52.5108	50	105		70	130
Phenol	1	0		52.6073	50	105		70	130
2-Chlorophenol	1	0		51.5739	50	103		70	130
1,3-Dichlorobenzene	1	0		52.0096	50	104		70	130
1,4-Dichlorobenzene	1	0		50.3683	50	101		70	130
1,2-Dichlorobenzene	1	0		50.5405	50	101		70	130
Benzyl alcohol	1	0		51.8036	50	104		70	130
bis(2-chloroisopropyl)ether	1	0		53.4383	50	107		70	130
2-Methylphenol	1	0		52.864	50	106		70	130
Acetophenone	1	0		51.9241	50	104		70	130
Hexachloroethane	1	0		50.4397	50	101		70	130
N-Nitroso-di-n-propylamine	1	0		50.5595	50	101		70	130
3,4-Methylphenol	1	0		50.6628	50	101		70	130
Nitrobenzene	1	0		51.2491	50	102		70	130
Isophorone	1	0		53.377	50	107		70	130
2-Nitrophenol	1	0		51.7496	50	103		70	130
2,4-Dimethylphenol	1	0		50.9888	50	102		70	130
Benzoic Acid	1	0		43.6392	50	87		70	130
bis(2-Chloroethoxy)methane	1	0		51.251	50	103		70	130
2,4-Dichlorophenol	1	0		50.4691	50	101		70	130
1,2,4-Trichlorobenzene	1	0		50.3856	50	101		70	130
Naphthalene	1	0		51.9337	50	104		70	130
4-Chloroaniline	1	0		53.2541	50	107		50	150
Hexachlorobutadiene	1	0		52.2978	50	105		70	130
Caprolactam	1	0		55.5353	50	111		70	130
4-Chloro-3-methylphenol	1	0		50.6572	50	101		70	130
2-Methylnaphthalene	1	0		51.7499	50	103		70	130
1-Methylnaphthalene	1	0		107.7909	100	108		70	130
1,1'-Biophenyl	1	0		46.084	50	92		70	130
1,2,4,5-Tetrachlorobenzene	1	0		51.839	50	104		70	130
Hexachlorocyclopentadiene	1	0		56.8594	50	114		70	130
2,4,6-Trichlorophenol	1	0		49.8172	50	100		70	130
2,4,5-Trichlorophenol	1	0		48.3961	50	97		70	130
2-Chloronaphthalene	1	0		48.6681	50	97		70	130
1,4-Dimethylnaphthalene	1	0		44.2678	50	89		70	130
Diphenyl Ether	1	0		50.9352	50	102		70	130
2-Nitroaniline	1	0		52.5114	50	105		70	130
Acenaphthylene	1	0		52.909	50	106		70	130
Dimethylnaphthalene	1	0		49.4838	50	99		70	130
2,6-Dinitrotoluene	1	0		48.3168	50	97		70	130
Acenaphthene	1	0		49.229	50	98		70	130
3-Nitroaniline	1	0		53.4619	50	107		70	130
2,4-Dinitrophenol	1	0		51.0219	50	102		70	130
Dibenzofuran	1	0		50.7024	50	101		70	130
2,4-Dinitrotoluene	1	0		50.5872	50	101		70	130
4-Nitrophenol	1	0		49.1269	50	98		70	130
2,3,4,6-Tetrachlorophenol	1	0		47.2872	50	95		70	130
Fluorene	1	0		49.0599	50	98		70	130
4-Chlorophenyl-phenylether	1	0		50.6312	50	101		70	130
Diethylnaphthalene	1	0		48.7791	50	98		70	130
4-Nitroaniline	1	0		51.3659	50	103		70	130
Atrazine	1	0		54.9585	50	110		70	130
4,6-Dinitro-2-methylphenol	1	0		55.1021	50	110		70	130
n-Nitrosodiphenylamine	1	0		49.2371	50	98		70	130
1,2-Diphenylhydrazine	1	0		52.2434	50	104		70	130
4-Bromophenyl-phenylether	1	0		50.6876	50	101		70	130
Hexachlorobenzene	1	0		49.4463	50	99		70	130
Pentachlorophenol	1	0		46.6992	50	93		70	130
Phenanthrene	1	0		51.1776	50	102		70	130
Anthracene	1	0		49.7933	50	100		70	130
Carbazole	1	0		49.7854	50	100		70	130
Di-n-butylphthalate	1	0		50.3952	50	101		70	130
Fluoranthene	1	0		49.5005	50	99		70	130
Pvrene	1	0		49.0611	50	98		70	130
Benzidine	1	0		64.3197	50	129		50	150
Butylbenzylphthalate	1	0		48.7593	50	98		70	130
3,3'-Dichlorobenzidine	1	0		45.2477	50	90		50	150
Benzo[a]anthracene	1	0		48.621	50	97		70	130
Chrysene	1	0		49.6321	50	99		70	130
bis(2-Ethylhexyl)phthalate	1	0		47.7287	50	95		70	130
Di-n-octylphthalate	1	0		49.6521	50	99		70	130
Benzo[b]fluoranthene	1	0		50.8717	50	102		70	130
Benzo[k]fluoranthene	1	0		48.9822	50	98		70	130
Benzo[a]pyrene	1	0		48.8681	50	98		70	130
Indeno[1,2,3-cd]pyrene	1	0		48.0555	50	96		70	130
Dibenzofluoranthene	1	0		48.2246	50	96		70	130
Benzo[a,h]perylene	1	0		48.9822	50	98		70	130

Form7

8101509 0439

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00

Data File: 10M71437.D
Method: EPA 8270D

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.73	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.76	49.67	50	**		0.964	0.958	0.65	
Pyridine	1	0		3.25	54.24	50	**		2.286	2.429	8.48	
N-Nitrosodimethylamine	1	0		3.18	51.26	50	**		1.333	1.367	2.52	
2-Fluorophenol	1	0	S	4.71	50.52	50	**		2.316	2.339	1.03	
Benzaldehyde	1	0		5.53	53.79	50	20	0.01	1.115	1.199	7.58	
Aniline	1	0		5.62	52.45	50	**		2.883	3.406	4.89	
Pentachloroethane	1	0		5.66	53.51	50	**	0.05	0.876	0.938	7.03	
bis(2-Chloroethyl)ether	1	0		5.67	51.93	50	20	0.7	2.349	2.404	3.87	
Phenol-d5	1	0	S	5.58	53.79	50	**		3.134	3.372	7.58	
Phenol	1	0		5.59	55.96	50	20	0.8	3.104	3.474	11.93	
2-Chlorophenol	1	0		5.72	52.41	50	20	0.8	2.592	2.718	4.82	
N-Decane	1	0		5.75	55.41	50	**	0.05	2.035	2.255	10.81	
1,3-Dichlorobenzene	1	0		5.85	51.84	50	**		2.875	2.981	3.69	
1,4-Dichlorobenzene-d4	1	0	I	5.89	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	49.97	50	20		1.472	1.471	0.06	
1,2-Dichlorobenzene	1	0		6.03	48.90	50	**		1.438	1.407	2.20	
Benzyl alcohol	1	0		6.01	50.94	50	**		0.812	0.827	1.87	
bis(2-chloroisopropyl)ether	1	0		6.11	50.78	50	20	0.01	1.365	1.387	1.56	
2-Methylphenol	1	0		6.10	50.08	50	20	0.7	1.163	1.165	0.17	
Acetophenone	1	0		6.22	53.06	50	20	0.01	1.647	1.748	6.13	
Hexachloroethane	1	0		6.31	52.39	50	20	0.3	0.570	0.597	4.79	
N-Nitroso-di-n-propylamine	1	0		6.21	54.57	50	20	0.5	0.768	0.838	9.14	
3&4-Methylphenol	1	0		6.21	55.27	50	20		1.105	1.221	10.54	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	24.73	25	**		0.121	0.124	1.06	
Nitrobenzene	1	0		6.36	48.16	50	20	0.2	0.348	0.335	3.68	
Isophorone	1	0		6.54	49.53	50	20	0.4	0.598	0.593	0.94	
2-Nitrophenol	1	0		6.60	49.06	50	20	0.1	0.190	0.187	1.87	
2,4-Dimethylphenol	1	0		6.63	48.35	50	20	0.2	0.355	0.343	3.30	
Benzoic Acid	1	0		6.70	33.91	50	**		0.296	0.179	32.19	
bis(2-Chloroethoxy)methane	1	0		6.70	49.59	50	20	0.3	0.375	0.372	0.83	
2,4-Dichlorophenol	1	0		6.79	49.80	50	20	0.2	0.310	0.308	0.40	
1,2,4-Trichlorobenzene	1	0		6.85	47.96	50	**		0.336	0.322	4.08	
Naphthalene	1	0		6.91	50.07	50	20	0.7	1.083	1.063	0.14	
4-Chloroaniline	1	0		6.95	57.37	50	20	0.01	0.344	0.395	14.74	
Hexachlorobutadiene	1	0		7.00	47.64	50	20	0.01	0.188	0.179	4.72	
Caprolactam	1	0		7.23	48.44	50	20	0.01	0.112	0.105	3.12	
4-Chloro-3-methylphenol	1	0		7.31	51.49	50	20	0.2	0.284	0.292	2.97	
2-Methylnaphthalene	1	0		7.45	50.43	50	**	0.4	0.701	0.707	0.86	
1-Methylnaphthalene	1	0		7.53	50.03	50	**	0.4	0.690	0.690	0.05	
Methylnaphthalenes	1	0		7.45	99.86	100	**			0.693	0.14	
1,1'-Biphenyl	1	0		7.82	48.75	50	20	0.01	0.871	0.850	2.49	
Acenaphthene-d10	1	0	I	8.33	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.58	47.79	50	20	0.01	0.548	0.524	4.43	
Hexachlorocyclopentadiene	1	0		7.57	33.59	50	20	0.05	0.188	0.132	32.83	C1
2,4,6-Trichlorophenol	1	0		7.67	48.44	50	20	0.2	0.333	0.323	3.12	
2,4,5-Trichlorophenol	1	0		7.71	48.47	50	20	0.2	0.354	0.343	3.06	
2-Fluorobiphenyl	1	0	S	7.74	24.06	25	**		1.281	1.232	3.76	
2-Chloronaphthalene	1	0		7.85	49.16	50	20	0.8	1.056	1.038	1.69	
1,4-Dimethylnaphthalene	1	0		8.13	50.88	50	**		0.872	0.887	1.76	
Dimethylnaphthalenes	1	0		8.13	50.88	50	20			0.887	1.76	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method
Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0440

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00

Data File: 10M71437.D
Method: EPA 8270D

Instrument: GCMS 10

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.91	49.94	50	**		0.783	0.782	0.11	
2-Nitroaniline	1	0		7.93	48.20	50	20	0.01	0.375	0.362	3.59	
Coumarin	1	0		8.12	53.46		**		0.389			
Acenaphthylene	1	0		8.21	47.39	50	20	0.9	1.558	1.477	5.22	
Dimethylphthalate	1	0		8.07	48.43	50	20	0.01	1.234	1.195	3.14	
2,6-Dinitrotoluene	1	0		8.13	52.11	50	20	0.2	0.257	0.268	4.22	
Acenaphthene	1	0		8.36	49.35	50	20	0.9	1.099	1.084	1.30	
3-Nitroaniline	1	0		8.28	49.06	50	20	0.01	0.280	0.304	1.88	
2,4-Dinitrophenol	1	0		8.38	39.56	50	20	0.01	0.151	0.107	20.87	C1
Dibenzofuran	1	0		8.52	46.41	50	20	0.8	1.584	1.475	7.18	
2,4-Dinitrotoluene	1	0		8.49	45.82	50	20	0.2	0.380	0.370	8.37	
4-Nitrophenol	1	0		8.41	43.27	50	20	0.01	0.204	0.191	13.46	
2,3,4,6-Tetrachlorophenol	1	0		8.63	47.22	50	20	0.01	0.308	0.291	5.57	
Fluorene	1	0		8.84	47.44	50	20	0.9	1.260	1.195	5.13	
4-Chlorophenyl-phenylether	1	0		8.82	49.86	50	20	0.4	0.601	0.599	0.27	
Diethylphthalate	1	0		8.70	49.04	50	20	0.01	1.219	1.196	1.92	
4-Nitroaniline	1	0		8.85	46.90	50	20	0.01	0.325	0.321	6.20	
Atrazine	1	0		9.47	45.88	50	20	0.01	0.409	0.375	8.23	
Phenanthrene-d10	1	0	I	9.80	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.88	46.36	50	20	0.01	0.114	0.106	7.28	
n-Nitrosodiphenylamine	1	0		8.94	50.63	50	20	0.01	0.603	0.611	1.27	
2,4,6-Tribromophenol	1	0	S	9.08	46.44	50	**		0.089	0.088	7.12	
1,2-Diphenylhydrazine	1	0		8.98	54.29	50	**		0.736	0.799	8.58	
4-Bromophenyl-phenylether	1	0		9.32	50.66	50	20	0.1	0.185	0.188	1.31	
Hexachlorobenzene	1	0		9.39	48.84	50	20	0.1	0.199	0.194	2.32	
N-Octadecane	1	0		9.64	54.53	50	**	0.05	0.338	0.369	9.06	
Pentachlorophenol	1	0		9.59	51.81	50	20	0.05	0.097	0.099	3.61	
Phenanthrene	1	0		9.83	50.35	50	20	0.7	1.057	1.064	0.71	
Anthracene	1	0		9.88	51.40	50	20	0.7	1.073	1.103	2.79	
Carbazole	1	0		10.05	50.43	50	20	0.01	0.976	0.984	0.85	
Di-n-butylphthalate	1	0		10.42	47.24	50	20	0.01	1.117	1.168	5.52	
Fluoranthene	1	0		11.16	51.57	50	20	0.6	1.115	1.150	3.14	
Chrysene-d12	1	0	I	12.86	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.43	46.87	50	20	0.6	1.233	1.156	6.27	
Benidine	1	0		11.32	41.99	50	**		0.463	0.402	16.02	
Terphenyl-d14	1	0	S	11.61	22.14	25	**		0.733	0.649	11.43	
4,4'-DDE	1	0		11.54	44.14		**		0.254			
4,4'-DDD	1	0		11.94	46.21		**		0.432			
Butylbenzylphthalate	1	0		12.18	49.48	50	20	0.01	0.536	0.515	1.05	
4,4'-DDT	1	0		12.29	46.93		**		0.383			
3,3'-Dichlorobenzidine	1	0		12.81	50.22	50	20	0.01	0.352	0.372	0.44	
Benzo[a]anthracene	1	0		12.85	47.52	50	20	0.8	1.110	1.055	4.97	
Chrysene	1	0		12.89	45.99	50	20	0.7	1.090	1.002	8.02	
bis(2-Ethylhexyl)phthalate	1	0		12.87	47.60	50	20	0.01	0.765	0.728	4.81	
Perylene-d12	1	0	I	14.49	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.62	46.80	50	20	0.01	1.236	1.260	6.41	
Benzo[b]fluoranthene	1	0		14.07	50.82	50	20	0.7	1.086	1.103	1.64	
Benzo[k]fluoranthene	1	0		14.10	51.70	50	20	0.7	1.069	1.106	3.39	
Benzo[a]pyrene	1	0		14.44	50.26	50	20	0.7	1.054	1.060	0.52	
Indeno[1,2,3-cd]pyrene	1	0		15.86	49.54	50	20	0.5	1.110	1.099	0.92	
Dibenzo[a,h]anthracene	1	0		15.87	50.34	50	20	0.4	0.920	0.927	0.67	
Benzo[g,h,i]perylene	1	0		16.25	48.94	50	20	0.5	0.980	0.959	2.11	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 2 of 3
**- No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0441

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00

Data File: 10M71437.D
Method: EPA 8270D

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.694	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.872	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

Page 3 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 10M71437.D
Acq On : 10/19/18 09:35

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1008.M
Qt On : 10/19/18 10:04
Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	39372	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.893	152	81447	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	309527	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	196345	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	338144	40.00	ng	0.00
91) Chrysene-d12	12.863	240	353562	40.00	ng	0.00
103) Perylene-d12	14.494	264	329334	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.711	112	115138	50.52	ng	-0.01
Spiked Amount 100.000			Recovery	=	50.52%	
16) Phenol-d5	5.578	99	165934	53.79	ng	0.00
Spiked Amount 100.000			Recovery	=	53.79%	
32) Nitrobenzene-d5	6.343	128	24068	24.73	ng	0.00
Spiked Amount 50.000			Recovery	=	49.46%	
55) 2-Fluorobiphenyl	7.739	172	151245	24.06	ng	0.00
Spiked Amount 50.000			Recovery	=	48.12%	
80) 2,4,6-Tribromophenol	9.076	330	37283	46.44	ng	0.00
Spiked Amount 100.000			Recovery	=	46.44%	
94) Terphenyl-d14	11.606	244	143440	22.14	ng	0.00
Spiked Amount 50.000			Recovery	=	44.28%	
Target Compounds						
8) 1,4-Dioxane	2.759	88	47133	49.6740	ng	94
9) Pyridine	3.251	79	119523m	54.2415	ng	
10) N-Nitrosodimethylamine	3.182	74	67259	51.2615	ng	79
12) Benzaldehyde	5.530	77	59008	53.7876	ng	69
13) Aniline	5.621	93	167641	52.4468	ng	72
14) Pentachloroethane	5.658	117	46148	53.5139	ng	77
15) bis(2-Chloroethyl) ether	5.669	93	118322	51.9341	ng	74
17) Phenol	5.594	94	170977	55.9629	ng	86
18) 2-Chlorophenol	5.717	128	133742	52.4110	ng	73
19) N-Decane	5.749	57	110961	55.4053	ng	81
20) 1,3-Dichlorobenzene	5.845	146	146696	51.8445	ng	98
22) 1,4-Dichlorobenzene	5.909	146	149758	49.9681	ng	96
23) 1,2-Dichlorobenzene	6.032	146	143210	48.8999	ng	96
24) Benzyl alcohol	6.006	108	84177	50.9369	ng	74
25) bis(2-chloroisopropyl)...	6.113	45	141181	50.7794	ng	82
26) 2-Methylphenol	6.097	108	118634	50.0847	ng	90
27) Acetophenone	6.220	105	177996	53.0633	ng	82
28) Hexachloroethane	6.305	117	60810	52.3929	ng	89
29) N-Nitroso-di-n-propyla...	6.214	70	85304	54.5690	ng	77
30) 3&4-Methylphenol	6.214	108	124348	55.2715	ng	96
33) Nitrobenzene	6.359	77	129518	48.1610	ng	80
34) Isophorone	6.541	82	229246	49.5279	ng	83
35) 2-Nitrophenol	6.605	139	72210	49.0642	ng	89
36) 2,4-Dimethylphenol	6.626	107	132830	48.3503	ng	92
37) Benzoic Acid	6.701	105	69292	33.9068	ng	81
38) bis(2-Chloroethoxy)met...	6.696	93	143975	49.5867	ng	93
39) 2,4-Dichlorophenol	6.787	162	119360	49.7982	ng	85
40) 1,2,4-Trichlorobenzene	6.851	180	124619	47.9607	ng	98
41) Naphthalene	6.915	128	411287	50.0683	ng	98
42) 4-Chloroaniline	6.952	127	152679	57.3702	ng	97
43) Hexachlorobutadiene	6.995	225	69298	47.6410	ng	95
44) Caprolactam	7.225	113	40494	48.4381	ng	65
45) 4-Chloro-3-methylphenol	7.311	107	113068	51.4868	ng	85
46) 2-Methylnaphthalene	7.450	142	273653	50.4313	ng	99
47) 1-Methylnaphthalene	7.530	142	267012	50.0261	ng	94
48) Methylnaphthalenes (To...	7.450	142	536471m	99.8617	ng	
49) 1,1'-Biphenyl	7.824	154	328761	48.7529	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	128612	47.7873	ng	97
52) Hexachlorocyclopentadiene	7.567	237	32451	33.5864	ng	95
53) 2,4,6-Trichlorophenol	7.674	196	79204m	48.4396	ng	
54) 2,4,5-Trichlorophenol	7.707	196	84183m	48.4720	ng	
56) 2-Chloronaphthalene	7.851	162	254863	49.1566	ng	91
57) 1,4-Dimethylnaphthalene	8.129	156	217737	50.8823	ng	88
58) Dimethylnaphthalenes (...)	8.129	156	217737	50.8823	ng	88
59) Diphenyl Ether	7.910	170	191850	49.9431	ng	79
60) 2-Nitroaniline	7.931	65	88814	48.2033	ng	40
61) Coumarin	8.118	146	102063	53.4575	ng	65
62) Acenaphthylene	8.209	152	362395	47.3899	ng	98
63) Dimethylphthalate	8.070	163	293257	48.4287	ng	99
64) 2,6-Dinitrotoluene	8.129	165	65669	52.1108	ng	76
65) Acenaphthene	8.364	153	266135	49.3520	ng	94

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 10M_1008.M
 Data File: 10M71437.D Sam Mult : 1 Vial# : 2 Qt On : 10/19/18 10:04
 Acq On : 10/19/18 09:35 Misc : A,BNA Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	74685	49.0599	ng	70
67)	2,4-Dinitrophenol	8.380	184	26195	39.5645	ng	39
68)	Dibenzofuran	8.520	168	361951	46.4124	ng	85
69)	2,4-Dinitrotoluene	8.493	165	90757	45.8164	ng	67
70)	4-Nitrophenol	8.413	65	46762	43.2686	ng	59
71)	2,3,4,6-Tetrachlorophenol	8.627	232	71449	47.2156	ng	84
72)	Fluorene	8.840	166	293285	47.4365	ng	97
73)	4-Chlorophenyl-phenyle...	8.824	204	147101	49.8645	ng	84
74)	Diethylphthalate	8.701	149	293525	49.0412	ng	96
75)	4-Nitroaniline	8.851	138	78711	46.8984	ng	93
76)	Atrazine	9.466	200	92157	45.8826	ng	97
78)	4,6-Dinitro-2-methylph...	8.878	198	44649	46.3622	ng	66
79)	n-Nitrosodiphenylamine	8.942	169	258141	50.6338	ng	98
81)	1,2-Diphenylhydrazine	8.985	77	337692	54.2909	ng	82
82)	4-Bromophenyl-phenylether	9.317	248	79329	50.6569	ng	90
83)	Hexachlorobenzene	9.391	284	82143	48.8382	ng	69
84)	N-Octadecane	9.637	57	156014	54.5300	ng	76
85)	Pentachlorophenol	9.589	266	41858	51.8054	ng	98
86)	Phenanthrene	9.830	178	449862	50.3535	ng	99
87)	Anthracene	9.883	178	466027	51.3975	ng	98
88)	Carbazole	10.055	167	415987	50.4274	ng	96
89)	Di-n-butylphthalate	10.418	149	493896	47.2404	ng	97
90)	Fluoranthene	11.162	202	485918	51.5699	ng	87
92)	Pyrene	11.429	202	510695	46.8661	ng	84
93)	Benzidine	11.317	184	177671	41.9921	ng	81
95)	4,4'-DDE	11.536	246	99213	44.1433	ng	94
96)	4,4'-DDD	11.937	235	176403	46.2050	ng	93
97)	Butylbenzylphthalate	12.183	149	227595	49.4753	ng	79
98)	4,4'-DDT	12.290	235	158851	46.9274	ng	94
99)	3,3'-Dichlorobenzidine	12.815	252	164527	50.2185	ng	97
100)	Benzo[a]anthracene	12.852	228	466127	47.5165	ng	100
101)	Chrysene	12.895	228	443031	45.9882	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.868	149	321923	47.5966	ng	95
104)	Di-n-octylphthalate	13.617	149	518632	46.7971	ng	99
105)	Benzo[b]fluoranthene	14.066	252	454230	50.8221	ng	94
106)	Benzo[k]fluoranthene	14.098	252	455205m	51.6973	ng	
107)	Benzo[a]pyrene	14.435	252	436225	50.2613	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.863	276	452556	49.5380	ng	90
109)	Dibenzo[a,h]anthracene	15.874	278	381470	50.3372	ng	90
110)	Benzo[g,h,i]perylene	16.254	276	394880	48.9448	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form7

8101509 0445

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00Data File: 10M71437.D
Method: EPA 625.1

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.73	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.76	49.67	50	5	70	0.964	0.958	0.65	
Pyridine	1	0		3.25	54.24	50	2.5	75	2.286	2.429	8.48	
N-Nitrosodimethylamine	1	0		3.18	51.26	50	15	70	1.333	1.367	2.52	
2-Fluorophenol	1	0	S	4.71	50.52	50	**		2.316	2.339	1.03	
Benzaldehyde	1	0		5.53	53.79	50	2.5	115	1.115	1.199	7.58	
Aniline	1	0		5.62	52.45	50	5	70	2.883	3.406	4.89	
Pentachloroethane	1	0		5.66	53.51	50	30	70	0.876	0.938	7.03	
bis(2-Chloroethyl)ether	1	0		5.67	51.93	50	26	65	2.349	2.404	3.87	
Phenol-d5	1	0	S	5.58	53.79	50	**		3.134	3.372	7.58	
Phenol	1	0		5.59	55.96	50	24	65	3.104	3.474	11.93	
2-Chlorophenol	1	0		5.72	52.41	50	27.5	65	2.592	2.718	4.82	
N-Decane	1	0		5.75	55.41	50	30	70	2.035	2.255	10.81	
1,3-Dichlorobenzene	1	0		5.85	51.84	50	30	70	2.875	2.981	3.69	
1,4-Dichlorobenzene-d4	1	0	I	5.89	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	49.97	50	30	70	1.472	1.471	0.06	
1,2-Dichlorobenzene	1	0		6.03	48.90	50	30	70	1.438	1.407	2.20	
Benzyl alcohol	1	0		6.01	50.94	50	30	70	0.812	0.827	1.87	
bis(2-chloroisopropyl)ether	1	0		6.11	50.78	50	31.5	69.5	1.365	1.387	1.56	
2-Methylphenol	1	0		6.10	50.08	50	30	70	1.163	1.165	0.17	
Acetophenone	1	0		6.22	53.06	50	30	70	1.647	1.748	6.13	
Hexachloroethane	1	0		6.31	52.39	50	27.5	65	0.570	0.597	4.79	
N-Nitroso-di-n-propylamine	1	0		6.21	54.57	50	29.5	85	0.768	0.838	9.14	
3&4-Methylphenol	1	0		6.21	55.27	50	30	70	1.105	1.221	10.54	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	24.73	25	**		0.121	0.124	1.06	
Nitrobenzene	1	0		6.36	48.16	50	27	79	0.348	0.335	3.68	
Isophorone	1	0		6.54	49.53	50	26	90	0.598	0.593	0.94	
2-Nitrophenol	1	0		6.60	49.06	50	30.5	81.5	0.190	0.187	1.87	
2,4-Dimethylphenol	1	0		6.63	48.35	50	29	65	0.355	0.343	3.30	
Benzoic Acid	1	0		6.70	33.91	50	5	70	0.296	0.179	32.19	
bis(2-Chloroethoxy)methane	1	0		6.70	49.59	50	26	82	0.375	0.372	0.83	
2,4-Dichlorophenol	1	0		6.79	49.80	50	27	65	0.310	0.308	0.40	
1,2,4-Trichlorobenzene	1	0		6.85	47.96	50	25.5	65	0.336	0.322	4.08	
Naphthalene	1	0		6.91	50.07	50	35	65	1.083	1.063	0.14	
4-Chloroaniline	1	0		6.95	57.37	50	15	115	0.344	0.395	14.74	
Hexachlorobutadiene	1	0		7.00	47.64	50	34	65	0.188	0.179	4.72	
Caprolactam	1	0		7.23	48.44	50	30	70	0.112	0.105	3.12	
4-Chloro-3-methylphenol	1	0		7.31	51.49	50	34	65	0.284	0.292	2.97	
2-Methylnaphthalene	1	0		7.45	50.43	50	30	70	0.701	0.707	0.86	
1-Methylnaphthalene	1	0		7.53	50.03	50	30	70	0.690	0.690	0.05	
Methylnaphthalenes	1	0		7.45	99.86	100	**			0.693	0.14	
1,1'-Biphenyl	1	0		7.82	48.75	50	30	70	0.871	0.850	2.49	
Acenaphthene-d10	1	0	I	8.33	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.58	47.79	50	30	70	0.548	0.524	4.43	
Hexachlorocyclopentadiene	1	0		7.57	33.59	50	5	70	0.188	0.132	32.83	
2,4,6-Trichlorophenol	1	0		7.67	48.44	50	34.5	65	0.333	0.323	3.12	
2,4,5-Trichlorophenol	1	0		7.71	48.47	50	30	70	0.354	0.343	3.06	
2-Fluorobiphenyl	1	0	S	7.74	24.06	25	**		1.281	1.232	3.76	
2-Chloronaphthalene	1	0		7.85	49.16	50	35	65	1.056	1.038	1.69	
1,4-Dimethylnaphthalene	1	0		8.13	50.88	50	30	70	0.872	0.887	1.76	
Dimethylnaphthalenes	1	0		8.13	50.88		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00

Data File: 10M71437.D
Method: EPA 625.1

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.91	49.94	50	30	70	0.783	0.782	0.11	
2-Nitroaniline	1	0		7.93	48.20	50	30	70	0.375	0.362	3.59	
Coumarin	1	0		8.12	53.46	50	30	70	0.389	0.416	6.92	
Acenaphthylene	1	0		8.21	47.39	50	30	65	1.558	1.477	5.22	
Dimethylphthalate	1	0		8.07	48.43	50	25	65	1.234	1.195	3.14	
2,6-Dinitrotoluene	1	0		8.13	52.11	50	34	68.5	0.257	0.268	4.22	
Acenaphthene	1	0		8.36	49.35	50	35	65	1.099	1.084	1.30	
3-Nitroaniline	1	0		8.28	49.06	50	30	70	0.280	0.304	1.88	
2,4-Dinitrophenol	1	0		8.38	39.56	50	19.5	86.5	0.151	0.107	20.87	
Dibenzofuran	1	0		8.52	46.41	50	30	70	1.584	1.475	7.18	
2,4-Dinitrotoluene	1	0		8.49	45.82	50	26.5	65	0.380	0.370	8.37	
4-Nitrophenol	1	0		8.41	43.27	50	12.5	65	0.204	0.191	13.46	
2,3,4,6-Tetrachlorophenol	1	0		8.63	47.22	50	30	70	0.308	0.291	5.57	
Fluorene	1	0		8.84	47.44	50	35	65	1.260	1.195	5.13	
4-Chlorophenyl-phenylether	1	0		8.82	49.86	50	28.5	72.5	0.601	0.599	0.27	
Diethylphthalate	1	0		8.70	49.04	50	23.5	65	1.219	1.196	1.92	
4-Nitroaniline	1	0		8.85	46.90	50	30	70	0.325	0.321	6.20	
Atrazine	1	0		9.47	45.88	50	5	70	0.409	0.375	8.23	
Phenanthrene-d10	1	0	I	9.80	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.88	46.36	50	28	65	0.114	0.106	7.28	
n-Nitrosodiphenylamine	1	0		8.94	50.63	50	30	70	0.603	0.611	1.27	
2,4,6-Tribromophenol	1	0	S	9.08	46.44	50	**		0.089	0.088	7.12	
1,2-Diphenylhydrazine	1	0		8.98	54.29	50	30	70	0.736	0.799	8.58	
4-Bromophenyl-phenylether	1	0		9.32	50.66	50	35	65	0.185	0.188	1.31	
Hexachlorobenzene	1	0		9.39	48.84	50	19	71	0.199	0.194	2.32	
N-Octadecane	1	0		9.64	54.53	50	30	70	0.338	0.369	9.06	
Pentachlorophenol	1	0		9.59	51.81	50	21	76	0.097	0.099	3.61	
Phenanthrene	1	0		9.83	50.35	50	33.5	65	1.057	1.064	0.71	
Anthracene	1	0		9.88	51.40	50	29	65	1.073	1.103	2.79	
Carbazole	1	0		10.05	50.43	50	30	70	0.976	0.984	0.85	
Di-n-butylphthalate	1	0		10.42	47.24	50	26	65	1.117	1.168	5.52	
Fluoranthene	1	0		11.16	51.57	50	23.5	65	1.115	1.150	3.14	
Chrysene-d12	1	0	I	12.86	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.43	46.87	50	35	65	1.233	1.156	6.27	
Benzidine	1	0		11.32	41.99	50	2.5	75	0.463	0.402	16.02	
Terphenyl-d14	1	0	S	11.61	22.14	25	**		0.733	0.649	11.43	
4,4'-DDE	1	0		11.54	44.14		**		0.254			
4,4'-DDD	1	0		11.94	46.21		**		0.432			
Butylbenzylphthalate	1	0		12.18	49.48	50	21.5	70	0.536	0.515	1.05	
4,4'-DDT	1	0		12.29	46.93		**		0.383			
3,3'-Dichlorobenzidine	1	0		12.81	50.22	50	9	107	0.352	0.372	0.44	
Benzo[a]anthracene	1	0		12.85	47.52	50	21	66.5	1.110	1.055	4.97	
Chrysene	1	0		12.89	45.99	50	22	70	1.090	1.002	8.02	
bis(2-Ethylhexyl)phthalate	1	0		12.87	47.60	50	21.5	68.5	0.765	0.728	4.81	
Perylene-d12	1	0	I	14.49	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.62	46.80	50	10.5	66	1.236	1.260	6.41	
Benzo[b]fluoranthene	1	0		14.07	50.82	50	21	70	1.086	1.103	1.64	
Benzo[k]fluoranthene	1	0		14.10	51.70	50	12.5	73	1.069	1.106	3.39	
Benzo[a]pyrene	1	0		14.44	50.26	50	16	74	1.054	1.060	0.52	
Indeno[1,2,3-cd]pyrene	1	0		15.86	49.54	50	6.5	75.5	1.110	1.099	0.92	
Dibenzo[a,h]anthracene	1	0		15.87	50.34	50	6.5	100	0.920	0.927	0.67	
Benzo[g,h,i]perylene	1	0		16.25	48.94	50	6.5	97.5	0.980	0.959	2.11	

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

CI-Compound %Diff exceeds limits

Page 2 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0447

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:35:00Data File: 10M71437.D
Method: EPA 625.1

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.694	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.872	0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limitsPage 3 of 3
** - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

8101509 0448

SampleID : CAL BNA@50PPM
Data File: 10M71437.D
Acq On : 10/19/18 09:35

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M 100%
Qt On : 10/19/18 10:04
Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.732	96	39372	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.893	152	81447	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	309527	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	196345	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	338144	40.00	ng	0.00
91) Chrysene-d12	12.863	240	353562	40.00	ng	0.00
103) Perylene-d12	14.494	264	329334	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.711	112	115138	50.52	ng	-0.01
Spiked Amount 100.000			Recovery	=	50.52%	
16) Phenol-d5	5.578	99	165934	53.79	ng	0.00
Spiked Amount 100.000			Recovery	=	53.79%	
32) Nitrobenzene-d5	6.343	128	24068	24.73	ng	0.00
Spiked Amount 50.000			Recovery	=	49.46%	
55) 2-Fluorobiphenyl	7.739	172	151245	24.06	ng	0.00
Spiked Amount 50.000			Recovery	=	48.12%	
80) 2,4,6-Tribromophenol	9.076	330	37283	46.44	ng	0.00
Spiked Amount 100.000			Recovery	=	46.44%	
94) Terphenyl-d14	11.606	244	143440	22.14	ng	0.00
Spiked Amount 50.000			Recovery	=	44.28%	
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.759	88	47133	49.6740	ng	94
9) Pyridine	3.251	79	119523m	54.2415	ng	
10) N-Nitrosodimethylamine	3.182	74	67259	51.2615	ng	79
12) Benzaldehyde	5.530	77	59008	53.7876	ng	69
13) Aniline	5.621	93	167641	52.4468	ng	72
14) Pentachloroethane	5.658	117	46148	53.5139	ng	77
15) bis(2-Chloroethyl)ether	5.669	93	118322	51.9341	ng	74
17) Phenol	5.594	94	170977	55.9629	ng	86
18) 2-Chlorophenol	5.717	128	133742	52.4110	ng	73
19) N-Decane	5.749	57	110961	55.4053	ng	81
20) 1,3-Dichlorobenzene	5.845	146	146696	51.8445	ng	98
22) 1,4-Dichlorobenzene	5.909	146	149758	49.9681	ng	96
23) 1,2-Dichlorobenzene	6.032	146	143210	48.8999	ng	96
24) Benzyl alcohol	6.006	108	84177	50.9369	ng	74
25) bis(2-chloroisopropyl)...	6.113	45	141181	50.7794	ng	82
26) 2-Methylphenol	6.097	108	118634	50.0847	ng	90
27) Acetophenone	6.220	105	177996	53.0633	ng	82
28) Hexachloroethane	6.305	117	60810	52.3929	ng	89
29) N-Nitroso-di-n-propyla...	6.214	70	85304	54.5690	ng	77
30) 3&4-Methylphenol	6.214	108	124348	55.2715	ng	96
33) Nitrobenzene	6.359	77	129518	48.1610	ng	80
34) Isophorone	6.541	82	229246	49.5279	ng	83
35) 2-Nitrophenol	6.605	139	72210	49.0642	ng	89
36) 2,4-Dimethylphenol	6.626	107	132830	48.3503	ng	92
37) Benzoic Acid	6.701	105	69292	33.9068	ng	81
38) bis(2-Chloroethoxy)met...	6.696	93	143975	49.5867	ng	93
39) 2,4-Dichlorophenol	6.787	162	119360	49.7982	ng	85
40) 1,2,4-Trichlorobenzene	6.851	180	124619	47.9607	ng	98
41) Naphthalene	6.915	128	411287	50.0683	ng	98
42) 4-Chloroaniline	6.952	127	152679	57.3702	ng	97
43) Hexachlorobutadiene	6.995	225	69298	47.6410	ng	95
44) Caprolactam	7.225	113	40494	48.4381	ng	65
45) 4-Chloro-3-methylphenol	7.311	107	113068	51.4868	ng	85
46) 2-Methylnaphthalene	7.450	142	273653	50.4313	ng	99
47) 1-Methylnaphthalene	7.530	142	267012	50.0261	ng	94
48) Methylnaphthalenes (To...	7.450	142	536471m	99.8617	ng	
49) 1,1'-Biphenyl	7.824	154	328761	48.7529	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	128612	47.7873	ng	97
52) Hexachlorocyclopentadiene	7.567	237	32451	33.5864	ng	95
53) 2,4,6-Trichlorophenol	7.674	196	79204m	48.4396	ng	
54) 2,4,5-Trichlorophenol	7.707	196	84183m	48.4720	ng	
56) 2-Chloronaphthalene	7.851	162	254863	49.1566	ng	91
57) 1,4-Dimethylnaphthalene	8.129	156	217737	50.8823	ng	88
58) Dimethylnaphthalenes (...)	8.129	156	217737	50.8823	ng	88
59) Diphenyl Ether	7.910	170	191850	49.9431	ng	79
60) 2-Nitroaniline	7.931	65	88814	48.2033	ng	40
61) Coumarin	8.118	146	102063	53.4575	ng	65
62) Acenaphthylene	8.209	152	362395	47.3899	ng	98
63) Dimethylphthalate	8.070	163	293257	48.4287	ng	99
64) 2,6-Dinitrotoluene	8.129	165	65669	52.1108	ng	76
65) Acenaphthene	8.364	153	266135	49.3520	ng	94

SampleID : CAL BNA@50PPM
 Data File: 10M71437.D
 Acq On : 10/19/18 09:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/19/18 10:04
 Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	74685	49.0599	ng	70
67) 2,4-Dinitrophenol	8.380	184	26195	39.5645	ng	39
68) Dibenzofuran	8.520	168	361951	46.4124	ng	85
69) 2,4-Dinitrotoluene	8.493	165	90757	45.8164	ng	67
70) 4-Nitrophenol	8.413	65	46762	43.2686	ng	59
71) 2,3,4,6-Tetrachlorophenol	8.627	232	71449	47.2156	ng	84
72) Fluorene	8.840	166	293285	47.4365	ng	97
73) 4-Chlorophenyl-phenyle...	8.824	204	147101	49.8645	ng	84
74) Diethylphthalate	8.701	149	293525	49.0412	ng	96
75) 4-Nitroaniline	8.851	138	78711	46.8984	ng	93
76) Atrazine	9.466	200	92157	45.8826	ng	97
78) 4,6-Dinitro-2-methylph...	8.878	198	44649	46.3622	ng	66
79) n-Nitrosodiphenylamine	8.942	169	258141	50.6338	ng	98
81) 1,2-Diphenylhydrazine	8.985	77	337692	54.2909	ng	82
82) 4-Bromophenyl-phenylether	9.317	248	79329	50.6569	ng	90
83) Hexachlorobenzene	9.391	284	82143	48.8382	ng	69
84) N-Octadecane	9.637	57	156014	54.5300	ng	76
85) Pentachlorophenol	9.589	266	41858	51.8054	ng	98
86) Phenanthrene	9.830	178	449862	50.3535	ng	99
87) Anthracene	9.883	178	466027	51.3975	ng	98
88) Carbazole	10.055	167	415987	50.4274	ng	96
89) Di-n-butylphthalate	10.418	149	493896	47.2404	ng	97
90) Fluoranthene	11.162	202	485918	51.5699	ng	87
92) Pyrene	11.429	202	510695	46.8661	ng	84
93) Benzidine	11.317	184	177671	41.9921	ng	81
95) 4,4'-DDE	11.536	246	99213	44.1433	ng	94
96) 4,4'-DDD	11.937	235	176403	46.2050	ng	93
97) Butylbenzylphthalate	12.183	149	227595	49.4753	ng	79
98) 4,4'-DDT	12.290	235	158851	46.9274	ng	94
99) 3,3'-Dichlorobenzidine	12.815	252	164527	50.2185	ng	97
100) Benzo[a]anthracene	12.852	228	466127	47.5165	ng	100
101) Chrysene	12.895	228	443031	45.9882	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	321923	47.5966	ng	95
104) Di-n-octylphthalate	13.617	149	518632	46.7971	ng	99
105) Benzo[b]fluoranthene	14.066	252	454230	50.8221	ng	94
106) Benzo[k]fluoranthene	14.098	252	455205m	51.6973	ng	
107) Benzo[a]pyrene	14.435	252	436225	50.2613	ng	93
108) Indeno[1,2,3-cd]pyrene	15.863	276	452556	49.5380	ng	90
109) Dibenzo[a,h]anthracene	15.874	278	381470	50.3372	ng	90
110) Benzo[g,h,i]perylene	16.254	276	394880	48.9448	ng	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:44:00

Data File: 5M105871.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.55	47.42	50	5	70	0.979	0.963	5.16	
Pyridine	1	0		3.02	47.48	50	2.5	75	2.530	2.403	5.04	
N-Nitrosodimethylamine	1	0		2.95	49.21	50	15	70	1.441	1.418	1.57	
2-Fluorophenol	1	0	S	4.54	48.20	50	**		2.077	2.002	3.60	
Benzaldehyde	1	0		5.37	48.29	50	2.5	115	1.211	1.169	3.41	
Aniline	1	0		5.46	45.41	50	5	70	2.890	3.076	9.19	
Pentachloroethane	1	0		5.50	46.46	50	30	70	0.798	0.742	7.08	
bis(2-Chloroethyl)ether	1	0		5.52	45.97	50	26	65	2.508	2.306	8.05	
Phenol-d5	1	0	S	5.43	48.39	50	**		3.202	3.099	3.23	
Phenol	1	0		5.44	50.05	50	24	65	3.388	3.391	0.09	
2-Chlorophenol	1	0		5.56	47.15	50	27.5	65	2.390	2.254	5.70	
N-Decane	1	0		5.60	45.65	50	30	70	2.744	2.505	8.70	
1,3-Dichlorobenzene	1	0		5.69	46.68	50	30	70	2.683	2.505	6.64	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.75	48.66	50	30	70	1.495	1.454	2.69	
1,2-Dichlorobenzene	1	0		5.88	49.98	50	30	70	1.389	1.389	0.03	
Benzyl alcohol	1	0		5.86	50.66	50	30	70	0.819	0.830	1.33	
bis(2-chloroisopropyl)ether	1	0		5.97	48.37	50	31.5	69.5	1.886	1.825	3.26	
2-Methylphenol	1	0		5.95	50.52	50	30	70	1.201	1.214	1.04	
Acetophenone	1	0		6.07	51.10	50	30	70	1.751	1.789	2.20	
Hexachloroethane	1	0		6.15	47.69	50	27.5	65	0.555	0.530	4.61	
N-Nitroso-di-n-propylamine	1	0		6.07	45.57	50	29.5	85	0.846	0.874	8.85	
3&4-Methylphenol	1	0		6.07	47.44	50	30	70	1.137	1.253	5.11	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.20	25.45	25	**		0.118	0.120	1.80	
Nitrobenzene	1	0		6.21	47.91	50	27	79	0.369	0.353	4.19	
Isophorone	1	0		6.39	48.76	50	26	90	0.639	0.623	2.48	
2-Nitrophenol	1	0		6.46	49.39	50	30.5	81.5	0.172	0.175	1.21	
2,4-Dimethylphenol	1	0		6.48	47.60	50	29	65	0.338	0.345	4.80	
Benzoic Acid	1	0		6.58	28.65	50	5	70	0.250	0.114	42.71	
bis(2-Chloroethoxy)methane	1	0		6.56	48.88	50	26	82	0.416	0.406	2.24	
2,4-Dichlorophenol	1	0		6.65	49.48	50	27	65	0.260	0.281	1.04	
1,2,4-Trichlorobenzene	1	0		6.70	50.25	50	25.5	65	0.311	0.313	0.50	
Naphthalene	1	0		6.77	47.90	50	35	65	1.070	1.025	4.21	
4-Chloroaniline	1	0		6.81	51.83	50	15	115	0.321	0.394	3.66	
Hexachlorobutadiene	1	0		6.85	48.71	50	34	65	0.167	0.162	2.57	
Caprolactam	1	0		7.08	47.18	50	30	70	0.100	0.103	5.65	
4-Chloro-3-methylphenol	1	0		7.17	48.96	50	34	65	0.282	0.279	2.08	
2-Methylnaphthalene	1	0		7.30	49.93	50	30	70	0.687	0.687	0.14	
1-Methylnaphthalene	1	0		7.38	48.02	50	30	70	0.676	0.649	3.97	
Methylnaphthalenes	1	0		7.30	98.17	100	**			0.665	1.83	
1,1'-Biphenyl	1	0		7.67	49.00	50	30	70	0.807	0.790	2.00	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	49.39	50	30	70	0.554	0.548	1.22	
Hexachlorocyclopentadiene	1	0		7.41	37.62	50	5	70	0.189	0.142	24.77	
2,4,6-Trichlorophenol	1	0		7.52	47.97	50	34.5	65	0.304	0.312	4.06	
2,4,5-Trichlorophenol	1	0		7.55	51.03	50	30	70	0.335	0.346	2.07	
2-Fluorobiphenyl	1	0	S	7.58	24.84	25	**		1.279	1.271	0.65	
2-Chloronaphthalene	1	0		7.69	49.16	50	35	65	1.076	1.058	1.67	
1,4-Dimethylnaphthalene	1	0		7.96	50.18	50	30	70	0.902	0.906	0.36	
Dimethylnaphthalenes	1	0		7.96	50.18		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0452

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:44:00Data File: 5M105871.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.75	50.07	50	30	70	0.798	0.799	0.14	
2-Nitroaniline	1	0		7.77	44.63	50	30	70	0.407	0.386	10.73	
Coumarin	1	0		7.95	51.07	50	30	70	0.414	0.423	2.15	
Acenaphthylene	1	0		8.04	50.11	50	30	65	1.618	1.621	0.22	
Dimethylphthalate	1	0		7.91	50.06	50	25	65	1.205	1.207	0.13	
2,6-Dinitrotoluene	1	0		7.98	48.68	50	34	68.5	0.264	0.270	2.64	
Acenaphthene	1	0		8.19	49.45	50	35	65	1.114	1.101	1.10	
3-Nitroaniline	1	0		8.12	49.84	50	30	70	0.272	0.307	0.33	
2,4-Dinitrophenol	1	0		8.22	41.28	50	19.5	86.5	0.121	0.091	17.45	
Dibenzofuran	1	0		8.35	48.23	50	30	70	1.562	1.553	3.54	
2,4-Dinitrotoluene	1	0		8.33	48.23	50	26.5	65	0.345	0.357	3.54	
4-Nitrophenol	1	0		8.26	40.84	50	12.5	65	0.215	0.190	18.31	
2,3,4,6-Tetrachlorophenol	1	0		8.46	46.69	50	30	70	0.270	0.279	6.62	
Fluorene	1	0		8.67	49.78	50	35	65	1.229	1.224	0.45	
4-Chlorophenyl-phenylether	1	0		8.65	50.91	50	28.5	72.5	0.557	0.568	1.82	
Diethylphthalate	1	0		8.54	49.50	50	23.5	65	1.193	1.181	1.00	
4-Nitroaniline	1	0		8.69	48.46	50	30	70	0.314	0.334	3.07	
Atrazine	1	0		9.29	49.91	50	5	70	0.338	0.340	0.18	
Phenanthrene-d10	1	0	I	9.62	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.71	46.54	50	28	65	0.101	0.087	6.91	
n-Nitrosodiphenylamine	1	0		8.77	48.49	50	30	70	0.625	0.606	3.03	
2,4,6-Tribromophenol	1	0	S	8.90	50.39	50	**		0.069	0.074	0.78	
1,2-Diphenylhydrazine	1	0		8.81	46.62	50	30	70	0.891	0.831	6.75	
4-Bromophenyl-phenylether	1	0		9.14	49.76	50	35	65	0.188	0.187	0.48	
Hexachlorobenzene	1	0		9.21	49.30	50	19	71	0.181	0.178	1.40	
N-Octadecane	1	0		9.47	44.63	50	30	70	0.493	0.476	10.74	
Pentachlorophenol	1	0		9.41	45.90	50	21	76	0.087	0.072	8.20	
Phenanthrene	1	0		9.64	48.51	50	33.5	65	1.085	1.052	2.99	
Anthracene	1	0		9.70	49.50	50	29	65	1.089	1.078	1.01	
Carbazole	1	0		9.87	49.93	50	30	70	1.010	1.008	0.14	
Di-n-butylphthalate	1	0		10.24	45.32	50	26	65	1.063	1.137	9.36	
Fluoranthene	1	0		10.97	49.54	50	23.5	65	1.087	1.113	0.92	
Chrysene-d12	1	0	I	12.67	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.23	49.82	50	35	65	1.141	1.137	0.35	
Benzidine	1	0		11.13	43.27	50	2.5	75	0.357	0.354	13.46	
Terphenyl-d14	1	0	S	11.42	24.26	25	**		0.640	0.621	2.97	
4,4'-DDE	1	0		11.35	49.59		**		0.231			
4,4'-DDD	1	0		11.75	50.75		**		0.370			
Butylbenzylphthalate	1	0		12.00	48.28	50	21.5	70	0.470	0.478	3.43	
4,4'-DDT	1	0		12.10	52.21		**		0.330			
3,3'-Dichlorobenzidine	1	0		12.63	52.59	50	9	107	0.271	0.336	5.18	
Benzo[a]anthracene	1	0		12.66	49.19	50	21	66.5	1.082	1.064	1.62	
Chrysene	1	0		12.70	50.79	50	22	70	1.036	1.052	1.58	
bis(2-Ethylhexyl)phthalate	1	0		12.69	45.66	50	21.5	68.5	0.664	0.705	8.67	
Perylene-d12	1	0	I	14.28	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	46.72	50	10.5	66	1.269	1.285	6.57	
Benzo[b]fluoranthene	1	0		13.87	49.25	50	21	70	1.126	1.109	1.50	
Benzo[k]fluoranthene	1	0		13.90	51.71	50	12.5	73	1.133	1.172	3.41	
Benzo[a]pyrene	1	0		14.22	51.49	50	16	74	1.085	1.111	2.98	
Indeno[1,2,3-cd]pyrene	1	0		15.56	52.32	50	6.5	75.5	1.189	1.229	4.64	
Dibenzo[a,h]anthracene	1	0		15.58	50.49	50	6.5	100	1.011	1.033	0.98	
Benzo[g,h,i]perylene	1	0		15.92	50.99	50	6.5	97.5	1.012	1.016	1.98	

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

CI-Compound %Diff exceeds limits

Page 2 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0453

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:44:00Data File: 5M105871.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.678		0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.902		0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
C1-Compound %Diff exceeds limitsPage 3 of 3
** - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 5M105871.D
Acq On : 10/19/18 09:44

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M 1000
Qt On : 10/19/18 10:00
Qt Upd On: 10/08/18 13:12

8101509 0454

Data Path : G:\GCMSData\2018\GCMS 5\Data\10-19-18\
Qt Path : G:\GCMSData\2018\GCMS 5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.516	96	58769	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	104259	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	386643	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	221233	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	372057	40.00	ng	0.00
91) Chrysene-d12	12.666	240	373793	40.00	ng	0.00
103) Perylene-d12	14.279	264	308966	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	147053	48.20	ng	0.00
Spiked Amount 100.000			Recovery =	48.20%		
16) Phenol-d5	5.427	99	227657	48.39	ng	0.00
Spiked Amount 100.000			Recovery =	48.39%		
32) Nitrobenzene-d5	6.196	128	29037	25.45	ng	0.00
Spiked Amount 50.000			Recovery =	50.90%		
55) 2-Fluorobiphenyl	7.580	172	175751	24.84	ng	0.00
Spiked Amount 50.000			Recovery =	49.68%		
80) 2,4,6-Tribromophenol	8.899	330	34561	50.39	ng	0.00
Spiked Amount 100.000			Recovery =	50.39%		
94) Terphenyl-d14	11.416	244	145028	24.26	ng	0.00
Spiked Amount 50.000			Recovery =	48.52%		
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.548	88	70758	47.4199	ng	85
9) Pyridine	3.018	79	176524	47.4821	ng	72
10) N-Nitrosodimethylamine	2.948	74	104171	49.2137	ng	80
12) Benzaldehyde	5.374	77	85905	48.2931	ng	77
13) Aniline	5.464	93	225956	45.4051	ng	63
14) Pentachloroethane	5.497	117	54498	46.4590	ng	77
15) bis(2-Chloroethyl)ether	5.518	93	169417	45.9729	ng	82
17) Phenol	5.443	94	249115	50.0464	ng	83
18) 2-Chlorophenol	5.561	128	165555	47.1507	ng	82
19) N-Decane	5.598	57	184033	45.6522	ng	89
20) 1,3-Dichlorobenzene	5.689	146	183997	46.6803	ng	98
22) 1,4-Dichlorobenzene	5.753	146	189536	48.6559	ng	96
23) 1,2-Dichlorobenzene	5.881	146	181024	49.9838	ng	98
24) Benzyl alcohol	5.860	108	108111	50.6634	ng	73
25) bis(2-chloroisopropyl)...	5.967	45	237795	48.3682	ng	98
26) 2-Methylphenol	5.951	108	158171	50.5222	ng	98
27) Acetophenone	6.073	105	233172	51.0977	ng	79
28) Hexachloroethane	6.148	117	69032	47.6944	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	113961	45.5747	ng	76
30) 3&4-Methylphenol	6.073	108	163351	47.4430	ng	95
33) Nitrobenzene	6.212	77	170837	47.9074	ng	79
34) Isophorone	6.394	82	300983	48.7590	ng	89
35) 2-Nitrophenol	6.458	139	84416	49.3949	ng	88
36) 2,4-Dimethylphenol	6.485	107	166530	47.5982	ng	94
37) Benzoic Acid	6.576	105	55040	28.6472	ng	89
38) bis(2-Chloroethoxy)met...	6.560	93	196363	48.8818	ng	97
39) 2,4-Dichlorophenol	6.645	162	135789	49.4818	ng	85
40) 1,2,4-Trichlorobenzene	6.704	180	151178	50.2476	ng	98
41) Naphthalene	6.768	128	495221	47.8974	ng	99
42) 4-Chloroaniline	6.805	127	190615	51.8285	ng	91
43) Hexachlorobutadiene	6.853	225	78493	48.7143	ng	97
44) Caprolactam	7.083	113	49550	47.1754	ng	69
45) 4-Chloro-3-methylphenol	7.169	107	134614	48.9611	ng	79
46) 2-Methylnaphthalene	7.297	142	331800	49.9303	ng	99
47) 1-Methylnaphthalene	7.377	142	313859	48.0158	ng	93
48) Methylnaphthalenes (To...	7.297	142	643017m	98.1686	ng	
49) 1,1'-Biphenyl	7.665	154	382018	48.9990	ng	95
51) 1,2,4,5-Tetrachloroben...	7.430	216	151435	49.3909	ng	98
52) Hexachlorocyclopentadiene	7.414	237	39247	37.6159	ng	97
53) 2,4,6-Trichlorophenol	7.516	196	86208	47.9714	ng	98
54) 2,4,5-Trichlorophenol	7.553	196	95702	51.0329	ng	100
56) 2-Chloronaphthalene	7.692	162	292555	49.1637	ng	90
57) 1,4-Dimethylnaphthalene	7.965	156	250431	50.1776	ng	90
58) Dimethylnaphthalenes (...)	7.965	156	250431	50.1776	ng	90
59) Diphenyl Ether	7.751	170	221053	50.0684	ng	78
60) 2-Nitroaniline	7.772	65	106718	44.6332	ng	55
61) Coumarin	7.954	146	116947	51.0741	ng	74
62) Acenaphthylene	8.045	152	448305	50.1094	ng	100
63) Dimethylphthalate	7.911	163	333708	50.0630	ng	99
64) 2,6-Dinitrotoluene	7.975	165	74791	48.6820	ng	57
65) Acenaphthene	8.194	153	304553	49.4512	ng	95

SampleID : CAL BNA@50PPM
 Data File: 5M105871.D
 Acq On : 10/19/18 09:44

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/19/18 10:00
 Qt Upd On: 10/08/18 13:12

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.125	138	84827	49.8366	ng	72
67) 2,4-Dinitrophenol	8.221	184	25271	41.2765	ng	42
68) Dibenzofuran	8.349	168	429557	48.2324	ng	85
69) 2,4-Dinitrotoluene	8.328	165	98587	48.2285	ng	71
70) 4-Nitrophenol	8.258	65	52532	40.8441	ng	81
71) 2,3,4,6-Tetrachlorophenol	8.456	232	77170	46.6898	ng	81
72) Fluorene	8.670	166	338418	49.7759	ng	98
73) 4-Chlorophenyl-phenyle...	8.654	204	156963	50.9088	ng	87
74) Diethylphthalate	8.536	149	326559	49.5012	ng	97
75) 4-Nitroaniline	8.686	138	92338	48.4643	ng	76
76) Atrazine	9.295	200	93979	49.9104	ng	98
78) 4,6-Dinitro-2-methylph...	8.713	198	40478	46.5444	ng	56
79) n-Nitrosodiphenylamine	8.771	169	281755	48.4859	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	386383	46.6239	ng	89
82) 4-Bromophenyl-phenylether	9.140	248	87072	49.7615	ng	83
83) Hexachlorobenzene	9.209	284	82859	49.3012	ng	72
84) N-Octadecane	9.466	57	221422	44.6277	ng	81
85) Pentachlorophenol	9.412	266	33674	45.9021	ng	92
86) Phenanthrene	9.642	178	489471	48.5055	ng	99
87) Anthracene	9.695	178	501127	49.4958	ng	99
88) Carbazole	9.866	167	468950	49.9307	ng	97
89) Di-n-butylphthalate	10.240	149	528639	45.3212	ng	98
90) Fluoranthene	10.972	202	517779	49.5399	ng	90
92) Pyrene	11.234	202	531026	49.8248	ng	89
93) Benzidine	11.127	184	165192	43.2725	ng	88
95) 4,4'-DDE	11.346	246	106951	49.5855	ng	92
96) 4,4'-DDD	11.747	235	175405	50.7505	ng	91
97) Butylbenzylphthalate	11.998	149	223500	48.2849	ng	79
98) 4,4'-DDT	12.100	235	161124	52.2101	ng	94
99) 3,3'-Dichlorobenzidine	12.628	252	157102	52.5907	ng	95
100) Benzo[a]anthracene	12.655	228	497173	49.1885	ng	98
101) Chrysene	12.698	228	491618	50.7880	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	329344	45.6635	ng	95
104) Di-n-octylphthalate	13.435	149	496187	46.7162	ng	99
105) Benzo[b]fluoranthene	13.873	252	428344	49.2489	ng	95
106) Benzo[k]fluoranthene	13.900	252	452505m	51.7058	ng	
107) Benzo[a]pyrene	14.220	252	429056	51.4905	ng	94
108) Indeno[1,2,3-cd]pyrene	15.561	276	474618	52.3187	ng	91
109) Dibenzo[a,h]anthracene	15.577	278	398998	50.4884	ng	92
110) Benzo[g,h,i]perylene	15.925	276	392223	50.9908	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:41:00Data File: 7M95305.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.50	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	50.98	50	5	70	0.940	0.958	1.97	
Pyridine	1	0		2.96	48.85	50	2.5	75	2.543	2.434	2.29	
N-Nitrosodimethylamine	1	0		2.90	49.24	50	15	70	1.450	1.428	1.51	
2-Fluorophenol	1	0	S	4.53	47.17	50	**		2.146	2.024	5.66	
Benzaldehyde	1	0		5.36	47.26	50	2.5	115	1.115	1.054	5.48	
Aniline	1	0		5.46	50.62	50	5	70	2.833	2.868	1.23	
Pentachloroethane	1	0		5.50	49.01	50	30	70	0.725	0.710	1.97	
bis(2-Chloroethyl)ether	1	0		5.52	50.45	50	26	65	2.222	2.212	0.90	
Phenol-d5	1	0	S	5.42	47.84	50	**		3.039	2.908	4.32	
Phenol	1	0		5.44	48.83	50	24	65	3.018	2.948	2.33	
2-Chlorophenol	1	0		5.56	47.41	50	27.5	65	2.243	2.127	5.18	
N-Decane	1	0		5.62	48.62	50	30	70	1.935	1.882	2.77	
1,3-Dichlorobenzene	1	0		5.69	48.40	50	30	70	2.413	2.336	3.20	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.76	49.06	50	30	70	1.460	1.432	1.88	
1,2-Dichlorobenzene	1	0		5.88	49.84	50	30	70	1.379	1.375	0.32	
Benzyl alcohol	1	0		5.85	46.22	50	30	70	0.881	0.815	7.57	
bis(2-chloroisopropyl)ether	1	0		5.97	50.51	50	31.5	69.5	1.346	1.360	1.01	
2-Methylphenol	1	0		5.94	48.49	50	30	70	1.205	1.169	3.01	
Acetophenone	1	0		6.07	51.31	50	30	70	1.723	1.768	2.62	
Hexachloroethane	1	0		6.16	50.48	50	27.5	65	0.534	0.539	0.96	
N-Nitroso-di-n-propylamine	1	0		6.07	49.54	50	29.5	85	0.837	0.830	0.91	
3&4-Methylphenol	1	0		6.07	49.89	50	30	70	1.203	1.201	0.21	
Naphthalene-d8	1	0	I	6.76	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.19	23.75	25	**		0.126	0.119	4.98	
Nitrobenzene	1	0		6.21	50.63	50	27	79	0.334	0.338	1.26	
Isophorone	1	0		6.40	48.70	50	26	90	0.617	0.601	2.61	
2-Nitrophenol	1	0		6.46	49.73	50	30.5	81.5	0.178	0.176	0.55	
2,4-Dimethylphenol	1	0		6.49	48.29	50	29	65	0.332	0.321	3.41	
Benzoic Acid	1	0		6.55	36.26	50	5	70	0.326	0.235	27.47	
bis(2-Chloroethoxy)methane	1	0		6.56	50.29	50	26	82	0.418	0.420	0.58	
2,4-Dichlorophenol	1	0		6.64	48.32	50	27	65	0.280	0.270	3.35	
1,2,4-Trichlorobenzene	1	0		6.71	47.91	50	25.5	65	0.312	0.299	4.17	
Naphthalene	1	0		6.77	48.84	50	35	65	1.067	1.042	2.31	
4-Chloroaniline	1	0		6.80	49.04	50	15	115	0.353	0.390	1.91	
Hexachlorobutadiene	1	0		6.87	47.85	50	34	65	0.158	0.151	4.29	
Caprolactam	1	0		7.07	45.81	50	30	70	0.116	0.107	8.37	
4-Chloro-3-methylphenol	1	0		7.17	47.48	50	34	65	0.279	0.264	5.04	
2-Methylnaphthalene	1	0		7.31	49.15	50	30	70	0.696	0.684	1.69	
1-Methylnaphthalene	1	0		7.38	48.81	50	30	70	0.677	0.660	2.39	
Methylnaphthalenes	1	0		7.31	97.95	100	**			0.672	2.05	
1,1'-Biphenyl	1	0		7.68	48.56	50	30	70	0.811	0.788	2.89	
Acenaphthene-d10	1	0	I	8.17	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.44	48.11	50	30	70	0.528	0.508	3.78	
Hexachlorocyclopentadiene	1	0		7.44	46.17	50	5	70	0.243	0.231	7.66	
2,4,6-Trichlorophenol	1	0		7.53	46.78	50	34.5	65	0.344	0.321	6.44	
2,4,5-Trichlorophenol	1	0		7.55	48.57	50	30	70	0.354	0.344	2.86	
2-Fluorobiphenyl	1	0	S	7.59	24.31	25	**		1.270	1.235	2.77	
2-Chloronaphthalene	1	0		7.70	48.91	50	35	65	1.087	1.063	2.17	
1,4-Dimethylnaphthalene	1	0		7.97	49.80	50	30	70	0.944	0.940	0.41	
Dimethylnaphthalenes	1	0		7.97	49.80		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:41:00Data File: 7M95305.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.76	48.78	50	30	70	0.809	0.789	2.44	
2-Nitroaniline	1	0		7.77	50.88	50	30	70	0.325	0.331	1.77	
Coumarin	1	0		7.95	48.97	50	30	70	0.453	0.444	2.06	
Acenaphthylene	1	0		8.05	48.70	50	30	65	1.623	1.581	2.61	
Dimethylphthalate	1	0		7.92	48.67	50	25	65	1.193	1.161	2.67	
2,6-Dinitrotoluene	1	0		7.97	52.72	50	34	68.5	0.258	0.272	5.45	
Acenaphthene	1	0		8.20	49.32	50	35	65	1.110	1.095	1.37	
3-Nitroaniline	1	0		8.12	55.09	50	30	70	0.286	0.315	10.18	
2,4-Dinitrophenol	1	0		8.20	52.67	50	19.5	86.5	0.112	0.126	5.33	
Dibenzofuran	1	0		8.35	47.93	50	30	70	1.566	1.501	4.13	
2,4-Dinitrotoluene	1	0		8.32	49.19	50	26.5	65	0.338	0.358	1.61	
4-Nitrophenol	1	0		8.24	52.33	50	12.5	65	0.194	0.211	4.67	
2,3,4,6-Tetrachlorophenol	1	0		8.46	46.37	50	30	70	0.301	0.287	7.27	
Fluorene	1	0		8.67	49.00	50	35	65	1.226	1.201	2.01	
4-Chlorophenyl-phenylether	1	0		8.66	48.47	50	28.5	72.5	0.565	0.548	3.05	
Diethylphthalate	1	0		8.55	48.72	50	23.5	65	1.199	1.168	2.56	
4-Nitroaniline	1	0		8.67	47.74	50	30	70	0.327	0.336	4.51	
Atrazine	1	0		9.30	46.23	50	5	70	0.360	0.333	7.54	
Phenanthrene-d10	1	0	I	9.61	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.70	52.73	50	28	65	0.087	0.097	5.45	
n-Nitrosodiphenylamine	1	0		8.77	48.65	50	30	70	0.621	0.604	2.70	
2,4,6-Tribromophenol	1	0	S	8.90	44.17	50	**		0.091	0.083	11.65	
1,2-Diphenylhydrazine	1	0		8.82	49.42	50	30	70	0.708	0.700	1.17	
4-Bromophenyl-phenylether	1	0		9.14	45.93	50	35	65	0.197	0.181	8.13	
Hexachlorobenzene	1	0		9.21	46.01	50	19	71	0.200	0.184	7.97	
N-Octadecane	1	0		9.49	51.02	50	30	70	0.381	0.389	2.05	
Pentachlorophenol	1	0		9.41	47.70	50	21	76	0.122	0.112	4.61	
Phenanthrene	1	0		9.64	48.23	50	33.5	65	1.081	1.043	3.53	
Anthracene	1	0		9.69	48.08	50	29	65	1.096	1.054	3.83	
Carbazole	1	0		9.86	47.88	50	30	70	1.001	0.959	4.25	
Di-n-butylphthalate	1	0		10.25	48.22	50	26	65	1.141	1.101	3.56	
Fluoranthene	1	0		10.96	48.04	50	23.5	65	1.120	1.076	3.92	
Chrysene-d12	1	0	I	12.64	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.22	49.86	50	35	65	1.158	1.155	0.29	
Benzidine	1	0		11.11	37.67	50	2.5	75	0.347	0.297	24.65	
Terphenyl-d14	1	0	S	11.40	24.17	25	**		0.686	0.664	3.31	
4,4'-DDE	1	0		11.35	48.87		**		0.240			
4,4'-DDD	1	0		11.74	48.38		**		0.408			
Butylbenzylphthalate	1	0		12.00	44.69	50	21.5	70	0.509	0.474	10.62	
4,4'-DDT	1	0		12.10	56.69		**		0.309			
3,3'-Dichlorobenzidine	1	0		12.61	47.82	50	9	106.5	0.316	0.328	4.36	
Benzo[a]anthracene	1	0		12.63	48.55	50	21	66.5	1.100	1.068	2.90	
Chrysene	1	0		12.68	50.92	50	22	70	1.013	1.032	1.85	
bis(2-Ethylhexyl)phthalate	1	0		12.70	45.74	50	21.5	68.5	0.688	0.662	8.52	
Perylene-d12	1	0	I	14.24	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.45	41.18	50	10.5	66	1.287	1.157	17.63	
Benzo[b]fluoranthene	1	0		13.84	49.41	50	21	70	1.146	1.133	1.18	
Benzo[k]fluoranthene	1	0		13.87	50.97	50	12.5	73	1.101	1.122	1.94	
Benzo[a]pyrene	1	0		14.18	49.49	50	16	74	1.085	1.074	1.02	
Indeno[1,2,3-cd]pyrene	1	0		15.50	49.70	50	6.5	75.5	1.160	1.153	0.60	
Dibenzo[a,h]anthracene	1	0		15.52	50.00	50	6.5	100	0.966	0.966	0.00	
Benzo[g,h,i]perylene	1	0		15.85	51.01	50	6.5	97.5	0.972	0.992	2.01	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 9:41:00

Data File: 7M95305.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.686	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.944	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

Page 3 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 7M95305.D
Acq On : 10/19/18 09:41

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/19/18 10:02
Qt Upd On: 10/17/18 08:02

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-19-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	80477	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	130844	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	485842	40.00	ng	0.00
50) Acenaphthene-d10	8.172	164	276201	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	477980	40.00	ng	0.00
91) Chrysene-d12	12.644	240	456743	40.00	ng	0.00
103) Perylene-d12	14.241	264	394976	40.00	ng	-0.03

System Monitoring Compounds						
11) 2-Fluorophenol	4.534	112	203632	47.17	ng	-0.01
Spiked Amount 100.000			Recovery =	47.17%		
16) Phenol-d5	5.421	99	292561	47.84	ng	-0.01
Spiked Amount 100.000			Recovery =	47.84%		
32) Nitrobenzene-d5	6.190	128	36227	23.75	ng	0.00
Spiked Amount 50.000			Recovery =	47.50%		
55) 2-Fluorobiphenyl	7.590	172	213156	24.31	ng	0.00
Spiked Amount 50.000			Recovery =	48.62%		
80) 2,4,6-Tribromophenol	8.899	330	49598	44.17	ng	0.00
Spiked Amount 100.000			Recovery =	44.17%		
94) Terphenyl-d14	11.404	244	189440	24.17	ng	0.00
Spiked Amount 50.000			Recovery =	48.34%		

Target Compounds						Qvalue
8) 1,4-Dioxane	2.542	88	96384	50.9848	ng	90
9) Pyridine	2.964	79	244852	48.8535	ng	62
10) N-Nitrosodimethylamine	2.899	74	143652	49.2434	ng	67
12) Benzaldehyde	5.362	77	106056	47.2617	ng	71
13) Aniline	5.458	93	288477	50.6173	ng	79
14) Pentachloroethane	5.501	117	71469	49.0138	ng	85
15) bis(2-Chloroethyl)ether	5.517	93	222534	50.4489	ng	75
17) Phenol	5.437	94	296541	48.8331	ng	77
18) 2-Chlorophenol	5.560	128	213961	47.4117	ng	77
19) N-Decane	5.619	57	189295	48.6168	ng	85
20) 1,3-Dichlorobenzene	5.693	146	234987	48.3989	ng	96
22) 1,4-Dichlorobenzene	5.758	146	234251	49.0580	ng	97
23) 1,2-Dichlorobenzene	5.880	146	224829	49.8390	ng	96
24) Benzyl alcohol	5.854	108	133246	46.2164	ng	69
25) bis(2-chloroisopropyl)...	5.971	45	222417	50.5071	ng	95
26) 2-Methylphenol	5.945	108	191226	48.4943	ng	96
27) Acetophenone	6.073	105	289184	51.3080	ng	69
28) Hexachloroethane	6.164	117	88209	50.4780	ng	85
29) N-Nitroso-di-n-propyla...	6.073	70	135678	49.5442	ng	91
30) 3&4-Methylphenol	6.073	108	196365	49.8929	ng	99
33) Nitrobenzene	6.206	77	205567	50.6296	ng	75
34) Isophorone	6.399	82	365068	48.6970	ng	81
35) 2-Nitrophenol	6.457	139	106770	49.7257	ng	81
36) 2,4-Dimethylphenol	6.489	107	194966	48.2940	ng	85
37) Benzoic Acid	6.554	105	142782	36.2639	ng	39
38) bis(2-Chloroethoxy)met...	6.564	93	255258	50.2905	ng	97
39) 2,4-Dichlorophenol	6.644	162	164081	48.3228	ng	87
40) 1,2,4-Trichlorobenzene	6.714	180	181488	47.9143	ng	96
41) Naphthalene	6.773	128	632784	48.8437	ng	99
42) 4-Chloroaniline	6.805	127	237082m	49.0449	ng	
43) Hexachlorobutadiene	6.869	225	91924	47.8534	ng	97
44) Caprolactam	7.066	113	64713	45.8136	ng	58
45) 4-Chloro-3-methylphenol	7.168	107	160628	47.4810	ng	76
46) 2-Methylnaphthalene	7.307	142	415354	49.1549	ng	100
47) 1-Methylnaphthalene	7.382	142	401053	48.8054	ng	91
48) Methylnaphthalenes (To...	7.307	142	816541m	97.9532	ng	
49) 1,1'-Biphenyl	7.675	154	478398	48.5550	ng	95
51) 1,2,4,5-Tetrachloroben...	7.440	216	175520	48.1113	ng	98
52) Hexachlorocyclopentadiene	7.435	237	79610	46.1700	ng	99
53) 2,4,6-Trichlorophenol	7.526	196	110992	46.7786	ng	99
54) 2,4,5-Trichlorophenol	7.553	196	118721	48.5722	ng	98
56) 2-Chloronaphthalene	7.697	162	367120	48.9147	ng	91
57) 1,4-Dimethylnaphthalene	7.975	156	324445	49.7961	ng	87
58) Dimethylnaphthalenes (...)	7.975	156	324445	49.7961	ng	87
59) Diphenyl Ether	7.761	170	272436	48.7824	ng	80
60) 2-Nitroaniline	7.766	65	114337	50.8840	ng	63
61) Coumarin	7.953	146	153259	48.9710	ng	83
62) Acenaphthylene	8.049	152	545767	48.6957	ng	99
63) Dimethylphthalate	7.921	163	400932	48.6671	ng	99
64) 2,6-Dinitrotoluene	7.969	165	93852	52.7249	ng	62
65) Acenaphthene	8.204	153	378155	49.3167	ng	98

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95305.D Sam Mult : 1 Vial# : 2 Qt On : 10/19/18 10:02
 Acq On : 10/19/18 09:41 Misc : A,BNA Qt Upd On: 10/17/18 08:02

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.119	138	108652	55.0878	ng	71
67) 2,4-Dinitrophenol	8.204	184	43368	52.6660	ng	68
68) Dibenzofuran	8.354	168	518215	47.9339	ng	84
69) 2,4-Dinitrotoluene	8.322	165	123631	49.1925	ng	64
70) 4-Nitrophenol	8.242	65	72722	52.3342	ng	84
71) 2,3,4,6-Tetrachlorophenol	8.461	232	98967	46.3674	ng	85
72) Fluorene	8.674	166	414810	48.9952	ng	99
73) 4-Chlorophenyl-phenyle...	8.664	204	189081	48.4732	ng	86
74) Diethylphthalate	8.546	149	403262	48.7221	ng	96
75) 4-Nitroaniline	8.669	138	115871	47.7439	ng	72
76) Atrazine	9.299	200	115042	46.2319	ng	95
78) 4,6-Dinitro-2-methylph...	8.701	198	58019	52.7255	ng	63
79) n-Nitrosodiphenylamine	8.771	169	361011	48.6505	ng	99
81) 1,2-Diphenylhydrazine	8.819	77	417951	49.4167	ng	78
82) 4-Bromophenyl-phenylether	9.145	248	108055	45.9334	ng	83
83) Hexachlorobenzene	9.214	284	109945	46.0129	ng	72
84) N-Octadecane	9.492	57	232220	51.0229	ng	67
85) Pentachlorophenol	9.406	266	66927	47.6953	ng	99
86) Phenanthrene	9.636	178	622961	48.2330	ng	100
87) Anthracene	9.689	178	629707	48.0840	ng	99
88) Carbazole	9.855	167	572682	47.8771	ng	97
89) Di-n-butylphthalate	10.245	149	657632	48.2205	ng	97
90) Fluoranthene	10.956	202	642747	48.0405	ng	95
92) Pyrene	11.217	202	659301	49.8568	ng	92
93) Benzidine	11.105	184	169297	37.6731	ng	90
95) 4,4'-DDE	11.346	246	133793	48.8729	ng	96
96) 4,4'-DDD	11.741	235	225360	48.3847	ng	94
97) Butylbenzylphthalate	11.997	149	270614	44.6885	ng	74
98) 4,4'-DDT	12.099	235	197616	56.6942	ng	96
99) 3,3'-Dichlorobenzidine	12.606	252	187418	47.8188	ng	97
100) Benzo[a]anthracene	12.633	228	609964	48.5484	ng	99
101) Chrysene	12.676	228	589180	50.9243	ng	99
102) bis(2-Ethylhexyl)phtha...	12.703	149	377798	45.7396	ng	94
104) Di-n-octylphthalate	13.445	149	571060	41.1835	ng	99
105) Benzo[b]fluoranthene	13.840	252	559385	49.4109	ng	97
106) Benzo[k]fluoranthene	13.867	252	554110m	50.9685	ng	
107) Benzo[a]pyrene	14.182	252	530217	49.4907	ng	95
108) Indeno[1,2,3-cd]pyrene	15.496	276	569241	49.7025	ng	90
109) Dibenzo[a,h]anthracene	15.518	278	476836	49.9987	ng	94
110) Benzo[g,h,i]perylene	15.849	276	489645	51.0053	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

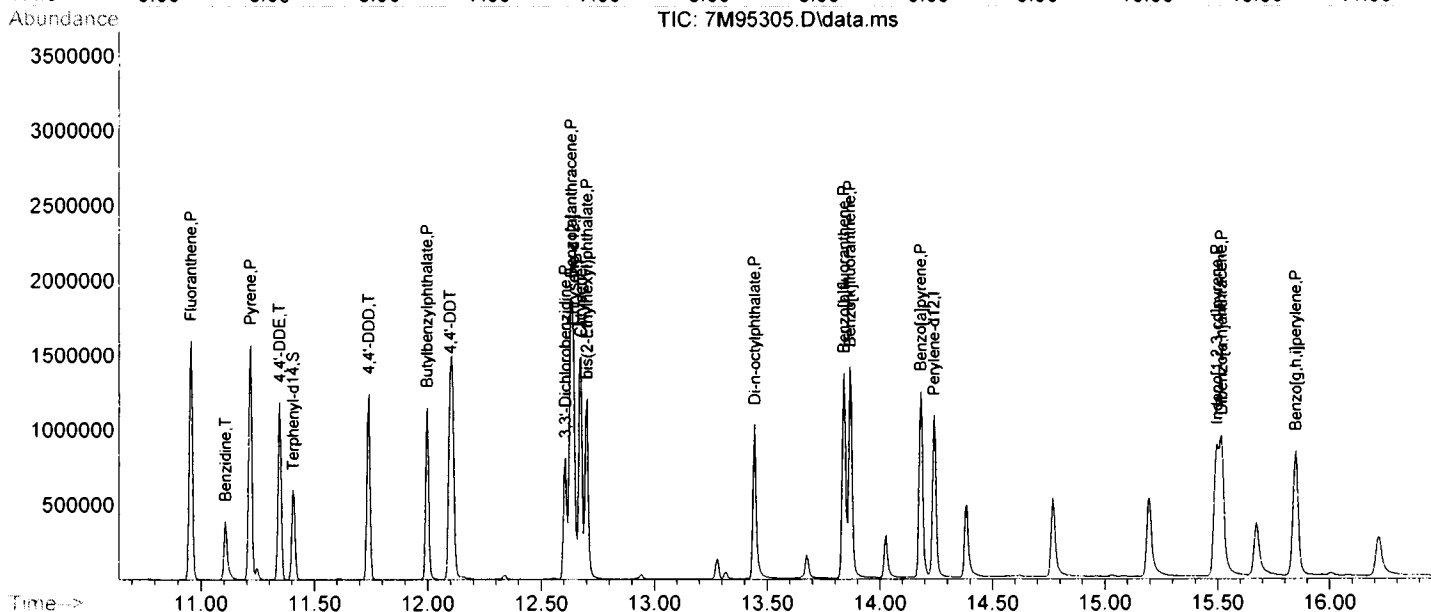
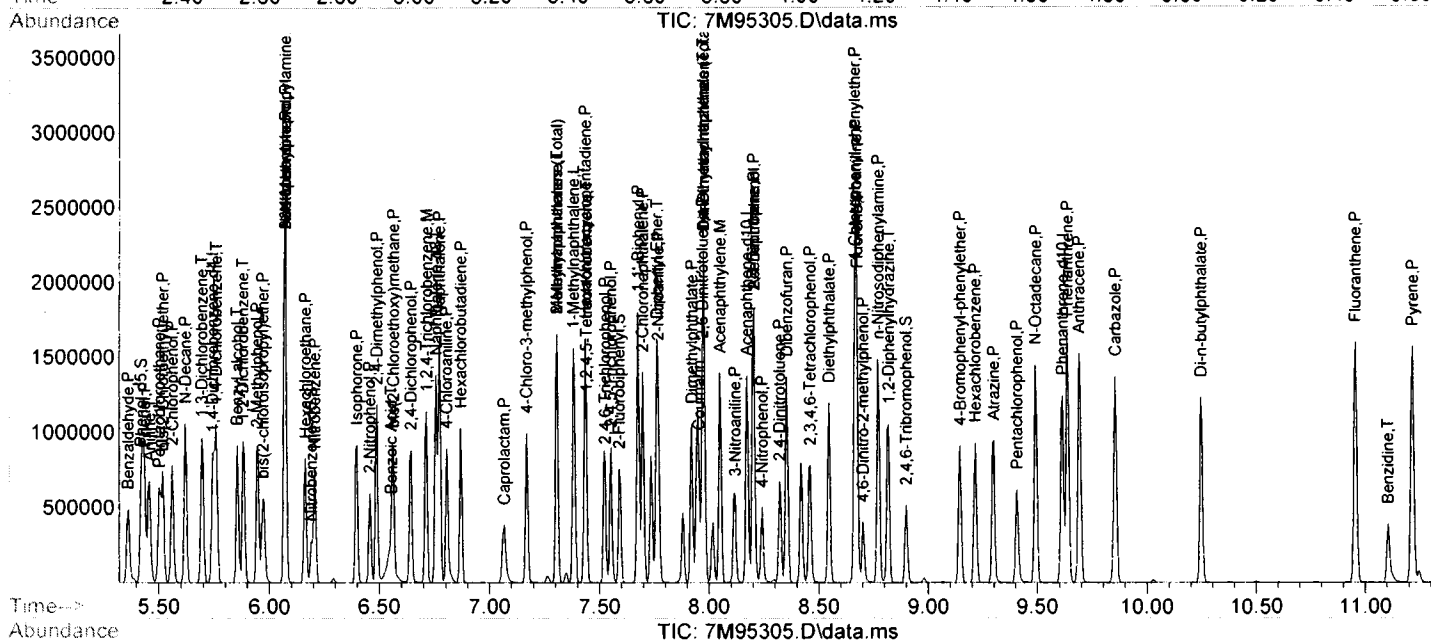
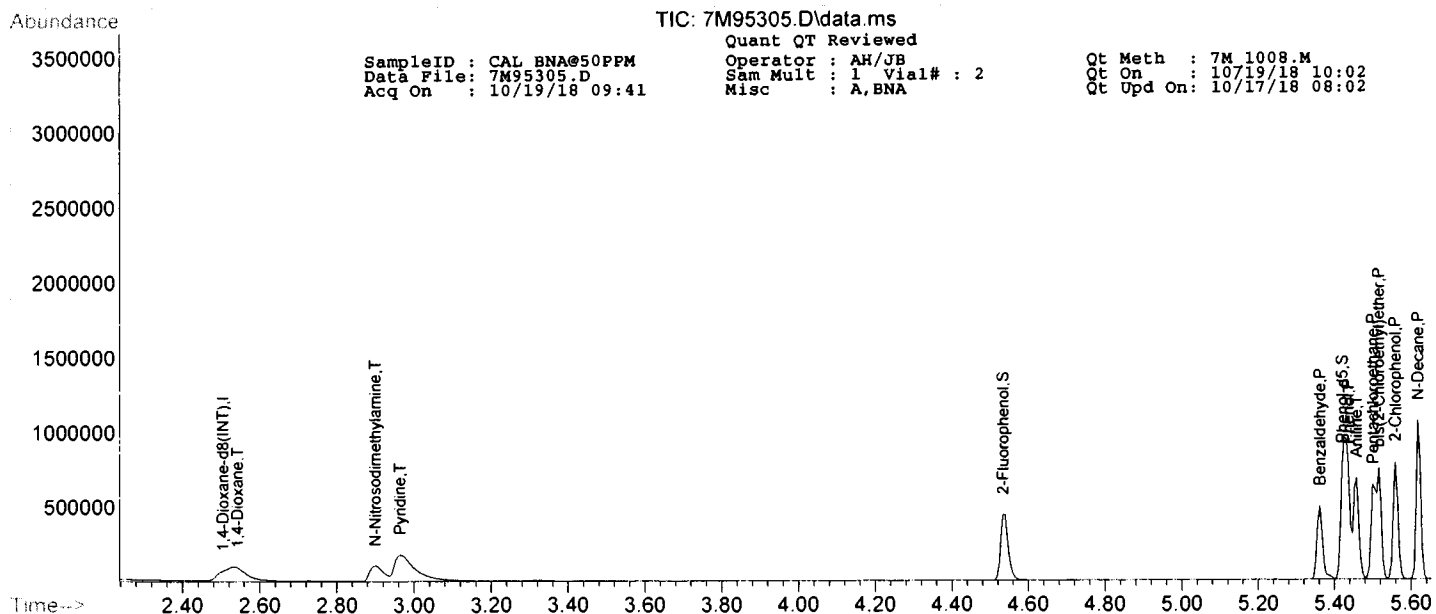
TIC: 7M95305.D\data.ms

Quant QT Reviewed

SampleID : CAL BNA@50PPM
Data File: 7M95305.D
Acq On : 10/19/18 09:41

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

```
Qt Meth   : 7M 1008.M
Qt On      : 10719/18 10:02
Qt Upd On : 10/17/18 08:02
```



Form7

8101509 0463

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 4:02:00 P

Data File: 9M88660.D
Method: EPA 8270D

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.56	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.59	48.50	50	**		0.983	0.953	3.01	
Pyridine	1	0		3.08	48.87	50	**		2.524	2.467	2.25	
N-Nitrosodimethylamine	1	0		2.98	53.02	50	**		1.448	1.535	6.04	
2-Fluorophenol	1	0	S	4.60	51.94	50	**		2.346	2.438	3.89	
Benzaldehyde	1	0		5.42	55.70	50	20	0.01	1.310	1.460	11.41	
Aniline	1	0		5.51	58.06	50	**		3.018	3.505	16.13	
Pentachloroethane	1	0		5.55	53.54	50	**	0.05	0.858	0.918	7.08	
bis(2-Chloroethyl)ether	1	0		5.57	52.77	50	20	0.7	2.446	2.471	5.54	
Phenol-d5	1	0	S	5.49	52.20	50	**		3.377	3.526	4.40	
Phenol	1	0		5.50	53.00	50	20	0.8	3.302	3.500	6.00	
2-Chlorophenol	1	0		5.62	51.10	50	20	0.8	2.617	2.675	2.20	
N-Decane	1	0		5.66	57.06	50	**	0.05	2.970	3.389	14.12	
1,3-Dichlorobenzene	1	0		5.75	51.68	50	**		2.864	2.960	3.36	
1,4-Dichlorobenzene-d4	1	0	I	5.79	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.81	48.70	50	20		1.491	1.452	2.60	
1,2-Dichlorobenzene	1	0		5.93	48.00	50	**		1.403	1.347	4.00	
Benzyl alcohol	1	0		5.91	50.28	50	**		0.846	0.851	0.56	
bis(2-chloroisopropyl)ether	1	0		6.02	58.73	50	20	0.01	1.831	2.150	17.47	
2-Methylphenol	1	0		6.01	50.40	50	20	0.7	1.213	1.148	0.80	
Acetophenone	1	0		6.12	49.62	50	20	0.01	1.907	1.892	0.75	
Hexachloroethane	1	0		6.21	49.85	50	20	0.3	0.572	0.570	0.30	
N-Nitroso-di-n-propylamine	1	0		6.12	52.82	50	20	0.5	0.971	1.026	5.64	
3&4-Methylphenol	1	0		6.13	48.96	50	20		1.275	1.249	2.09	
Naphthalene-d8	1	0	I	6.81	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.25	24.20	25	**		0.127	0.123	3.20	
Nitrobenzene	1	0		6.26	52.41	50	20	0.2	0.363	0.380	4.82	
Isophorone	1	0		6.45	51.22	50	20	0.4	0.630	0.645	2.44	
2-Nitrophenol	1	0		6.51	46.61	50	20	0.1	0.197	0.184	6.77	
2,4-Dimethylphenol	1	0		6.54	51.41	50	20	0.2	0.356	0.362	2.82	
Benzoic Acid	1	0		6.62	28.40	50	**		0.346	0.226	43.21	
bis(2-Chloroethoxy)methane	1	0		6.61	48.70	50	20	0.3	0.389	0.379	2.60	
2,4-Dichlorophenol	1	0		6.70	48.04	50	20	0.2	0.294	0.283	3.91	
1,2,4-Trichlorobenzene	1	0		6.76	47.34	50	**		0.326	0.309	5.31	
Naphthalene	1	0		6.82	48.71	50	20	0.7	1.042	0.965	2.59	
4-Chloroaniline	1	0		6.86	46.36	50	20	0.01	0.355	0.374	7.28	
Hexachlorobutadiene	1	0		6.91	51.03	50	20	0.01	0.194	0.193	2.06	
Caprolactam	1	0		7.13	47.95	50	20	0.01	0.114	0.109	4.10	
4-Chloro-3-methylphenol	1	0		7.23	49.62	50	20	0.2	0.304	0.301	0.75	
2-Methylnaphthalene	1	0		7.36	47.48	50	**	0.4	0.726	0.690	5.04	
1-Methylnaphthalene	1	0		7.44	47.99	50	**	0.4	0.700	0.672	4.03	
Methylnaphthalenes	1	0		7.36	95.44	100	**			0.681	4.56	
1,1'-Biphenyl	1	0		7.73	47.62	50	20	0.01	0.855	0.814	4.77	
Acenaphthene-d10	1	0	I	8.24	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.49	47.20	50	20	0.01	0.592	0.559	5.60	
Hexachlorocyclopentadiene	1	0		7.48	8.42	50	20	0.05	0.199	0.030	83.16	C1
2,4,6-Trichlorophenol	1	0		7.58	47.42	50	20	0.2	0.365	0.346	5.16	
2,4,5-Trichlorophenol	1	0		7.62	47.72	50	20	0.2	0.391	0.373	4.55	
2-Fluorobiphenyl	1	0	S	7.65	23.32	25	**		1.291	1.204	6.74	
2-Chloronaphthalene	1	0		7.75	47.63	50	20	0.8	1.121	1.068	4.75	
1,4-Dimethylnaphthalene	1	0		8.04	47.20	50	**		0.974	0.920	5.59	
Dimethylnaphthalenes	1	0		8.04	47.20	50	20			0.920	5.59	

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

C1-Compound %Diff exceeds limits

Page 1 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0464

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/19/2018 4:02:00 P

Data File: 9M88660.D
Method: EPA 8270D

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.82	46.72	50	**		0.857	0.801	6.56	
2-Nitroaniline	1	0		7.83	57.80	50	20	0.01	0.408	0.472	15.60	
Coumarin	1	0		8.02	47.09		**		0.446			
Acenaphthylene	1	0		8.11	47.01	50	20	0.9	1.630	1.532	5.98	
Dimethylphthalate	1	0		7.98	48.51	50	20	0.01	1.291	1.252	2.97	
2,6-Dinitrotoluene	1	0		8.03	47.85	50	20	0.2	0.312	0.299	4.31	
Acenaphthene	1	0		8.27	46.25	50	20	0.9	1.148	1.062	7.50	
3-Nitroaniline	1	0		8.18	51.34	50	20	0.01	0.285	0.305	2.68	
2,4-Dinitrophenol	1	0		8.29	33.08	50	20	0.01	0.170	0.102	33.84	C1
Dibenzofuran	1	0		8.42	48.16	50	20	0.8	1.628	1.502	3.68	
2,4-Dinitrotoluene	1	0		8.40	49.44	50	20	0.2	0.403	0.394	1.12	
4-Nitrophenol	1	0		8.33	50.41	50	20	0.01	0.230	0.240	0.83	
2,3,4,6-Tetrachlorophenol	1	0		8.53	46.07	50	20	0.01	0.341	0.314	7.87	
Fluorene	1	0		8.74	46.38	50	20	0.9	1.348	1.250	7.25	
4-Chlorophenyl-phenylether	1	0		8.73	49.01	50	20	0.4	0.661	0.618	1.98	
Diethylphthalate	1	0		8.61	49.69	50	20	0.01	1.297	1.289	0.62	
4-Nitroaniline	1	0		8.75	49.74	50	20	0.01	0.359	0.355	0.53	
Atrazine	1	0		9.37	49.47	50	20	0.01	0.430	0.412	1.06	
Phenanthrene-d10	1	0	I	9.70	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	40.14	50	20	0.01	0.133	0.102	19.72	
n-Nitrosodiphenylamine	1	0		8.84	47.16	50	20	0.01	0.661	0.623	5.69	
2,4,6-Tribromophenol	1	0	S	8.98	48.97	50	**		0.106	0.100	2.06	
1,2-Diphenylhydrazine	1	0		8.89	52.69	50	**		0.715	0.754	5.38	
4-Bromophenyl-phenylether	1	0		9.22	47.62	50	20	0.1	0.214	0.204	4.75	
Hexachlorobenzene	1	0		9.29	46.85	50	20	0.1	0.229	0.214	6.31	
N-Octadecane	1	0		9.56	54.02	50	**	0.05	0.508	0.549	8.04	
Pentachlorophenol	1	0		9.50	42.69	50	20	0.05	0.141	0.112	14.61	
Phenanthrene	1	0		9.72	48.54	50	20	0.7	1.094	1.030	2.93	
Anthracene	1	0		9.78	46.93	50	20	0.7	1.133	1.063	6.15	
Carbazole	1	0		9.95	47.79	50	20	0.01	1.035	0.990	4.42	
Di-n-butylphthalate	1	0		10.33	50.68	50	20	0.01	1.301	1.268	1.36	
Fluoranthene	1	0		11.06	47.65	50	20	0.6	1.246	1.188	4.70	
Chrysene-d12	1	0	I	12.76	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.32	47.05	50	20	0.6	1.116	1.050	5.90	
Benzidine	1	0		11.21	43.33	50	**		0.406	0.352	13.33	
Terphenyl-d14	1	0	S	11.50	23.76	25	**		0.677	0.644	4.96	
4,4'-DDE	1	0		11.44	50.27		**		0.248			
4,4'-DDD	1	0		11.84	49.81		**		0.432			
Butylbenzylphthalate	1	0		12.09	49.45	50	20	0.01	0.514	0.509	1.09	
4,4'-DDT	1	0		12.20	47.77		**		0.391			
3,3'-Dichlorobenzidine	1	0		12.71	52.69	50	20	0.01	0.341	0.395	5.38	
Benzo[a]anthracene	1	0		12.75	47.36	50	20	0.8	1.099	1.041	5.27	
Chrysene	1	0		12.79	49.11	50	20	0.7	1.060	1.015	1.78	
bis(2-Ethylhexyl)phthalate	1	0		12.79	49.78	50	20	0.01	0.744	0.741	0.43	
Perylene-d12	1	0	I	14.38	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.54	49.95	50	20	0.01	1.386	1.338	0.10	
Benzo[b]fluoranthene	1	0		13.97	46.34	50	20	0.7	1.129	1.047	7.33	
Benzo[k]fluoranthene	1	0		13.99	46.99	50	20	0.7	1.148	1.079	6.01	
Benzo[a]pyrene	1	0		14.32	47.31	50	20	0.7	1.112	1.052	5.39	
Indeno[1,2,3-cd]pyrene	1	0		15.71	49.43	50	20	0.5	1.213	1.199	1.15	
Dibenzo[a,h]anthracene	1	0		15.73	48.19	50	20	0.4	1.026	0.989	3.61	
Benzo[g,h,i]perylene	1	0		16.09	48.71	50	20	0.5	1.003	0.977	2.58	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0465

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/19/2018 4:02:00 P

Data File: 9M88660.D
 Method: EPA 8270D

Instrument: GCMS 9

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.974	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.714	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 3 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 9M88660.D
Acq On : 10/19/18 16:02

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 9M_1008.M
Qt On : 10/19/18 16:20
Qt Upd On: 10/08/18 16:51

Data Path : G:\GCMSData\2018\GCMS_9\Data\10-1918\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.558	96	21198	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.794	152	44404	40.00	ng	0.00
31) Naphthalene-d8	6.806	136	172643	40.00	ng	0.00
50) Acenaphthene-d10	8.235	164	106798	40.00	ng	0.00
77) Phenanthrene-d10	9.696	188	184072	40.00	ng	0.00
91) Chrysene-d12	12.759	240	211692	40.00	ng	0.01
103) Perylene-d12	14.381	264	191500	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.601	112	64588	51.94	ng	0.00
Spiked Amount 100.000			Recovery =	51.94%		
16) Phenol-d5	5.487	99	93423	52.20	ng	0.00
Spiked Amount 100.000			Recovery =	52.20%		
32) Nitrobenzene-d5	6.246	128	13305	24.20	ng	0.00
Spiked Amount 50.000			Recovery =	48.40%		
55) 2-Fluorobiphenyl	7.647	172	80350	23.32	ng	0.00
Spiked Amount 50.000			Recovery =	46.64%		
80) 2,4,6-Tribromophenol	8.977	330	23054	48.97	ng	0.00
Spiked Amount 100.000			Recovery =	48.97%		
94) Terphenyl-d14	11.503	244	85173	23.76	ng	0.00
Spiked Amount 50.000			Recovery =	47.52%		
Target Compounds						
8) 1,4-Dioxane	2.595	88	25252	48.4956	ng	99
9) Pyridine	3.075	79	65366	48.8749	ng	90
10) N-Nitrosodimethylamine	2.984	74	40678	53.0203	ng	96
12) Benzaldehyde	5.416	77	38679	55.7034	ng	88
13) Aniline	5.513	93	92871	58.0636	ng	88
14) Pentachloroethane	5.553	117	24336	53.5410	ng	74
15) bis(2-Chloroethyl) ether	5.570	93	65471	52.7690	ng	91
17) Phenol	5.499	94	92743	52.9996	ng	96
18) 2-Chlorophenol	5.618	128	70881	51.0993	ng	84
19) N-Decane	5.664	57	89797	57.0615	ng	71
20) 1,3-Dichlorobenzene	5.746	146	78429	51.6822	ng	98
22) 1,4-Dichlorobenzene	5.809	146	80580	48.6976	ng	93
23) 1,2-Dichlorobenzene	5.934	146	74767	47.9998	ng	97
24) Benzyl alcohol	5.911	108	47234	50.2814	ng	87
25) bis(2-chloroisopropyl)...	6.022	45	119355	58.7327	ng	93
26) 2-Methylphenol	6.007	108	63713	50.3983	ng	97
27) Acetophenone	6.124	105	105035	49.6249	ng	79
28) Hexachloroethane	6.212	117	31647	49.8488	ng	91
29) N-Nitroso-di-n-propyla...	6.124	70	56944	52.8225	ng	89
30) 3&4-Methylphenol	6.130	108	69305	48.9572	ng	98
33) Nitrobenzene	6.260	77	81998	52.4091	ng	91
34) Isophorone	6.448	82	139283	51.2197	ng	92
35) 2-Nitrophenol	6.510	139	39711	46.6134	ng	92
36) 2,4-Dimethylphenol	6.542	107	78163	51.4081	ng	96
37) Benzoic Acid	6.615	105	48682	28.3975	ng	91
38) bis(2-Chloroethoxy)met...	6.610	93	81752	48.7013	ng	94
39) 2,4-Dichlorophenol	6.698	162	60984	48.0445	ng	90
40) 1,2,4-Trichlorobenzene	6.763	180	66649	47.3447	ng	98
41) Naphthalene	6.823	128	208248	48.7061	ng	98
42) 4-Chloroaniline	6.857	127	80772	46.3583	ng	88
43) Hexachlorobutadiene	6.914	225	41635	51.0314	ng	96
44) Caprolactam	7.130	113	23619	47.9506	ng	74
45) 4-Chloro-3-methylphenol	7.229	107	65015	49.6248	ng	95
46) 2-Methylnaphthalene	7.357	142	148870	47.4818	ng	100
47) 1-Methylnaphthalene	7.437	142	145054	47.9875	ng	92
48) Methylnaphthalenes (To...	7.357	142	293911m	95.4368	ng	
49) 1,1'-Biphenyl	7.732	154	175738	47.6152	ng	93
51) 1,2,4,5-Tetrachloroben...	7.493	216	74655	47.1998	ng	97
52) Hexachlorocyclopentadiene	7.485	237	3976	8.4176	ng	86
53) 2,4,6-Trichlorophenol	7.582	196	46210	47.4193	ng	97
54) 2,4,5-Trichlorophenol	7.619	196	49810	47.7244	ng	95
56) 2-Chloronaphthalene	7.755	162	142529	47.6274	ng	93
57) 1,4-Dimethylnaphthalene	8.036	156	122785	47.2048	ng	93
58) Dimethylnaphthalenes (...)	8.036	156	122785	47.2048	ng	93
59) Diphenyl Ether	7.817	170	106893	46.7216	ng	84
60) 2-Nitroaniline	7.832	65	63011	57.8023	ng	75
61) Coumarin	8.016	146	56071	47.0885	ng	66
62) Acenaphthylene	8.113	152	204539	47.0099	ng	98
63) Dimethylphthalate	7.977	163	167161	48.5149	ng	99
64) 2,6-Dinitrotoluene	8.033	165	39901	47.8474	ng	72
65) Acenaphthene	8.266	153	141718	46.2511	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 9M88660.D
 Acq On : 10/19/18 16:02

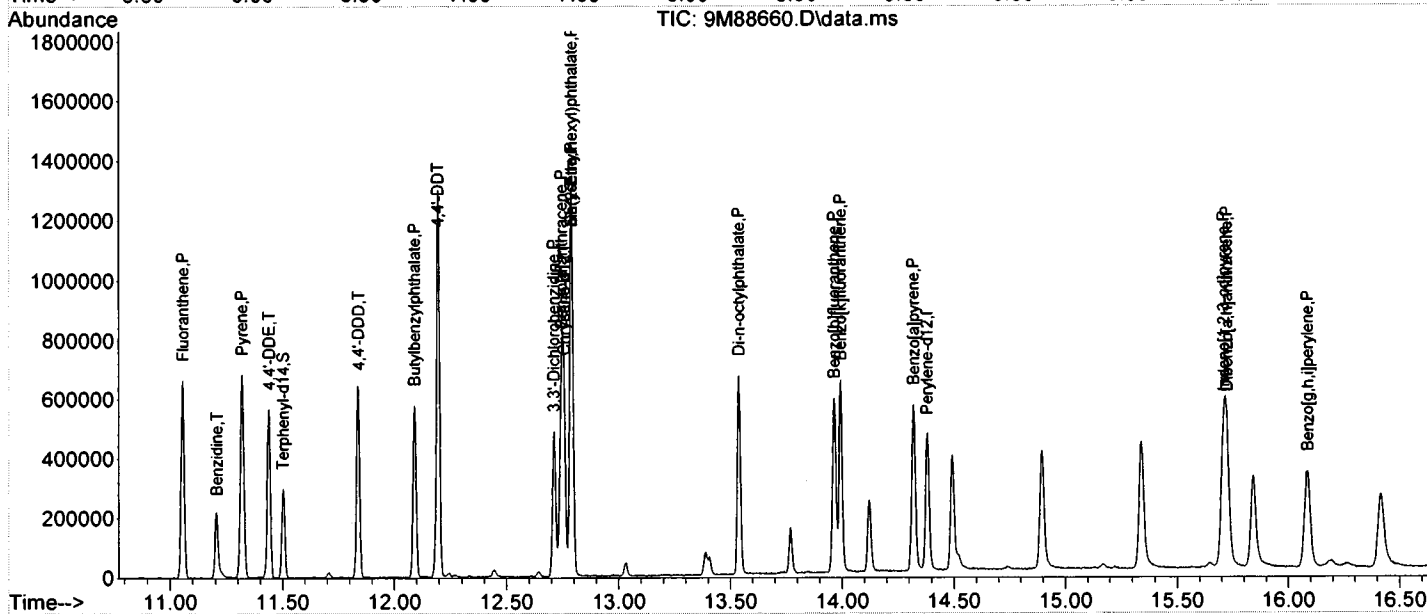
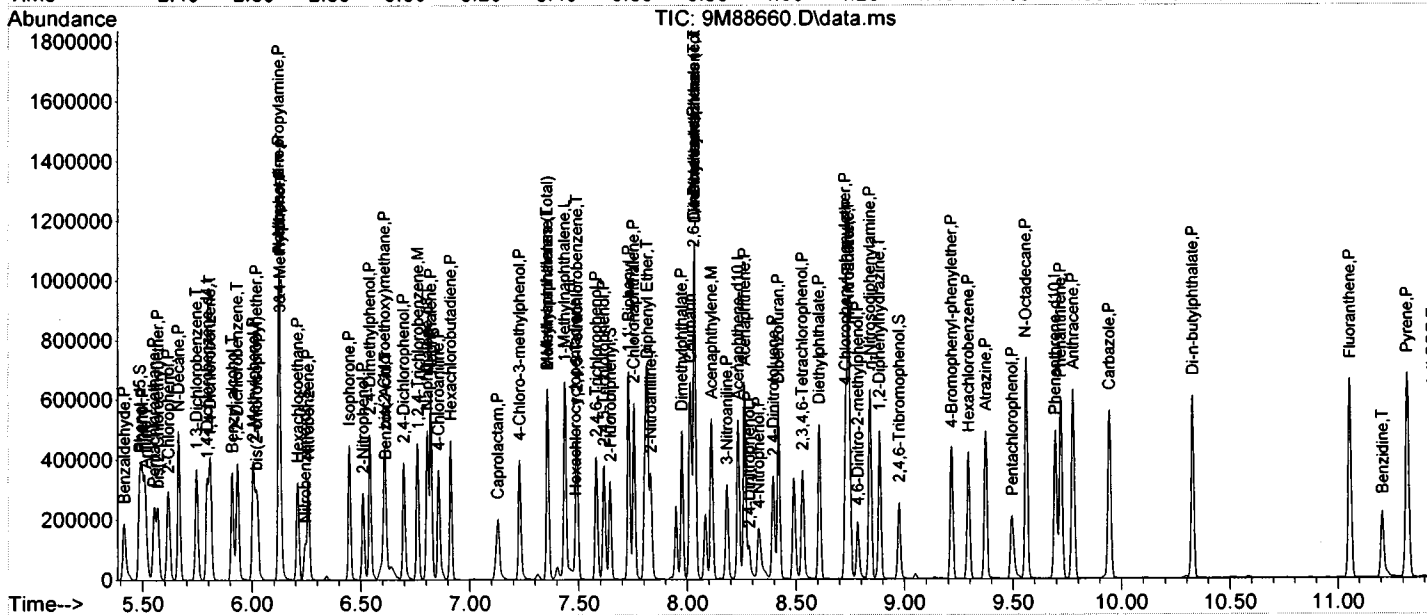
Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 9M_1008.M
 Qt On : 10/19/18 16:20
 Qt Upd On: 10/08/18 16:51

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-1918\
 Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.184	138	40763	51.3392	ng	85
67) 2,4-Dinitrophenol	8.286	184	13646	33.0815	ng	29
68) Dibenzofuran	8.420	168	200479	48.1617	ng	93
69) 2,4-Dinitrotoluene	8.397	165	52579	49.4404	ng	70
70) 4-Nitrophenol	8.329	65	31989	50.4131	ng	76
71) 2,3,4,6-Tetrachlorophenol	8.531	232	41901	46.0671	ng	88
72) Fluorene	8.744	166	166921	46.3772	ng	96
73) 4-Chlorophenyl-phenyle...	8.729	204	82519	49.0099	ng	90
74) Diethylphthalate	8.607	149	172015	49.6879	ng	98
75) 4-Nitroaniline	8.747	138	47355	49.7367	ng	90
76) Atrazine	9.375	200	55035	49.4694	ng	97
78) 4,6-Dinitro-2-methylph...	8.786	198	23520	40.1377	ng	41
79) n-Nitrosodiphenylamine	8.843	169	143393	47.1556	ng	94
81) 1,2-Diphenylhydrazine	8.886	77	173448	52.6898	ng	87
82) 4-Bromophenyl-phenylether	9.218	248	46874	47.6235	ng	86
83) Hexachlorobenzene	9.295	284	49308	46.8472	ng	73
84) N-Octadecane	9.562	57	126353	54.0206	ng	92
85) Pentachlorophenol	9.497	266	25868	42.6941	ng	96
86) Phenanthrene	9.721	178	236951	48.5367	ng	99
87) Anthracene	9.778	178	244676	46.9254	ng	99
88) Carbazole	9.946	167	227677	47.7912	ng	98
89) Di-n-butylphthalate	10.329	149	291772	50.6822	ng	98
90) Fluoranthene	11.057	202	273315	47.6515	ng	85
92) Pyrene	11.321	202	277892	47.0491	ng	83
93) Benzidine	11.207	184	93088	43.3333	ng	82
95) 4,4'-DDE	11.440	246	65877	50.2705	ng	94
96) 4,4'-DDD	11.841	235	114006	49.8139	ng	92
97) Butylbenzylphthalate	12.091	149	134645	49.4526	ng	76
98) 4,4'-DDT	12.196	235	98941	47.7657	ng	96
99) 3,3'-Dichlorobenzidine	12.713	252	104468	52.6890	ng	95
100) Benzo[a]anthracene	12.747	228	275585	47.3640	ng	98
101) Chrysene	12.790	228	268589	49.1076	ng	99
102) bis(2-Ethylhexyl)phtha...	12.793	149	195951	49.7842	ng	97
104) Di-n-octylphthalate	13.540	149	320320	49.9484	ng	100
105) Benzo[b]fluoranthene	13.966	252	250510	46.3359	ng	91
106) Benzo[k]fluoranthene	13.995	252	258374	46.9938	ng	91
107) Benzo[a]pyrene	14.321	252	251787	47.3064	ng	90
108) Indeno[1,2,3-cd]pyrene	15.711	276	286968	49.4272	ng	79
109) Dibenzo[a,h]anthracene	15.725	278	236803	48.1942	ng	86
110) Benzo[g,h,i]perylene	16.089	276	233978	48.7076	ng	72

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/22/2018 7:45:00Data File: 10M71464.D
Method: EPA 625.1

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.73	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.77	48.40		**		0.964			
Pyridine	1	0		3.25	52.00	50	**		2.286	2.322	4.00	
N-Nitrosodimethylamine	1	0		3.19	47.96	50	**		1.333	1.279	4.09	
2-Fluorophenol	1	0	S	4.71	46.92	50	**		2.316	2.173	6.17	
Benzaldehyde	1	0		5.53	28.56	50	**		1.115	0.637	42.89	
Aniline	1	0		5.62	43.23	50	**		2.883	2.803	13.54	
Pentachloroethane	1	0		5.66	47.90	50	**		0.876	0.839	4.20	
bis(2-Chloroethyl)ether	1	0		5.67	48.48	50	20		2.349	2.245	3.03	
Phenol-d5	1	0	S	5.58	47.77	50	**		3.134	2.994	4.47	
Phenol	1	0		5.59	49.91	50	20		3.104	3.098	0.18	
2-Chlorophenol	1	0		5.72	47.92	50	20		2.592	2.485	4.16	
N-Decane	1	0		5.75	48.77	50	20		2.035	1.985	2.45	
1,3-Dichlorobenzene	1	0		5.85	47.91	50	20		2.875	2.754	4.18	
1,4-Dichlorobenzene-d4	1	0	I	5.89	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.91	49.24	50	20		1.472	1.449	1.53	
1,2-Dichlorobenzene	1	0		6.03	49.56	50	20		1.438	1.426	0.88	
Benzyl alcohol	1	0		6.01	48.40	50	**		0.812	0.786	3.21	
bis(2-chloroisopropyl)ether	1	0		6.11	50.33	50	20		1.365	1.375	0.67	
2-Methylphenol	1	0		6.09	48.49	50	20		1.163	1.128	3.03	
Acetophenone	1	0		6.22	49.46	50	**		1.647	1.630	1.09	
Hexachloroethane	1	0		6.31	50.30	50	20		0.570	0.573	0.60	
N-Nitroso-di-n-propylamine	1	0		6.21	49.87	50	**		0.768	0.766	0.26	
3&4-Methylphenol	1	0		6.21	51.95	50	**		1.105	1.148	3.89	
Naphthalene-d8	1	0	I	6.90	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.34	25.50	25	**		0.121	0.128	1.98	
Nitrobenzene	1	0		6.36	51.20	50	20		0.348	0.356	2.41	
Isophorone	1	0		6.54	51.49	50	20		0.598	0.616	2.98	
2-Nitrophenol	1	0		6.60	51.39	50	20		0.190	0.195	2.78	
2,4-Dimethylphenol	1	0		6.63	51.35	50	20		0.355	0.365	2.70	
Benzoic Acid	1	0		6.71	30.93	50	**		0.296	0.162	38.14	
bis(2-Chloroethoxy)methane	1	0		6.70	54.91	50	20		0.375	0.412	9.82	
2,4-Dichlorophenol	1	0		6.79	52.20	50	20		0.310	0.323	4.40	
1,2,4-Trichlorobenzene	1	0		6.85	52.89	50	20		0.336	0.355	5.77	
Naphthalene	1	0		6.92	51.86	50	**		1.083	1.100	3.72	
4-Chloroaniline	1	0		6.95	59.09	50	**		0.344	0.406	18.18	
Hexachlorobutadiene	1	0		7.00	49.61	50	20		0.188	0.187	0.78	
Caprolactam	1	0		7.23	51.11	50	**		0.112	0.111	2.22	
4-Chloro-3-methylphenol	1	0		7.31	50.01	50	20		0.284	0.284	0.01	
2-Methylnaphthalene	1	0		7.45	50.38	50	**		0.701	0.707	0.75	
1-Methylnaphthalene	1	0		7.53	51.27	50	**		0.690	0.707	2.53	
Methylnaphthalenes	1	0		7.53	101.87	100	**			0.707	1.87	
1,1'-Biphenyl	1	0		7.82	51.18	50	**		0.871	0.892	2.36	
Acenaphthene-d10	1	0	I	8.33	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.58	49.96	50	**		0.548	0.548	0.08	
Hexachlorocyclopentadiene	1	0		7.57	42.96	50	**		0.188	0.173	14.08	
2,4,6-Trichlorophenol	1	0		7.67	47.10	50	20		0.333	0.314	5.80	
2,4,5-Trichlorophenol	1	0		7.71	48.70	50	**		0.354	0.345	2.60	
2-Fluorobiphenyl	1	0	S	7.74	24.06	25	**		1.281	1.233	3.74	
2-Chloronaphthalene	1	0		7.85	50.11	50	20		1.056	1.058	0.21	
1,4-Dimethylnaphthalene	1	0		8.13	49.10	50	**		0.872	0.856	1.80	
Dimethylnaphthalenes	1	0		8.13	49.10		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/22/2018 7:45:00

Data File: 10M71464.D
Method: EPA 625.1

Instrument: GCMS 10

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.91	50.75	50	**		0.783	0.794	1.50	
2-Nitroaniline	1	0		7.93	47.05	50	**		0.375	0.353	5.90	
Coumarin	1	0		8.12	51.04		**		0.389			
Acenaphthylene	1	0		8.21	49.69	50	20		1.558	1.548	0.61	
Dimethylphthalate	1	0		8.06	49.00	50	20		1.234	1.209	2.01	
2,6-Dinitrotoluene	1	0		8.13	48.57	50	20		0.257	0.249	2.86	
Acenaphthene	1	0		8.36	48.34	50	20		1.099	1.062	3.32	
3-Nitroaniline	1	0		8.28	45.54	50	**		0.280	0.283	8.92	
2,4-Dinitrophenol	1	0		8.38	43.73	50	20		0.151	0.120	12.54	
Dibenzofuran	1	0		8.52	48.09	50	**		1.584	1.527	3.82	
2,4-Dinitrotoluene	1	0		8.49	44.88	50	20		0.380	0.362	10.24	
4-Nitrophenol	1	0		8.41	39.17	50	20		0.204	0.172	21.66	C1
2,3,4,6-Tetrachlorophenol	1	0		8.63	45.75	50	**		0.308	0.282	8.49	
Fluorene	1	0		8.84	47.24	50	20		1.260	1.190	5.52	
4-Chlorophenyl-phenylether	1	0		8.82	48.37	50	20		0.601	0.581	3.26	
Diethylphthalate	1	0		8.70	47.93	50	20		1.219	1.169	4.15	
4-Nitroaniline	1	0		8.85	46.33	50	**		0.325	0.317	7.34	
Atrazine	1	0		9.47	45.51	50	**		0.409	0.372	8.99	
Phenanthrene-d10	1	0	I	9.80	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.88	50.12	50	20		0.114	0.115	0.23	
n-Nitrosodiphenylamine	1	0		8.94	50.40	50	**		0.603	0.608	0.79	
2,4,6-Tribromophenol	1	0	S	9.08	42.47	50	**		0.089	0.081	15.06	
1,2-Diphenylhydrazine	1	0		8.98	52.90	50	**		0.736	0.778	5.80	
4-Bromophenyl-phenylether	1	0		9.32	49.29	50	20		0.185	0.183	1.42	
Hexachlorobenzene	1	0		9.39	46.27	50	**		0.199	0.184	7.47	
N-Octadecane	1	0		9.64	51.29	50	**		0.338	0.347	2.59	
Pentachlorophenol	1	0		9.59	46.12	50	20		0.097	0.087	7.75	
Phenanthrene	1	0		9.83	49.24	50	20		1.057	1.041	1.51	
Anthracene	1	0		9.88	51.19	50	20		1.073	1.098	2.38	
Carbazole	1	0		10.05	51.10	50	20		0.976	0.997	2.20	
Di-n-butylphthalate	1	0		10.42	44.15	50	20		1.117	1.094	11.69	
Fluoranthene	1	0		11.16	52.10	50	20		1.115	1.161	4.19	
Chrysene-d12	1	0	I	12.86	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.43	53.76	50	20		1.233	1.325	7.52	
Benzidine	1	0		11.31	41.80	50	**		0.463	0.400	16.40	
Terphenyl-d14	1	0	S	11.60	26.07	25	**		0.733	0.764	4.30	
4,4'-DDE	1	0		11.54	51.12		**		0.254			
4,4'-DDD	1	0		11.94	52.86		**		0.432			
Butylbenzylphthalate	1	0		12.18	53.75	50	20		0.536	0.565	7.50	
4,4'-DDT	1	0		12.29	53.93		**		0.383			
3,3'-Dichlorobenzidine	1	0		12.81	54.18	50	20		0.352	0.401	8.35	
Benzo[a]anthracene	1	0		12.85	50.81	50	20		1.110	1.128	1.62	
Chrysene	1	0		12.89	51.10	50	20		1.090	1.114	2.20	
bis(2-Ethylhexyl)phthalate	1	0		12.87	48.14	50	20		0.765	0.737	3.71	
Perylene-d12	1	0	I	14.49	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.62	45.53	50	20		1.236	1.226	8.94	
Benzo[b]fluoranthene	1	0		14.07	53.13	50	20		1.086	1.153	6.26	
Benzo[k]fluoranthene	1	0		14.09	53.50	50	20		1.069	1.144	7.01	
Benzo[a]pyrene	1	0		14.43	50.73	50	20		1.054	1.070	1.46	
Indeno[1,2,3-cd]pyrene	1	0		15.86	51.12	50	20		1.110	1.134	2.24	
Dibenzo[a,h]anthracene	1	0		15.87	51.08	50	20		0.920	0.940	2.16	
Benzo[g,h,i]perylene	1	0		16.25	48.46	50	20		0.980	0.950	3.08	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 10M71464.D
Acq On : 10/22/18 07:45

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M 100%
Qt On : 10/22/18 08:12
Qt Upd On: 10/08/18 12:40

8101509 0471

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-22-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	56350	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.893	152	107070	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	369309	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	241193	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	417865	40.00	ng	0.00
91) Chrysene-d12	12.863	240	373431	40.00	ng	0.00
103) Perylene-d12	14.494	264	395181	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.711	112	153040	46.92	ng	-0.01
Spiked Amount 100.000			Recovery =	46.92%		
16) Phenol-d5	5.578	99	210893	47.77	ng	0.00
Spiked Amount 100.000			Recovery =	47.77%		
32) Nitrobenzene-d5	6.343	128	29633	25.50	ng	0.00
Spiked Amount 50.000			Recovery =	51.00%		
55) 2-Fluorobiphenyl	7.739	172	185830	24.06	ng	0.00
Spiked Amount 50.000			Recovery =	48.12%		
80) 2,4,6-Tribromophenol	9.076	330	42175	42.47	ng	0.00
Spiked Amount 100.000			Recovery =	42.47%		
94) Terphenyl-d14	11.600	244	178410	26.07	ng	0.00
Spiked Amount 50.000			Recovery =	52.14%		
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.770	88	65731	48.4025	ng	93
9) Pyridine	3.246	79	163559	52.0018	ng	70
10) N-Nitrosodimethylamine	3.187	74	90055	47.9559	ng	85
12) Benzaldehyde	5.530	77	44836	28.5556	ng	74
13) Aniline	5.621	93	197443	43.2318	ng	36
14) Pentachloroethane	5.658	117	59117	47.8982	ng	71
15) bis(2-Chloroethyl)ether	5.674	93	158104	48.4841	ng	75
17) Phenol	5.589	94	218238	49.9099	ng	88
18) 2-Chlorophenol	5.717	128	175014	47.9205	ng	77
19) N-Decane	5.749	57	139802	48.7739	ng	78
20) 1,3-Dichlorobenzene	5.845	146	194020	47.9098	ng	97
22) 1,4-Dichlorobenzene	5.909	146	193992	49.2372	ng	96
23) 1,2-Dichlorobenzene	6.032	146	190799	49.5585	ng	98
24) Benzyl alcohol	6.006	108	105141	48.3970	ng	80
25) bis(2-chloroisopropyl)...	6.113	45	183965	50.3331	ng	79
26) 2-Methylphenol	6.091	108	150981	48.4870	ng	100
27) Acetophenone	6.220	105	218091	49.4571	ng	73
28) Hexachloroethane	6.305	117	76749	50.3011	ng	82
29) N-Nitroso-di-n-propyla...	6.214	70	102482	49.8691	ng	77
30) 3&4-Methylphenol	6.214	108	153630	51.9453	ng	97
33) Nitrobenzene	6.359	77	164296	51.2037	ng	77
34) Isophorone	6.541	82	284359	51.4901	ng	82
35) 2-Nitrophenol	6.605	139	90237	51.3879	ng	87
36) 2,4-Dimethylphenol	6.626	107	168321	51.3512	ng	93
37) Benzoic Acid	6.712	105	74603	30.9306	ng	83
38) bis(2-Chloroethoxy)met...	6.696	93	190216	54.9078	ng	96
39) 2,4-Dichlorophenol	6.787	162	149278	52.1986	ng	86
40) 1,2,4-Trichlorobenzene	6.851	180	163957	52.8859	ng	95
41) Naphthalene	6.915	128	508001	51.8592	ng	99
42) 4-Chloroaniline	6.952	127	187634	59.0918	ng	96
43) Hexachlorobutadiene	6.995	225	86098	49.6092	ng	96
44) Caprolactam	7.225	113	51252	51.1106	ng	62
45) 4-Chloro-3-methylphenol	7.311	107	131026	50.0060	ng	79
46) 2-Methylnaphthalene	7.450	142	326148	50.3760	ng	100
47) 1-Methylnaphthalene	7.530	142	326482	51.2665	ng	95
48) Methylnaphthalenes (To...	7.530	142	652933m	101.8661	ng	
49) 1,1'-Biphenyl	7.824	154	411782	51.1795	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	165166	49.9582	ng	97
52) Hexachlorocyclopentadiene	7.568	237	52068	42.9609	ng	94
53) 2,4,6-Trichlorophenol	7.669	196	94608	47.1017	ng	98
54) 2,4,5-Trichlorophenol	7.707	196	103897	48.6996	ng	91
56) 2-Chloronaphthalene	7.851	162	319126	50.1063	ng	91
57) 1,4-Dimethylnaphthalene	8.129	156	258105	49.1005	ng	92
58) Dimethylnaphthalenes (...)	8.129	156	258105	49.1005	ng	92
59) Diphenyl Ether	7.910	170	239468	50.7477	ng	74
60) 2-Nitroaniline	7.926	65	106494	47.0517	ng	50
61) Coumarin	8.118	146	119699	51.0371	ng	67
62) Acenaphthylene	8.209	152	466814	49.6938	ng	99
63) Dimethylphthalate	8.065	163	364467	48.9968	ng	99
64) 2,6-Dinitrotoluene	8.129	165	75188	48.5703	ng	75
65) Acenaphthene	8.365	153	320215	48.3392	ng	95

SampleID : CAL BNA@50PPM
 Data File: 10M71464.D
 Acq On : 10/22/18 07:45

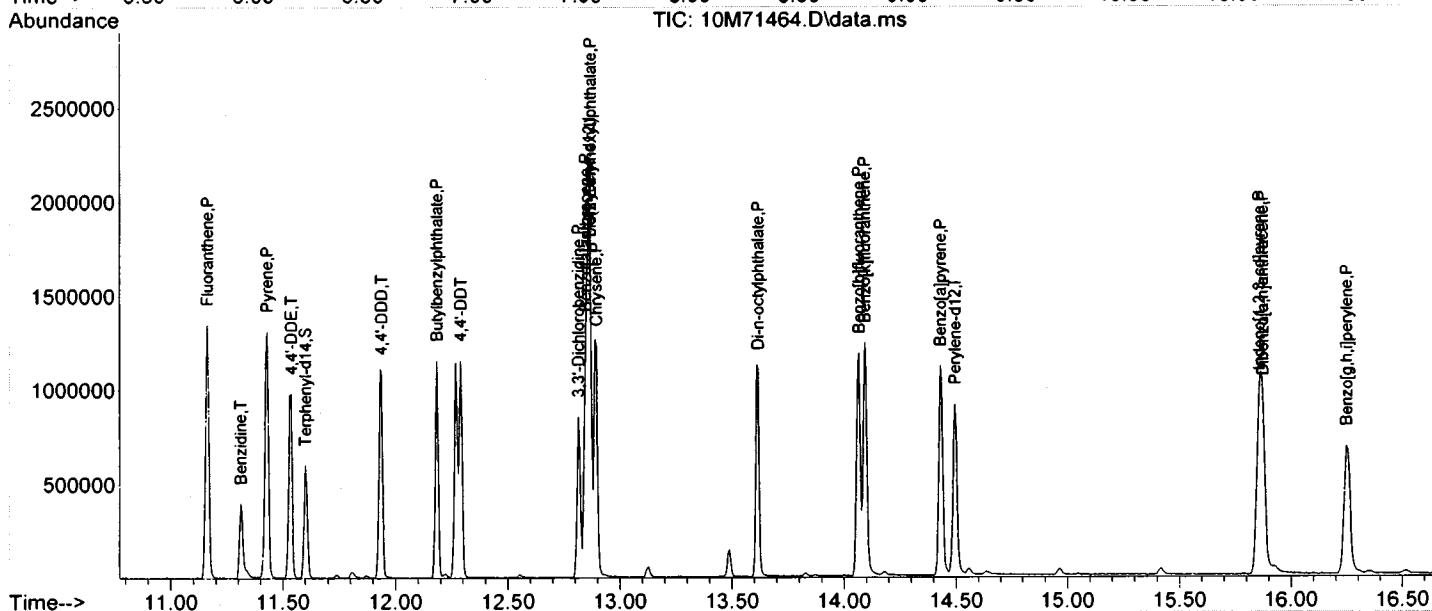
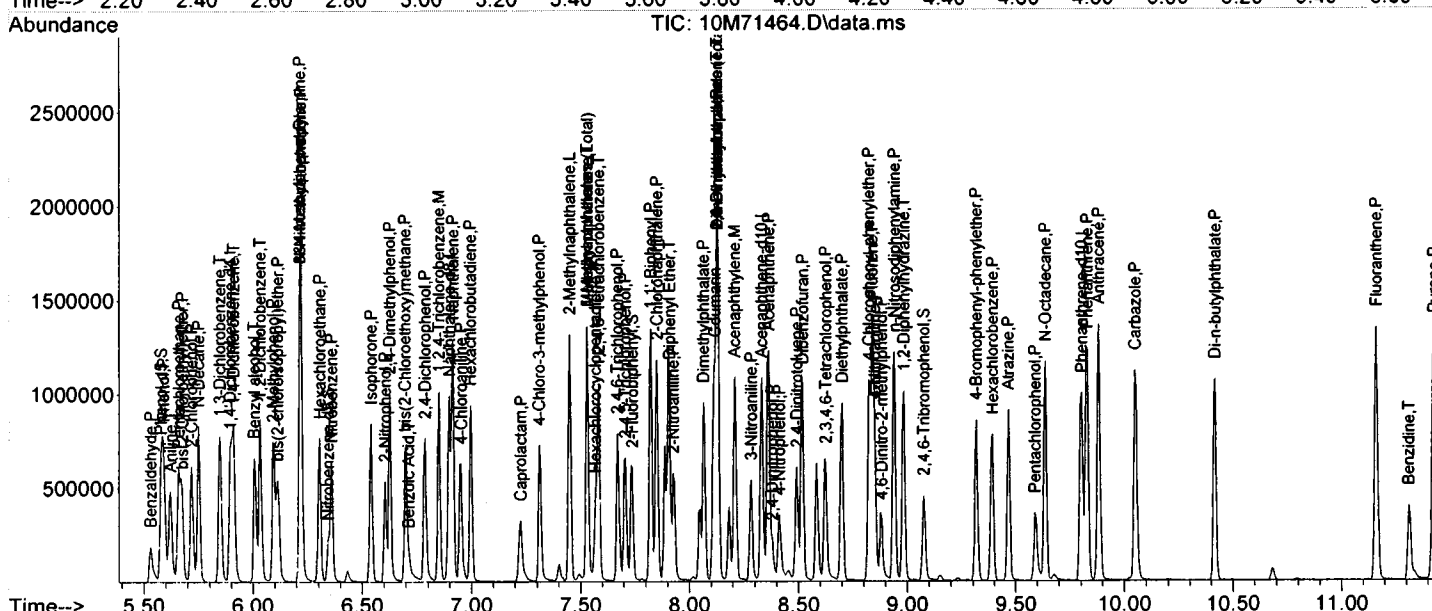
Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 10M 1008.M
 Qt On : 10/22/18 08:12
 Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.284	138	85455	45.5392	ng	74
67)	2,4-Dinitrophenol	8.381	184	36135	43.7301	ng	35
68)	Dibenzofuran	8.520	168	460398	48.0901	ng	84
69)	2,4-Dinitrotoluene	8.493	165	109207	44.8813	ng	62
70)	4-Nitrophenol	8.413	65	51853	39.1714	ng	63
71)	2,3,4,6-Tetrachlorophenol	8.627	232	85051	45.7534	ng	81
72)	Fluorene	8.841	166	358785	47.2403	ng	97
73)	4-Chlorophenyl-phenyle...	8.824	204	175288	48.3708	ng	85
74)	Diethylphthalate	8.701	149	352366	47.9253	ng	96
75)	4-Nitroaniline	8.851	138	95488	46.3286	ng	88
76)	Atrazine	9.466	200	112279	45.5065	ng	99
78)	4,6-Dinitro-2-methylph...	8.883	198	59952	50.1170	ng	68
79)	n-Nitrosodiphenylamine	8.942	169	317500	50.3957	ng	100
81)	1,2-Diphenylhydrazine	8.985	77	406610	52.8994	ng	81
82)	4-Bromophenyl-phenylether	9.317	248	95391	49.2924	ng	86
83)	Hexachlorobenzene	9.391	284	96163	46.2661	ng	71
84)	N-Octadecane	9.637	57	181357	51.2946	ng	75
85)	Pentachlorophenol	9.589	266	45518	46.1231	ng	96
86)	Phenanthrene	9.830	178	543666	49.2435	ng	98
87)	Anthracene	9.884	178	573552	51.1881	ng	99
88)	Carbazole	10.049	167	520923	51.1006	ng	98
89)	Di-n-butylphthalate	10.418	149	571367	44.1526	ng	98
90)	Fluoranthene	11.162	202	606608	52.0963	ng	90
92)	Pyrene	11.429	202	618715	53.7580	ng	81
93)	Benzidine	11.312	184	186770	41.8009	ng	80
95)	4,4'-DDE	11.536	246	121360	51.1242	ng	92
96)	4,4'-DDD	11.937	235	213133	52.8553	ng	92
97)	Butylbenzylphthalate	12.183	149	263608	53.7519	ng	73
98)	4,4'-DDT	12.290	235	192827	53.9336	ng	94
99)	3,3'-Dichlorobenzidine	12.815	252	187282	54.1769	ng	95
100)	Benzo[a]anthracene	12.847	228	526423	50.8078	ng	98
101)	Chrysene	12.895	228	519940	51.1000	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.868	149	343922	48.1436	ng	97
104)	Di-n-octylphthalate	13.617	149	605458	45.5306	ng	97
105)	Benzo[b]fluoranthene	14.066	252	569781	53.1282	ng	92
106)	Benzo[k]fluoranthene	14.093	252	565298	53.5031	ng	93
107)	Benzo[a]pyrene	14.430	252	528317	50.7292	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.858	276	560371	51.1190	ng	86
109)	Dibenzo[a,h]anthracene	15.874	278	464514	51.0821	ng	90
110)	Benzo[g,h,i]perylene	16.248	276	469120	48.4581	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form7

Continuing Calibration

8101509 0474

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/22/2018 7:52:00Data File: 5M105896.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.51	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	51.35	50	5	70	0.979	1.044	2.69	
Pyridine	1	0		3.01	49.54	50	2.5	75	2.530	2.507	0.92	
N-Nitrosodimethylamine	1	0		2.94	49.22	50	15	70	1.441	1.418	1.56	
2-Fluorophenol	1	0	S	4.54	50.13	50	**		2.077	2.082	0.26	
Benzaldehyde	1	0		5.37	27.43	50	2.5	115	1.211	0.664	45.13	
Aniline	1	0		5.46	42.72	50	5	70	2.890	2.891	14.55	
Pentachloroethane	1	0		5.50	46.45	50	30	70	0.798	0.742	7.09	
bis(2-Chloroethyl)ether	1	0		5.52	45.76	50	26	65	2.508	2.295	8.49	
Phenol-d5	1	0	S	5.43	46.87	50	**		3.202	3.002	6.26	
Phenol	1	0		5.44	49.09	50	24	65	3.388	3.327	1.81	
2-Chlorophenol	1	0		5.56	46.98	50	27.5	65	2.390	2.246	6.03	
N-Decane	1	0		5.60	44.28	50	30	70	2.744	2.430	11.45	
1,3-Dichlorobenzene	1	0		5.69	47.79	50	30	70	2.683	2.564	4.43	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.75	50.73	50	30	70	1.495	1.516	1.45	
1,2-Dichlorobenzene	1	0		5.88	51.42	50	30	70	1.389	1.429	2.85	
Benzyl alcohol	1	0		5.86	50.79	50	30	70	0.819	0.832	1.58	
bis(2-chloroisopropyl)ether	1	0		5.97	48.50	50	31.5	69.5	1.886	1.830	2.99	
2-Methylphenol	1	0		5.95	50.17	50	30	70	1.201	1.205	0.35	
Acetophenone	1	0		6.07	49.98	50	30	70	1.751	1.750	0.05	
Hexachloroethane	1	0		6.15	43.28	50	27.5	65	0.555	0.481	13.45	
N-Nitroso-di-n-propylamine	1	0		6.07	45.26	50	29.5	85	0.846	0.869	9.47	
3&4-Methylphenol	1	0		6.07	46.08	50	30	70	1.137	1.219	7.83	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.20	24.92	25	**		0.118	0.118	0.34	
Nitrobenzene	1	0		6.21	48.10	50	27	79	0.369	0.355	3.80	
Isophorone	1	0		6.39	48.88	50	26	90	0.639	0.624	2.24	
2-Nitrophenol	1	0		6.46	51.13	50	30.5	81.5	0.172	0.181	2.26	
2,4-Dimethylphenol	1	0		6.48	47.20	50	29	65	0.338	0.342	5.61	
Benzoic Acid	1	0		6.58	28.44	50	5	70	0.250	0.113	43.12	
bis(2-Chloroethoxy)methane	1	0		6.56	48.79	50	26	82	0.416	0.406	2.42	
2,4-Dichlorophenol	1	0		6.65	51.06	50	27	65	0.260	0.290	2.12	
1,2,4-Trichlorobenzene	1	0		6.70	49.75	50	25.5	65	0.311	0.310	0.51	
Naphthalene	1	0		6.77	48.70	50	35	65	1.070	1.042	2.59	
4-Chloroaniline	1	0		6.81	50.41	50	15	115	0.321	0.384	0.81	
Hexachlorobutadiene	1	0		6.85	49.61	50	34	65	0.167	0.165	0.78	
Caprolactam	1	0		7.08	47.76	50	30	70	0.100	0.104	4.49	
4-Chloro-3-methylphenol	1	0		7.17	49.20	50	34	65	0.282	0.280	1.59	
2-Methylnaphthalene	1	0		7.30	50.69	50	30	70	0.687	0.697	1.37	
1-Methylnaphthalene	1	0		7.38	51.23	50	30	70	0.676	0.693	2.45	
Methylnaphthalenes	1	0		7.30	101.76	100	**			0.690	1.76	
1,1'-Biphenyl	1	0		7.67	50.90	50	30	70	0.807	0.821	1.79	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	50.03	50	30	70	0.554	0.555	0.05	
Hexachlorocyclopentadiene	1	0		7.41	45.23	50	5	70	0.189	0.175	9.53	
2,4,6-Trichlorophenol	1	0		7.52	48.32	50	34.5	65	0.304	0.314	3.35	
2,4,5-Trichlorophenol	1	0		7.55	51.98	50	30	70	0.335	0.353	3.95	
2-Fluorobiphenyl	1	0	S	7.58	25.20	25	**		1.279	1.289	0.79	
2-Chloronaphthalene	1	0		7.69	49.61	50	35	65	1.076	1.068	0.78	
1,4-Dimethylnaphthalene	1	0		7.96	50.35	50	30	70	0.902	0.909	0.69	
Dimethylnaphthalenes	1	0		7.96	50.35		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/22/2018 7:52:00

Data File: 5M105896.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.75	51.52	50	30	70	0.798	0.822	3.03	
2-Nitroaniline	1	0		7.77	44.50	50	30	70	0.407	0.385	11.00	
Coumarin	1	0		7.95	52.19	50	30	70	0.414	0.432	4.38	
Acenaphthylene	1	0		8.04	49.48	50	30	65	1.618	1.601	1.04	
Dimethylphthalate	1	0		7.91	49.73	50	25	65	1.205	1.199	0.53	
2,6-Dinitrotoluene	1	0		7.98	49.25	50	34	68.5	0.264	0.274	1.50	
Acenaphthene	1	0		8.19	49.78	50	35	65	1.114	1.109	0.44	
3-Nitroaniline	1	0		8.12	48.99	50	30	70	0.272	0.302	2.03	
2,4-Dinitrophenol	1	0		8.22	44.21	50	19.5	86.5	0.121	0.099	11.59	
Dibenzofuran	1	0		8.35	47.34	50	30	70	1.562	1.525	5.32	
2,4-Dinitrotoluene	1	0		8.33	48.17	50	26.5	65	0.345	0.356	3.66	
4-Nitrophenol	1	0		8.25	39.23	50	12.5	65	0.215	0.182	21.55	
2,3,4,6-Tetrachlorophenol	1	0		8.46	48.25	50	30	70	0.270	0.289	3.49	
Fluorene	1	0		8.67	50.36	50	35	65	1.229	1.238	0.72	
4-Chlorophenyl-phenylether	1	0		8.65	49.89	50	28.5	72.5	0.557	0.556	0.23	
Diethylphthalate	1	0		8.54	48.99	50	23.5	65	1.193	1.169	2.01	
4-Nitroaniline	1	0		8.69	48.49	50	30	70	0.314	0.334	3.02	
Atrazine	1	0		9.30	49.99	50	5	70	0.338	0.340	0.01	
Phenanthrene-d10	1	0	I	9.62	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.71	50.17	50	28	65	0.101	0.095	0.35	
n-Nitrosodiphenylamine	1	0		8.77	49.33	50	30	70	0.625	0.616	1.33	
2,4,6-Tribromophenol	1	0	S	8.90	51.17	50	**		0.069	0.076	2.34	
1,2-Diphenylhydrazine	1	0		8.81	45.55	50	30	70	0.891	0.812	8.90	
4-Bromophenyl-phenylether	1	0		9.14	51.09	50	35	65	0.188	0.192	2.18	
Hexachlorobenzene	1	0		9.21	51.27	50	19	71	0.181	0.185	2.53	
N-Octadecane	1	0		9.47	44.39	50	30	70	0.493	0.474	11.23	
Pentachlorophenol	1	0		9.41	51.89	50	21	76	0.087	0.084	3.78	
Phenanthrene	1	0		9.64	50.24	50	33.5	65	1.085	1.090	0.48	
Anthracene	1	0		9.70	49.68	50	29	65	1.089	1.081	0.65	
Carbazole	1	0		9.87	49.85	50	30	70	1.010	1.007	0.29	
Di-n-butylphthalate	1	0		10.24	46.15	50	26	65	1.063	1.158	7.70	
Fluoranthene	1	0		10.97	50.62	50	23.5	65	1.087	1.139	1.25	
Chrysene-d12	1	0	I	12.67	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.23	51.60	50	35	65	1.141	1.177	3.21	
Benzidine	1	0		11.13	40.64	50	2.5	75	0.357	0.332	18.72	
Terphenyl-d14	1	0	S	11.42	25.28	25	**		0.640	0.647	1.11	
4,4'-DDE	1	0		11.35	51.43		**		0.231			
4,4'-DDD	1	0		11.75	52.97		**		0.370			
Butylbenzylphthalate	1	0		12.00	49.05	50	21.5	70	0.470	0.486	1.91	
4,4'-DDT	1	0		12.10	55.22		**		0.330			
3,3'-Dichlorobenzidine	1	0		12.63	50.50	50	9	107	0.271	0.323	1.01	
Benzo[a]anthracene	1	0		12.66	50.82	50	21	66.5	1.082	1.099	1.65	
Chrysene	1	0		12.70	49.81	50	22	70	1.036	1.032	0.38	
bis(2-Ethylhexyl)phthalate	1	0		12.69	45.19	50	21.5	68.5	0.664	0.697	9.61	
Perylene-d12	1	0	I	14.28	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	47.36	50	10.5	66	1.269	1.304	5.29	
Benzo[b]fluoranthene	1	0		13.87	50.44	50	21	70	1.126	1.136	0.87	
Benzo[k]fluoranthene	1	0		13.90	52.43	50	12.5	73	1.133	1.188	4.86	
Benzo[a]pyrene	1	0		14.22	50.80	50	16	74	1.085	1.095	1.60	
Indeno[1,2,3-cd]pyrene	1	0		15.56	50.69	50	6.5	75.5	1.189	1.187	1.38	
Dibenzo[a,h]anthracene	1	0		15.58	49.46	50	6.5	100	1.011	1.011	1.08	
Benzo[g,h,i]perylene	1	0		15.92	50.46	50	6.5	97.5	1.012	1.004	0.91	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0476

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/22/2018 7:52:00Data File: 5M105896.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.678		0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**	0.902		0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
C1-Compound %Diff exceeds limitsPage 3 of 3
** - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 5M105896.D
Acq On : 10/22/18 07:52

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/22/18 08:10
Qt Upd On: 10/08/18 13:12

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	65003	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	110898	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	411619	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	238931	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	397061	40.00	ng	0.00
91) Chrysene-d12	12.666	240	401600	40.00	ng	0.00
103) Perylene-d12	14.279	264	327289	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	169171	50.13	ng	0.00
Spiked Amount 100.000			Recovery	=	50.13%	
16) Phenol-d5	5.427	99	243911	46.87	ng	0.00
Spiked Amount 100.000			Recovery	=	46.87%	
32) Nitrobenzene-d5	6.196	128	30265	24.92	ng	0.00
Spiked Amount 50.000			Recovery	=	49.84%	
55) 2-Fluorobiphenyl	7.580	172	192555	25.20	ng	0.00
Spiked Amount 50.000			Recovery	=	50.40%	
80) 2,4,6-Tribromophenol	8.900	330	37495	51.17	ng	0.00
Spiked Amount 100.000			Recovery	=	51.17%	
94) Terphenyl-d14	11.416	244	162384	25.28	ng	0.00
Spiked Amount 50.000			Recovery	=	50.56%	
Target Compounds						
8) 1,4-Dioxane	2.542	88	84860m	51.3474	ng	Qvalue
9) Pyridine	3.007	79	203703	49.5380	ng	74
10) N-Nitrosodimethylamine	2.943	74	115238	49.2209	ng	77
12) Benzaldehyde	5.374	77	53978	27.4346	ng	74
13) Aniline	5.464	93	234905m	42.7239	ng	
14) Pentachloroethane	5.497	117	60272	46.4536	ng	77
15) bis(2-Chloroethyl)ether	5.518	93	186510	45.7575	ng	82
17) Phenol	5.443	94	270294	49.0935	ng	81
18) 2-Chlorophenol	5.561	128	182471	46.9845	ng	81
19) N-Decane	5.598	57	197417	44.2757	ng	87
20) 1,3-Dichlorobenzene	5.689	146	208331	47.7850	ng	97
22) 1,4-Dichlorobenzene	5.753	146	210180	50.7253	ng	98
23) 1,2-Dichlorobenzene	5.881	146	198094	51.4226	ng	97
24) Benzyl alcohol	5.860	108	115283	50.7902	ng	69
25) bis(2-chloroisopropyl)...	5.967	45	253643	48.5032	ng	97
26) 2-Methylphenol	5.951	108	167082	50.1736	ng	98
27) Acetophenone	6.073	105	242579	49.9768	ng	78
28) Hexachloroethane	6.148	117	66625	43.2757	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	120424	45.2643	ng	74
30) 3&4-Methylphenol	6.073	108	169023	46.0831	ng	94
33) Nitrobenzene	6.212	77	182598	48.0985	ng	78
34) Isophorone	6.394	82	321222	48.8802	ng	88
35) 2-Nitrophenol	6.458	139	93247	51.1324	ng	88
36) 2,4-Dimethylphenol	6.485	107	175756	47.1961	ng	93
37) Benzoic Acid	6.581	105	58096	28.4406	ng	88
38) bis(2-Chloroethoxy)met...	6.560	93	208662	48.7917	ng	96
39) 2,4-Dichlorophenol	6.645	162	149345	51.0601	ng	85
40) 1,2,4-Trichlorobenzene	6.704	180	159341	49.7473	ng	98
41) Naphthalene	6.768	128	536075	48.7027	ng	100
42) 4-Chloroaniline	6.805	127	197724	50.4050	ng	92
43) Hexachlorobutadiene	6.848	225	85096	49.6077	ng	96
44) Caprolactam	7.083	113	53439	47.7563	ng	68
45) 4-Chloro-3-methylphenol	7.169	107	144055	49.2037	ng	78
46) 2-Methylnaphthalene	7.297	142	358573	50.6851	ng	100
47) 1-Methylnaphthalene	7.377	142	356474	51.2262	ng	93
48) Methylnaphthalenes (To...	7.297	142	709612m	101.7620	ng	
49) 1,1'-Biphenyl	7.665	154	422438	50.8957	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	165652	50.0259	ng	98
52) Hexachlorocyclopentadiene	7.414	237	52241	45.2326	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	93816	48.3249	ng	100
54) 2,4,5-Trichlorophenol	7.548	196	105391	51.9757	ng	97
56) 2-Chloronaphthalene	7.692	162	318832	49.6108	ng	90
57) 1,4-Dimethylnaphthalene	7.965	156	271373	50.3461	ng	89
58) Dimethylnaphthalenes (...)	7.965	156	271373	50.3461	ng	89
59) Diphenyl Ether	7.751	170	245644	51.5171	ng	75
60) 2-Nitroaniline	7.772	65	114908	44.5015	ng	54
61) Coumarin	7.954	146	129057	52.1880	ng	78
62) Acenaphthylene	8.045	152	478085	49.4798	ng	99
63) Dimethylphthalate	7.911	163	358030	49.7333	ng	98
64) 2,6-Dinitrotoluene	7.975	165	81729	49.2510	ng	56
65) Acenaphthene	8.194	153	331092	49.7783	ng	95

SampleID : CAL BNA@50PPM
 Data File: 5M105896.D
 Acq On : 10/22/18 07:52

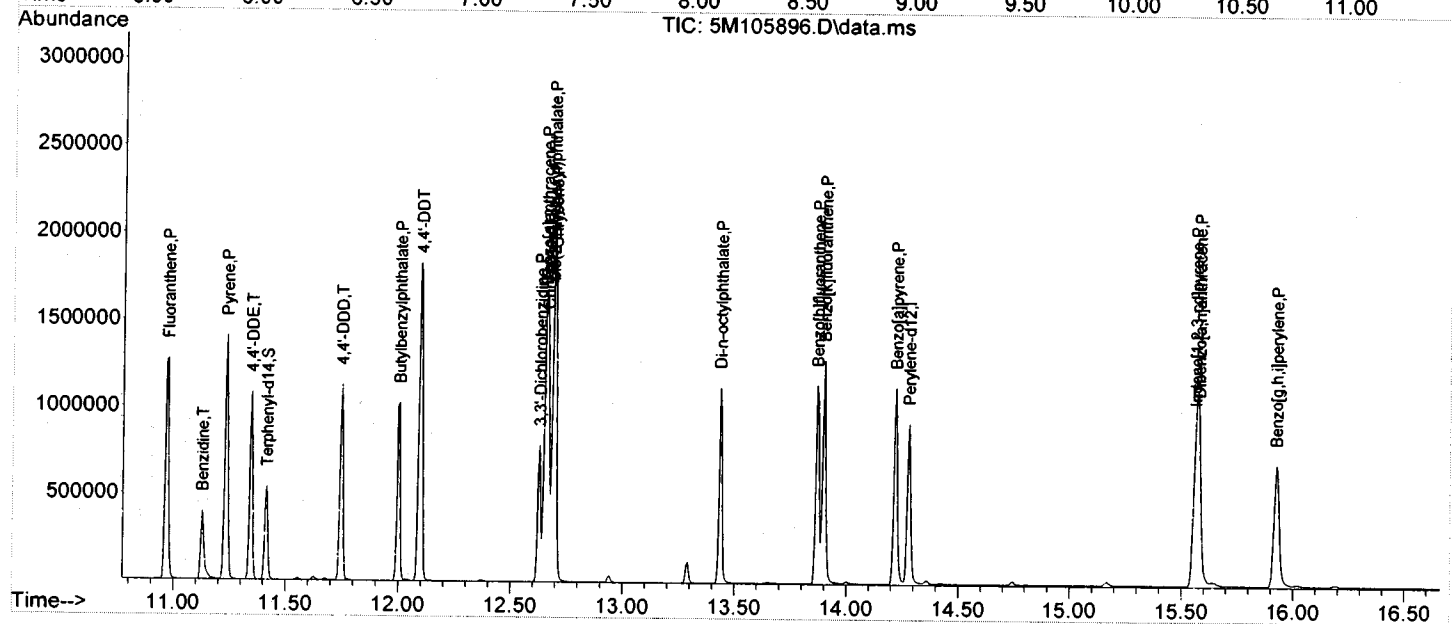
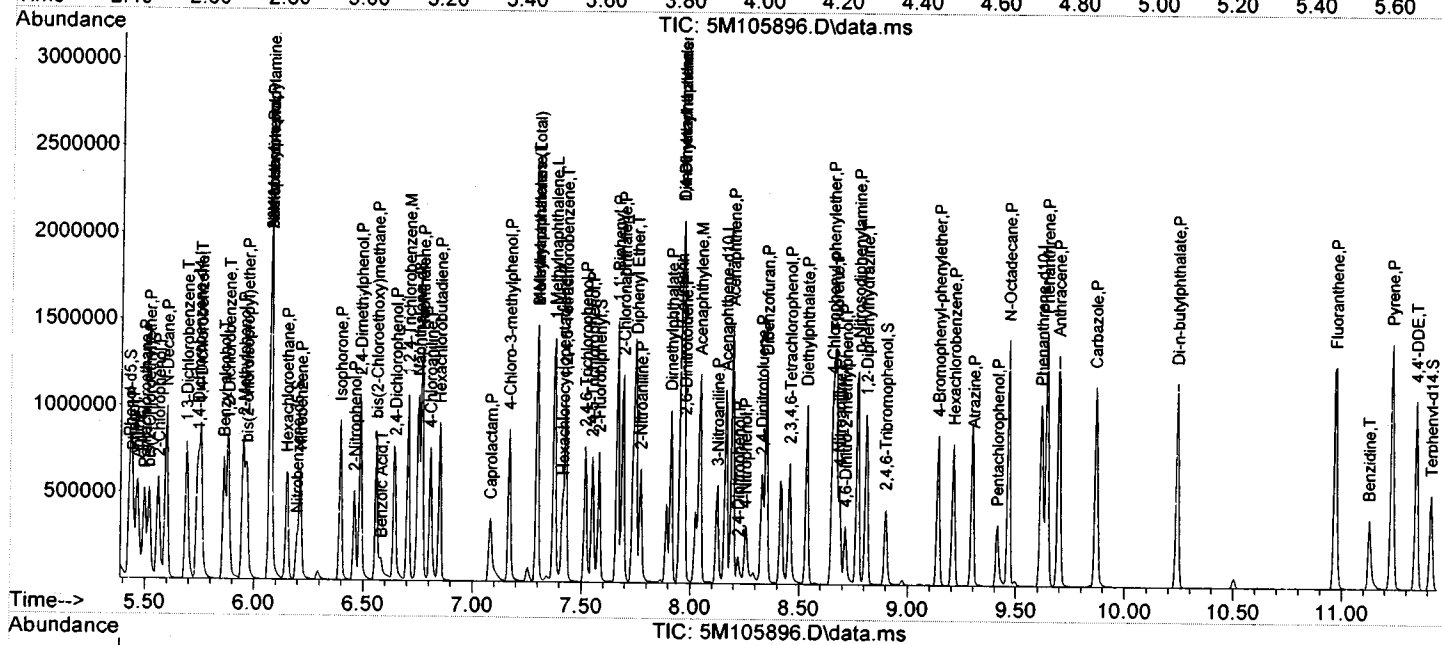
Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/22/18 08:10
 Qt Upd On: 10/08/18 13:12

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	90089	48.9853	ng	72
67)	2,4-Dinitrophenol	8.221	184	29576	44.2051	ng	36
68)	Dibenzofuran	8.349	168	455337	47.3408	ng	83
69)	2,4-Dinitrotoluene	8.328	165	106344	48.1719	ng	69
70)	4-Nitrophenol	8.253	65	54358	39.2253	ng	92
71)	2,3,4,6-Tetrachlorophenol	8.456	232	86219	48.2534	ng	80
72)	Fluorene	8.670	166	369796	50.3622	ng	99
73)	4-Chlorophenyl-phenyle...	8.654	204	166113	49.8857	ng	87
74)	Diethylphthalate	8.536	149	349059	48.9925	ng	97
75)	4-Nitroaniline	8.686	138	99785	48.4923	ng	73
76)	Atrazine	9.300	200	101679	49.9942	ng	95
78)	4,6-Dinitro-2-methylph...	8.713	198	47137	50.1727	ng	61
79)	n-Nitrosodiphenylamine	8.771	169	305946	49.3334	ng	100
81)	1,2-Diphenylhydrazine	8.809	77	402836	45.5482	ng	89
82)	4-Bromophenyl-phenylether	9.140	248	95404	51.0898	ng	81
83)	Hexachlorobenzene	9.209	284	91952	51.2662	ng	73
84)	N-Octadecane	9.466	57	235021	44.3870	ng	82
85)	Pentachlorophenol	9.412	266	41526	51.8923	ng	95
86)	Phenanthrene	9.642	178	541044	50.2399	ng	99
87)	Anthracene	9.696	178	536742	49.6751	ng	99
88)	Carbazole	9.866	167	499696	49.8539	ng	98
89)	Di-n-butylphthalate	10.240	149	574783	46.1511	ng	97
90)	Fluoranthene	10.972	202	565197	50.6236	ng	91
92)	Pyrene	11.234	202	590908	51.6045	ng	88
93)	Benzidine	11.127	184	166540	40.6382	ng	89
95)	4,4'-DDE	11.346	246	119174	51.4268	ng	92
96)	4,4'-DDD	11.747	235	196704	52.9723	ng	92
97)	Butylbenzylphthalate	12.003	149	244207	49.0458	ng	71
98)	4,4'-DDT	12.100	235	183101	55.2233	ng	94
99)	3,3'-Dichlorobenzidine	12.628	252	162226	50.5029	ng	97
100)	Benzo[a]anthracene	12.655	228	551919	50.8240	ng	99
101)	Chrysene	12.698	228	518024	49.8105	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.687	149	350143	45.1927	ng	96
104)	Di-n-octylphthalate	13.435	149	533584	47.3575	ng	100
105)	Benzo[b]fluoranthene	13.868	252	464681	50.4357	ng	97
106)	Benzo[k]fluoranthene	13.900	252	486052m	52.4298	ng	
107)	Benzo[a]pyrene	14.220	252	447871	50.7999	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.561	276	485725	50.6920	ng	93
109)	Dibenzo[a,h]anthracene	15.577	278	413442	49.4611	ng	91
110)	Benzo[g,h,i]perylene	15.925	276	410739	50.4551	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/23/2018 8:44:00Data File: 5M105924.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.55	50.13		**	0.979				
Pyridine	1	0		3.01	50.86	50	**	2.530	2.574		1.71	
N-Nitrosodimethylamine	1	0		2.95	50.02	50	**	1.441	1.441		0.04	
2-Fluorophenol	1	0	S	4.54	50.67	50	**	2.077	2.104		1.34	
Benzaldehyde	1	0		5.37	36.55	50	**	1.211	0.885		26.90	
Aniline	1	0		5.46	44.46	50	**	2.890	3.011		11.08	
Pentachloroethane	1	0		5.50	48.84	50	**	0.798	0.780		2.32	
bis(2-Chloroethyl)ether	1	0		5.52	46.84	50	20	2.508	2.350		6.31	
Phenol-d5	1	0	S	5.43	48.81	50	**	3.202	3.126		2.37	
Phenol	1	0		5.44	52.10	50	20	3.388	3.470		4.20	
2-Chlorophenol	1	0		5.56	49.12	50	20	2.390	2.348		1.77	
N-Decane	1	0		5.60	48.63	50	20	2.744	2.668		2.75	
1,3-Dichlorobenzene	1	0		5.69	48.39	50	20	2.683	2.596		3.22	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.75	50.70	50	20	1.495	1.516		1.41	
1,2-Dichlorobenzene	1	0		5.88	50.72	50	20	1.389	1.409		1.43	
Benzyl alcohol	1	0		5.86	52.39	50	**	0.819	0.858		4.78	
bis(2-chloroisopropyl)ether	1	0		5.97	50.58	50	20	1.886	1.908		1.17	
2-Methylphenol	1	0		5.95	50.19	50	20	1.201	1.206		0.39	
Acetophenone	1	0		6.07	52.14	50	**	1.751	1.826		4.28	
Hexachloroethane	1	0		6.15	50.10	50	20	0.555	0.556		0.21	
N-Nitroso-di-n-propylamine	1	0		6.07	47.89	50	**	0.846	0.917		4.21	
3&4-Methylphenol	1	0		6.07	48.20	50	**	1.137	1.272		3.61	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.20	26.60	25	**	0.118	0.126		6.42	
Nitrobenzene	1	0		6.21	49.87	50	20	0.369	0.368		0.25	
Isophorone	1	0		6.39	49.64	50	20	0.639	0.634		0.73	
2-Nitrophenol	1	0		6.46	50.75	50	20	0.172	0.180		1.51	
2,4-Dimethylphenol	1	0		6.48	46.77	50	20	0.338	0.338		6.47	
Benzoic Acid	1	0		6.58	32.55	50	**	0.250	0.133		34.90	
bis(2-Chloroethoxy)methane	1	0		6.56	49.83	50	20	0.416	0.414		0.33	
2,4-Dichlorophenol	1	0		6.64	50.35	50	20	0.260	0.286		0.70	
1,2,4-Trichlorobenzene	1	0		6.70	48.72	50	20	0.311	0.303		2.57	
Naphthalene	1	0		6.77	48.07	50	**	1.070	1.028		3.87	
4-Chloroaniline	1	0		6.81	50.27	50	**	0.321	0.383		0.53	
Hexachlorobutadiene	1	0		6.85	50.13	50	20	0.167	0.167		0.25	
Caprolactam	1	0		7.08	48.48	50	**	0.100	0.106		3.05	
4-Chloro-3-methylphenol	1	0		7.17	51.52	50	20	0.282	0.294		3.05	
2-Methylnaphthalene	1	0		7.30	49.70	50	**	0.687	0.683		0.60	
1-Methylnaphthalene	1	0		7.38	49.67	50	**	0.676	0.672		0.67	
Methylnaphthalenes	1	0		7.30	99.65	100	**		0.675		0.35	
1,1'-Biphenyl	1	0		7.67	50.34	50	**	0.807	0.812		0.68	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.42	50.41	50	**	0.554	0.559		0.82	
Hexachlorocyclopentadiene	1	0		7.41	45.20	50	**	0.189	0.175		9.60	
2,4,6-Trichlorophenol	1	0		7.52	48.33	50	20	0.304	0.314		3.35	
2,4,5-Trichlorophenol	1	0		7.55	52.14	50	**	0.335	0.354		4.28	
2-Fluorobiphenyl	1	0	S	7.58	25.30	25	**	1.279	1.295		1.20	
2-Chloronaphthalene	1	0		7.69	51.63	50	20	1.076	1.111		3.26	
1,4-Dimethylnaphthalene	1	0		7.96	52.61	50	**	0.902	0.949		5.21	
Dimethylnaphthalenes	1	0		7.96	52.61		**					

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

CI-Compound %Diff exceeds limits

Page 1 of 2

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0481

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/23/2018 8:44:00Data File: 5M105924.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.75	50.95	50	**		0.798	0.813	1.90	
2-Nitroaniline	1	0		7.77	47.63	50	**		0.407	0.412	4.74	
Coumarin	1	0		7.95	53.65		**		0.414			
Acenaphthylene	1	0		8.04	51.66	50	20		1.618	1.671	3.33	
Dimethylphthalate	1	0		7.91	50.32	50	20		1.205	1.213	0.64	
2,6-Dinitrotoluene	1	0		7.97	51.07	50	20		0.264	0.284	2.14	
Acenaphthene	1	0		8.19	51.40	50	20		1.114	1.145	2.80	
3-Nitroaniline	1	0		8.12	51.08	50	**		0.272	0.314	2.15	
2,4-Dinitrophenol	1	0		8.22	45.02	50	20		0.121	0.101	9.96	
Dibenzofuran	1	0		8.35	48.51	50	**		1.562	1.562	2.98	
2,4-Dinitrotoluene	1	0		8.33	48.77	50	20		0.345	0.361	2.46	
4-Nitrophenol	1	0		8.25	47.42	50	20		0.215	0.207	5.15	
2,3,4,6-Tetrachlorophenol	1	0		8.46	48.73	50	**		0.270	0.292	2.54	
Fluorene	1	0		8.66	50.51	50	20		1.229	1.242	1.02	
4-Chlorophenyl-phenylether	1	0		8.65	50.06	50	20		0.557	0.558	0.12	
Diethylphthalate	1	0		8.54	50.20	50	20		1.193	1.198	0.40	
4-Nitroaniline	1	0		8.69	47.96	50	**		0.314	0.330	4.08	
Atrazine	1	0		9.29	50.19	50	**		0.338	0.342	0.38	
Phenanthrene-d10	1	0	I	9.62	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.71	50.39	50	20		0.101	0.095	0.79	
n-Nitrosodiphenylamine	1	0		8.77	49.36	50	**		0.625	0.617	1.28	
2,4,6-Tribromophenol	1	0	S	8.90	50.44	50	**		0.069	0.074	0.88	
1,2-Diphenylhydrazine	1	0		8.81	49.08	50	**		0.891	0.875	1.83	
4-Bromophenyl-phenylether	1	0		9.14	49.94	50	20		0.188	0.188	0.12	
Hexachlorobenzene	1	0		9.21	50.64	50	**		0.181	0.183	1.29	
N-Octadecane	1	0		9.47	46.54	50	**		0.493	0.497	6.92	
Pentachlorophenol	1	0		9.41	51.18	50	20		0.087	0.082	2.36	
Phenanthrene	1	0		9.64	49.31	50	20		1.085	1.070	1.37	
Anthracene	1	0		9.70	49.83	50	20		1.089	1.085	0.34	
Carbazole	1	0		9.87	45.26	50	20		1.010	0.914	9.48	
Di-n-butylphthalate	1	0		10.24	46.02	50	20		1.063	1.155	7.97	
Fluoranthene	1	0		10.97	50.23	50	20		1.087	1.129	0.45	
Chrysene-d12	1	0	I	12.67	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.23	52.32	50	20		1.141	1.193	4.63	
Benzidine	1	0		11.13	42.74	50	**		0.357	0.349	14.53	
Terphenyl-d14	1	0	S	11.42	25.33	25	**		0.640	0.648	1.30	
4,4'-DDE	1	0		11.35	52.13		**		0.231			
4,4'-DDD	1	0		11.75	54.30		**		0.370			
Butylbenzylphthalate	1	0		12.00	50.73	50	20		0.470	0.504	1.45	
4,4'-DDT	1	0		12.10	54.28		**		0.330			
3,3'-Dichlorobenzidine	1	0		12.63	51.84	50	20		0.271	0.332	3.69	
Benzo[a]anthracene	1	0		12.66	50.03	50	20		1.082	1.082	0.07	
Chrysene	1	0		12.70	51.59	50	20		1.036	1.069	3.19	
bis(2-Ethylhexyl)phthalate	1	0		12.69	46.59	50	20		0.664	0.719	6.83	
Perylene-d12	1	0	I	14.28	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	47.17	50	20		1.269	1.299	5.66	
Benzo[b]fluoranthene	1	0		13.87	50.23	50	20		1.126	1.131	0.45	
Benzo[k]fluoranthene	1	0		13.90	51.90	50	20		1.133	1.176	3.81	
Benzo[a]pyrene	1	0		14.22	52.12	50	20		1.085	1.126	4.24	
Indeno[1,2,3-cd]pyrene	1	0		15.56	51.32	50	20		1.189	1.203	2.63	
Dibenzo[a,h]anthracene	1	0		15.58	49.99	50	20		1.011	1.022	0.02	
Benzo[g,h,i]perylene	1	0		15.93	50.38	50	20		1.012	1.002	0.75	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits** - No limit specified in method
Page 2 of 2Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0482

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/24/2018 8:33:00

Data File: 7M95315.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	51.48	50	5	70	0.940	0.967	2.95	
Pyridine	1	0		2.97	49.69	50	2.5	75	2.543	2.476	0.62	
N-Nitrosodimethylamine	1	0		2.91	47.69	50	15	70	1.450	1.383	4.63	
2-Fluorophenol	1	0	S	4.54	48.26	50	**		2.146	2.071	3.48	
Benzaldehyde	1	0		5.36	34.99	50	2.5	115	1.115	0.781	30.02	
Aniline	1	0		5.46	49.16	50	5	70	2.833	2.785	1.68	
Pentachloroethane	1	0		5.51	51.23	50	30	70	0.725	0.743	2.46	
bis(2-Chloroethyl)ether	1	0		5.52	50.04	50	26	65	2.222	2.194	0.08	
Phenol-d5	1	0	S	5.43	48.80	50	**		3.039	2.966	2.40	
Phenol	1	0		5.44	49.63	50	24	65	3.018	2.996	0.74	
2-Chlorophenol	1	0		5.56	49.93	50	27.5	65	2.243	2.240	0.15	
N-Decane	1	0		5.62	49.56	50	30	70	1.935	1.918	0.87	
1,3-Dichlorobenzene	1	0		5.69	51.27	50	30	70	2.413	2.474	2.54	
1,4-Dichlorobenzene-d4	1	0	I	5.75	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.76	49.97	50	30	70	1.460	1.459	0.07	
1,2-Dichlorobenzene	1	0		5.89	49.93	50	30	70	1.379	1.377	0.14	
Benzyl alcohol	1	0		5.85	44.52	50	30	70	0.881	0.785	10.95	
bis(2-chloroisopropyl)ether	1	0		5.97	49.21	50	31.5	69.5	1.346	1.325	1.57	
2-Methylphenol	1	0		5.95	47.47	50	30	70	1.205	1.144	5.06	
Acetophenone	1	0		6.07	50.20	50	30	70	1.723	1.730	0.39	
Hexachloroethane	1	0		6.16	50.35	50	27.5	65	0.534	0.538	0.71	
N-Nitroso-di-n-propylamine	1	0		6.07	47.08	50	29.5	85	0.837	0.788	5.85	
3&4-Methylphenol	1	0		6.07	47.91	50	30	70	1.203	1.153	4.18	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.19	24.39	25	**		0.126	0.122	2.44	
Nitrobenzene	1	0		6.21	50.07	50	27	79	0.334	0.335	0.14	
Isophorone	1	0		6.39	47.64	50	26	90	0.617	0.588	4.73	
2-Nitrophenol	1	0		6.46	50.60	50	30.5	81.5	0.178	0.179	1.19	
2,4-Dimethylphenol	1	0		6.48	48.66	50	29	65	0.332	0.323	2.68	
Benzoic Acid	1	0		6.56	40.51	50	5	70	0.326	0.265	18.99	
bis(2-Chloroethoxy)methane	1	0		6.56	49.93	50	26	82	0.418	0.417	0.13	
2,4-Dichlorophenol	1	0		6.64	49.75	50	27	65	0.280	0.278	0.51	
1,2,4-Trichlorobenzene	1	0		6.71	49.89	50	25.5	65	0.312	0.311	0.22	
Naphthalene	1	0		6.77	49.23	50	35	65	1.067	1.050	1.54	
4-Chloroaniline	1	0		6.80	47.60	50	15	115	0.353	0.380	4.80	
Hexachlorobutadiene	1	0		6.86	50.10	50	34	65	0.158	0.158	0.20	
Caprolactam	1	0		7.06	45.31	50	30	70	0.116	0.105	9.38	
4-Chloro-3-methylphenol	1	0		7.16	48.31	50	34	65	0.279	0.269	3.38	
2-Methylnaphthalene	1	0		7.30	51.00	50	30	70	0.696	0.710	2.01	
1-Methylnaphthalene	1	0		7.38	49.90	50	30	70	0.677	0.675	0.21	
Methylnaphthalenes	1	0		7.30	100.87	100	**			0.692	0.87	
1,1'-Biphenyl	1	0		7.67	50.06	50	30	70	0.811	0.812	0.12	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	50.14	50	30	70	0.528	0.530	0.28	
Hexachlorocyclopentadiene	1	0		7.42	56.09	50	5	70	0.243	0.283	12.18	
2,4,6-Trichlorophenol	1	0		7.52	48.17	50	34.5	65	0.344	0.331	3.65	
2,4,5-Trichlorophenol	1	0		7.54	48.75	50	30	70	0.354	0.345	2.50	
2-Fluorobiphenyl	1	0	S	7.58	24.75	25	**		1.270	1.257	1.01	
2-Chloronaphthalene	1	0		7.69	49.46	50	35	65	1.087	1.075	1.08	
1,4-Dimethylnaphthalene	1	0		7.97	50.03	50	30	70	0.944	0.944	0.06	
Dimethylnaphthalenes	1	0		7.97	50.03		**					

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

CI-Compound %Diff exceeds limits

Page 1 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 5M105924.D
Acq On : 10/23/18 08:44

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/23/18 09:00
Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-23-18\
Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.515	96	59259	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	106413	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	398382	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	225614	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	384355	40.00	ng	0.00
91) Chrysene-d12	12.666	240	374643	40.00	ng	0.00
103) Perylene-d12	14.279	264	311166	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	155879	50.67	ng	0.00
Spiked Amount 100.000			Recovery =	50.67%		
16) Phenol-d5	5.432	99	231585	48.81	ng	0.00
Spiked Amount 100.000			Recovery =	48.81%		
32) Nitrobenzene-d5	6.196	128	31276	26.60	ng	0.00
Spiked Amount 50.000			Recovery =	53.20%		
55) 2-Fluorobiphenyl	7.580	172	182576	25.30	ng	0.00
Spiked Amount 50.000			Recovery =	50.60%		
80) 2,4,6-Tribromophenol	8.899	330	35743	50.44	ng	0.00
Spiked Amount 100.000			Recovery =	50.44%		
94) Terphenyl-d14	11.416	244	151766	25.33	ng	0.00
Spiked Amount 50.000			Recovery =	50.66%		
Target Compounds						
8) 1,4-Dioxane	2.553	88	75492	50.1276	ng	89
9) Pyridine	3.012	79	190641	50.8553	ng	75
10) N-Nitrosodimethylamine	2.948	74	106760	50.0198	ng	80
12) Benzaldehyde	5.374	77	65554	36.5476	ng	77
13) Aniline	5.464	93	223022m	44.4623	ng	
14) Pentachloroethane	5.496	117	57767	48.8386	ng	77
15) bis(2-Chloroethyl)ether	5.518	93	174066	46.8439	ng	87
17) Phenol	5.443	94	257018	52.0997	ng	83
18) 2-Chlorophenol	5.561	128	173897	49.1170	ng	83
19) N-Decane	5.598	57	197652	48.6252	ng	87
20) 1,3-Dichlorobenzene	5.689	146	192324	48.3894	ng	97
22) 1,4-Dichlorobenzene	5.753	146	201597	50.7045	ng	97
23) 1,2-Dichlorobenzene	5.881	146	187468	50.7153	ng	98
24) Benzyl alcohol	5.860	108	114110	52.3923	ng	73
25) bis(2-chloroisopropyl)...	5.967	45	253829	50.5845	ng	99
26) 2-Methylphenol	5.951	108	160386	50.1927	ng	97
27) Acetophenone	6.073	105	242836	52.1383	ng	80
28) Hexachloroethane	6.148	117	74018	50.1041	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	121990	47.8927	ng	76
30) 3&4-Methylphenol	6.073	108	169230	48.1951	ng	94
33) Nitrobenzene	6.212	77	183246	49.8731	ng	80
34) Isophorone	6.394	82	315696	49.6355	ng	89
35) 2-Nitrophenol	6.458	139	89534	50.7534	ng	89
36) 2,4-Dimethylphenol	6.485	107	168522	46.7668	ng	93
37) Benzoic Acid	6.581	105	66046	32.5501	ng	87
38) bis(2-Chloroethoxy)met...	6.560	93	206266	49.8340	ng	97
39) 2,4-Dichlorophenol	6.640	162	142461	50.3511	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	151024	48.7173	ng	98
41) Naphthalene	6.768	128	512051	48.0659	ng	99
42) 4-Chloroaniline	6.805	127	190874	50.2664	ng	92
43) Hexachlorobutadiene	6.848	225	83222	50.1273	ng	96
44) Caprolactam	7.083	113	52546	48.4751	ng	69
45) 4-Chloro-3-methylphenol	7.169	107	146332	51.5226	ng	82
46) 2-Methylnaphthalene	7.297	142	340301	49.7006	ng	96
47) 1-Methylnaphthalene	7.377	142	334508	49.6668	ng	93
48) Methylnaphthalenes (To...	7.297	142	672548m	99.6515	ng	
49) 1,1'-Biphenyl	7.665	154	404370	50.3376	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	157627	50.4121	ng	98
52) Hexachlorocyclopentadiene	7.414	237	49287	45.1987	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	88591	48.3270	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	99847	52.1376	ng	98
56) 2-Chloronaphthalene	7.692	162	313330	51.6324	ng	91
57) 1,4-Dimethylnaphthalene	7.965	156	267752	52.6064	ng	87
58) Dimethylnaphthalenes (...)	7.965	156	267752	52.6064	ng	87
59) Diphenyl Ether	7.751	170	229408	50.9519	ng	77
60) 2-Nitroaniline	7.772	65	116295	47.6288	ng	59
61) Coumarin	7.954	146	125278	53.6500	ng	74
62) Acenaphthylene	8.045	152	471373	51.6647	ng	99
63) Dimethylphthalate	7.911	163	342060	50.3196	ng	99
64) 2,6-Dinitrotoluene	7.970	165	80057	51.0694	ng	73
65) Acenaphthene	8.194	153	322833	51.4015	ng	96

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 5M105924.D
 Acq On : 10/23/18 08:44

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/23/18 09:00
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	88601	51.0770	ng	74
67)	2,4-Dinitrophenol	8.221	184	28535	45.0197	ng	5
68)	Dibenzofuran	8.349	168	440569	48.5080	ng	85
69)	2,4-Dinitrotoluene	8.328	165	101713	48.7713	ng	73
70)	4-Nitrophenol	8.253	65	58420	47.4246	ng	98
71)	2,3,4,6-Tetrachlorophenol	8.456	232	82244	48.7310	ng	82
72)	Fluorene	8.664	166	350213	50.5105	ng	99
73)	4-Chlorophenyl-phenyle...	8.654	204	157404	50.0605	ng	86
74)	Diethylphthalate	8.536	149	337737	50.2015	ng	98
75)	4-Nitroaniline	8.686	138	93148	47.9616	ng	80
76)	Atrazine	9.295	200	96417	50.1918	ng	97
78)	4,6-Dinitro-2-methylph...	8.712	198	45863	50.3933	ng	58
79)	n-Nitrosodiphenylamine	8.771	169	296324	49.3614	ng	100
81)	1,2-Diphenylhydrazine	8.809	77	420205	49.0828	ng	89
82)	4-Bromophenyl-phenylether	9.140	248	90277	49.9424	ng	83
83)	Hexachlorobenzene	9.209	284	87928	50.6433	ng	73
84)	N-Octadecane	9.466	57	238592	46.5389	ng	85
85)	Pentachlorophenol	9.412	266	39542	51.1786	ng	95
86)	Phenanthrene	9.642	178	514071	49.3133	ng	99
87)	Anthracene	9.695	178	521178	49.8292	ng	99
88)	Carbazole	9.866	167	439155	45.2622	ng	97
89)	Di-n-butylphthalate	10.240	149	554707	46.0152	ng	97
90)	Fluoranthene	10.967	202	542642	50.2274	ng	96
92)	Pyrene	11.234	202	558837	52.3153	ng	88
93)	Benzidine	11.127	184	163488	42.7361	ng	88
95)	4,4'-DDE	11.346	246	112684	52.1250	ng	92
96)	4,4'-DDD	11.747	235	188101	54.3004	ng	92
97)	Butylbenzylphthalate	11.998	149	236252	50.7264	ng	80
98)	4,4'-DDT	12.099	235	167883	54.2768	ng	94
99)	3,3'-Dichlorobenzidine	12.628	252	155268	51.8430	ng	97
100)	Benzo[a]anthracene	12.655	228	506871	50.0342	ng	99
101)	Chrysene	12.698	228	500547	51.5932	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.687	149	336865	46.5863	ng	96
104)	Di-n-octylphthalate	13.435	149	505082	47.1701	ng	99
105)	Benzo[b]fluoranthene	13.868	252	439951	50.2258	ng	97
106)	Benzo[k]fluoranthene	13.900	252	457466m	51.9031	ng	
107)	Benzo[a]pyrene	14.220	252	437879	52.1211	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.561	276	467998	51.3157	ng	93
109)	Dibenzo[a,h]anthracene	15.577	278	397591	49.9908	ng	93
110)	Benzo[g,h,i]perylene	15.930	276	389834	50.3753	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form7

Continuing Calibration

8101509 0486

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/24/2018 8:33:00

Data File: 7M95315.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	51.48	50	5	70	0.940	0.967	2.95	
Pyridine	1	0		2.97	49.69	50	2.5	75	2.543	2.476	0.62	
N-Nitrosodimethylamine	1	0		2.91	47.69	50	15	70	1.450	1.383	4.63	
2-Fluorophenol	1	0	S	4.54	48.26	50	**		2.146	2.071	3.48	
Benzaldehyde	1	0		5.36	34.99	50	2.5	115	1.115	0.781	30.02	
Aniline	1	0		5.46	49.16	50	5	70	2.833	2.785	1.68	
Pentachloroethane	1	0		5.51	51.23	50	30	70	0.725	0.743	2.46	
bis(2-Chloroethyl)ether	1	0		5.52	50.04	50	26	65	2.222	2.194	0.08	
Phenol-d5	1	0	S	5.43	48.80	50	**		3.039	2.966	2.40	
Phenol	1	0		5.44	49.63	50	24	65	3.018	2.996	0.74	
2-Chlorophenol	1	0		5.56	49.93	50	27.5	65	2.243	2.240	0.15	
N-Decane	1	0		5.62	49.56	50	30	70	1.935	1.918	0.87	
1,3-Dichlorobenzene	1	0		5.69	51.27	50	30	70	2.413	2.474	2.54	
1,4-Dichlorobenzene-d4	1	0	I	5.75	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.76	49.97	50	30	70	1.460	1.459	0.07	
1,2-Dichlorobenzene	1	0		5.89	49.93	50	30	70	1.379	1.377	0.14	
Benzyl alcohol	1	0		5.85	44.52	50	30	70	0.881	0.785	10.95	
bis(2-chloroisopropyl)ether	1	0		5.97	49.21	50	31.5	69.5	1.346	1.325	1.57	
2-Methylphenol	1	0		5.95	47.47	50	30	70	1.205	1.144	5.06	
Acetophenone	1	0		6.07	50.20	50	30	70	1.723	1.730	0.39	
Hexachloroethane	1	0		6.16	50.35	50	27.5	65	0.534	0.538	0.71	
N-Nitroso-di-n-propylamine	1	0		6.07	47.08	50	29.5	85	0.837	0.788	5.85	
3&4-Methylphenol	1	0		6.07	47.91	50	30	70	1.203	1.153	4.18	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.19	24.39	25	**		0.126	0.122	2.44	
Nitrobenzene	1	0		6.21	50.07	50	27	79	0.334	0.335	0.14	
Isophorone	1	0		6.39	47.64	50	26	90	0.617	0.588	4.73	
2-Nitrophenol	1	0		6.46	50.60	50	30.5	81.5	0.178	0.179	1.19	
2,4-Dimethylphenol	1	0		6.48	48.66	50	29	65	0.332	0.323	2.68	
Benzoic Acid	1	0		6.56	40.51	50	5	70	0.326	0.265	18.99	
bis(2-Chloroethoxy)methane	1	0		6.56	49.93	50	26	82	0.418	0.417	0.13	
2,4-Dichlorophenol	1	0		6.64	49.75	50	27	65	0.280	0.278	0.51	
1,2,4-Trichlorobenzene	1	0		6.71	49.89	50	25.5	65	0.312	0.311	0.22	
Naphthalene	1	0		6.77	49.23	50	35	65	1.067	1.050	1.54	
4-Chloroaniline	1	0		6.80	47.60	50	15	115	0.353	0.380	4.80	
Hexachlorobutadiene	1	0		6.86	50.10	50	34	65	0.158	0.158	0.20	
Caprolactam	1	0		7.06	45.31	50	30	70	0.116	0.105	9.38	
4-Chloro-3-methylphenol	1	0		7.16	48.31	50	34	65	0.279	0.269	3.38	
2-Methylnaphthalene	1	0		7.30	51.00	50	30	70	0.696	0.710	2.01	
1-Methylnaphthalene	1	0		7.38	49.90	50	30	70	0.677	0.675	0.21	
Methylnaphthalenes	1	0		7.30	100.87	100	**			0.692	0.87	
1,1'-Biphenyl	1	0		7.67	50.06	50	30	70	0.811	0.812	0.12	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	50.14	50	30	70	0.528	0.530	0.28	
Hexachlorocyclopentadiene	1	0		7.42	56.09	50	5	70	0.243	0.283	12.18	
2,4,6-Trichlorophenol	1	0		7.52	48.17	50	34.5	65	0.344	0.331	3.65	
2,4,5-Trichlorophenol	1	0		7.54	48.75	50	30	70	0.354	0.345	2.50	
2-Fluorobiphenyl	1	0	S	7.58	24.75	25	**		1.270	1.257	1.01	
2-Chloronaphthalene	1	0		7.69	49.46	50	35	65	1.087	1.075	1.08	
1,4-Dimethylnaphthalene	1	0		7.97	50.03	50	30	70	0.944	0.944	0.06	
Dimethylnaphthalenes	1	0		7.97	50.03		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 1 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0487

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/24/2018 8:33:00

Data File: 7M95315.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.76	49.47	50	30	70	0.809	0.800	1.06	
2-Nitroaniline	1	0		7.76	50.36	50	30	70	0.325	0.328	0.72	
Coumarin	1	0		7.94	49.85	50	30	70	0.453	0.452	0.29	
Acenaphthylene	1	0		8.04	49.31	50	30	65	1.623	1.601	1.37	
Dimethylphthalate	1	0		7.91	49.52	50	25	65	1.193	1.182	0.96	
2,6-Dinitrotoluene	1	0		7.96	53.84	50	34	68.5	0.258	0.278	7.68	
Acenaphthene	1	0		8.19	49.87	50	35	65	1.110	1.108	0.26	
3-Nitroaniline	1	0		8.11	53.73	50	30	70	0.286	0.307	7.46	
2,4-Dinitrophenol	1	0		8.20	55.42	50	19.5	86.5	0.112	0.133	10.84	
Dibenzofuran	1	0		8.34	49.04	50	30	70	1.566	1.536	1.93	
2,4-Dinitrotoluene	1	0		8.32	49.96	50	26.5	65	0.338	0.364	0.09	
4-Nitrophenol	1	0		8.23	51.39	50	12.5	65	0.194	0.207	2.78	
2,3,4,6-Tetrachlorophenol	1	0		8.45	48.71	50	30	70	0.301	0.302	2.58	
Fluorene	1	0		8.66	49.50	50	35	65	1.226	1.214	0.99	
4-Chlorophenyl-phenylether	1	0		8.65	49.72	50	28.5	72.5	0.565	0.562	0.55	
Diethylphthalate	1	0		8.54	48.41	50	23.5	65	1.199	1.161	3.18	
4-Nitroaniline	1	0		8.66	47.53	50	30	70	0.327	0.334	4.95	
Atrazine	1	0		9.29	45.99	50	5	70	0.360	0.331	8.03	
Phenanthrene-d10	1	0	I	9.60	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.70	60.57	50	28	65	0.087	0.104	21.15	
n-Nitrosodiphenylamine	1	0		8.77	48.55	50	30	70	0.621	0.603	2.89	
2,4,6-Tribromophenol	1	0	S	8.89	47.59	50	**		0.091	0.090	4.83	
1,2-Diphenylhydrazine	1	0		8.81	48.10	50	30	70	0.708	0.681	3.80	
4-Bromophenyl-phenylether	1	0		9.14	47.82	50	35	65	0.197	0.188	4.37	
Hexachlorobenzene	1	0		9.21	48.66	50	19	71	0.200	0.195	2.68	
N-Octadecane	1	0		9.49	48.27	50	30	70	0.381	0.368	3.45	
Pentachlorophenol	1	0		9.40	50.40	50	21	76	0.122	0.119	0.80	
Phenanthrene	1	0		9.63	49.48	50	33.5	65	1.081	1.070	1.03	
Anthracene	1	0		9.68	49.59	50	29	65	1.096	1.087	0.83	
Carbazole	1	0		9.85	48.21	50	30	70	1.001	0.965	3.58	
Di-n-butylphthalate	1	0		10.24	48.26	50	26	65	1.141	1.102	3.48	
Fluoranthene	1	0		10.95	49.71	50	23.5	65	1.120	1.113	0.58	
Chrysene-d12	1	0	I	12.64	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.21	50.06	50	35	65	1.158	1.159	0.11	
Benzidine	1	0		11.10	28.56	50	2.5	75	0.347	0.226	42.87	
Terphenyl-d14	1	0	S	11.40	24.41	25	**		0.686	0.670	2.38	
4,4'-DDE	1	0		11.34	48.73		**		0.240			
4,4'-DDD	1	0		11.74	48.12		**		0.408			
Butylbenzylphthalate	1	0		11.99	43.68	50	21.5	70	0.509	0.463	12.65	
4,4'-DDT	1	0		12.09	57.17		**		0.309			
3,3'-Dichlorobenzidine	1	0		12.60	45.06	50	9	107	0.316	0.310	9.88	
Benzo[a]anthracene	1	0		12.63	48.51	50	21	66.5	1.100	1.068	2.97	
Chrysene	1	0		12.67	51.41	50	22	70	1.013	1.042	2.83	
bis(2-Ethylhexyl)phthalate	1	0		12.70	44.22	50	21.5	68.5	0.688	0.639	11.56	
Perylene-d12	1	0	I	14.24	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	38.82	50	10.5	66	1.287	1.089	22.37	
Benzo[b]fluoranthene	1	0		13.84	48.79	50	21	70	1.146	1.118	2.41	
Benzo[k]fluoranthene	1	0		13.87	52.42	50	12.5	73	1.101	1.154	4.84	
Benzo[a]pyrene	1	0		14.18	50.00	50	16	74	1.085	1.085	0.01	
Indeno[1,2,3-cd]pyrene	1	0		15.49	49.40	50	6.5	75.5	1.160	1.146	1.20	
Dibenzo[a,h]anthracene	1	0		15.51	49.10	50	6.5	100	0.966	0.949	1.79	
Benzo[g,h,i]perylene	1	0		15.84	50.40	50	6.5	97.5	0.972	0.980	0.81	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 2 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0488

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/24/2018 8:33:00

Data File: 7M95315.D
 Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.686	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.944	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 C1-Compound %Diff exceeds limits

Page 3 of 3
 ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 7M95315.D
Acq On : 10/24/18 08:33

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/24/18 08:48
Qt Upd On: 10/09/18 08:53

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-24-18\
Qt Path : G:\GCMSData\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.515	96	78417	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.747	152	133949	40.00	ng	0.00
31) Naphthalene-d8	6.751	136	493459	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	285348	40.00	ng	-0.01
77) Phenanthrene-d10	9.604	188	495180	40.00	ng	-0.01
91) Chrysene-d12	12.639	240	486476	40.00	ng	-0.01
103) Perylene-d12	14.241	264	421621	40.00	ng	-0.03
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	203009	48.26	ng	0.00
Spiked Amount 100.000			Recovery =	48.26%		
16) Phenol-d5	5.427	99	290778	48.80	ng	0.00
Spiked Amount 100.000			Recovery =	48.80%		
32) Nitrobenzene-d5	6.190	128	37778	24.39	ng	0.00
Spiked Amount 50.000			Recovery =	48.78%		
55) 2-Fluorobiphenyl	7.585	172	224222	24.75	ng	0.00
Spiked Amount 50.000			Recovery =	49.50%		
80) 2,4,6-Tribromophenol	8.894	330	55538	47.59	ng	0.00
Spiked Amount 100.000			Recovery =	47.59%		
94) Terphenyl-d14	11.399	244	203708	24.41	ng	-0.01
Spiked Amount 50.000			Recovery =	48.82%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	94821	51.4756	ng	89
9) Pyridine	2.974	79	242716	49.6878	ng	59
10) N-Nitrosodimethylamine	2.910	74	135547	47.6857	ng	64
12) Benzaldehyde	5.362	77	76509	34.9903	ng	73
13) Aniline	5.459	93	272988m	49.1579	ng	
14) Pentachloroethane	5.507	117	72791	51.2319	ng	84
15) bis(2-Chloroethyl) ether	5.517	93	215102	50.0399	ng	75
17) Phenol	5.437	94	293659	49.6289	ng	76
18) 2-Chlorophenol	5.560	128	219536	49.9250	ng	76
19) N-Decane	5.619	57	188039	49.5629	ng	84
20) 1,3-Dichlorobenzene	5.694	146	242547	51.2683	ng	98
22) 1,4-Dichlorobenzene	5.758	146	244246	49.9655	ng	97
23) 1,2-Dichlorobenzene	5.886	146	230592	49.9317	ng	97
24) Benzyl alcohol	5.854	108	131414	44.5244	ng	68
25) bis(2-chloroisopropyl)...	5.971	45	221869	49.2147	ng	95
26) 2-Methylphenol	5.950	108	191622	47.4683	ng	96
27) Acetophenone	6.073	105	289629	50.1958	ng	68
28) Hexachloroethane	6.164	117	90078	50.3527	ng	88
29) N-Nitroso-di-n-propyla...	6.073	70	131980	47.0767	ng	89
30) 3&4-Methylphenol	6.073	108	193035	47.9098	ng	99
33) Nitrobenzene	6.207	77	206487	50.0712	ng	73
34) Isophorone	6.393	82	362723	47.6373	ng	86
35) 2-Nitrophenol	6.458	139	110432	50.5953	ng	79
36) 2,4-Dimethylphenol	6.484	107	199516	48.6582	ng	90
37) Benzoic Acid	6.559	105	163447	40.5070	ng	40
38) bis(2-Chloroethoxy)met...	6.559	93	257419	49.9334	ng	96
39) 2,4-Dichlorophenol	6.639	162	171565	49.7470	ng	88
40) 1,2,4-Trichlorobenzene	6.709	180	191940	49.8915	ng	98
41) Naphthalene	6.767	128	647816	49.2321	ng	99
42) 4-Chloroaniline	6.799	127	234171m	47.5977	ng	
43) Hexachlorobutadiene	6.864	225	97749	50.1002	ng	96
44) Caprolactam	7.061	113	65002	45.3079	ng	57
45) 4-Chloro-3-methylphenol	7.163	107	165990	48.3086	ng	74
46) 2-Methylnaphthalene	7.296	142	437742	51.0048	ng	100
47) 1-Methylnaphthalene	7.376	142	416445	49.8962	ng	91
48) Methylnaphthalenes (To...	7.296	142	854039m	100.8701	ng	
49) 1,1'-Biphenyl	7.670	154	500983	50.0624	ng	93
51) 1,2,4,5-Tetrachloroben...	7.430	216	188987	50.1421	ng	98
52) Hexachlorocyclopentadiene	7.425	237	100843	56.0916	ng	100
53) 2,4,6-Trichlorophenol	7.515	196	118090	48.1747	ng	99
54) 2,4,5-Trichlorophenol	7.542	196	123097	48.7481	ng	99
56) 2-Chloronaphthalene	7.692	162	383515	49.4612	ng	90
57) 1,4-Dimethylnaphthalene	7.969	156	336764	50.0300	ng	84
58) Dimethylnaphthalenes (...)	7.969	156	336764	50.0300	ng	84
59) Diphenyl Ether	7.756	170	285435	49.4717	ng	73
60) 2-Nitroaniline	7.761	65	116907	50.3600	ng	46
61) Coumarin	7.943	146	161190	49.8542	ng	86
62) Acenaphthylene	8.044	152	571007	49.3145	ng	99
63) Dimethylphthalate	7.911	163	421490	49.5225	ng	99
64) 2,6-Dinitrotoluene	7.964	165	99014	53.8418	ng	60
65) Acenaphthene	8.194	153	395052	49.8688	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 7M95315.D
 Acq On : 10/24/18 08:33

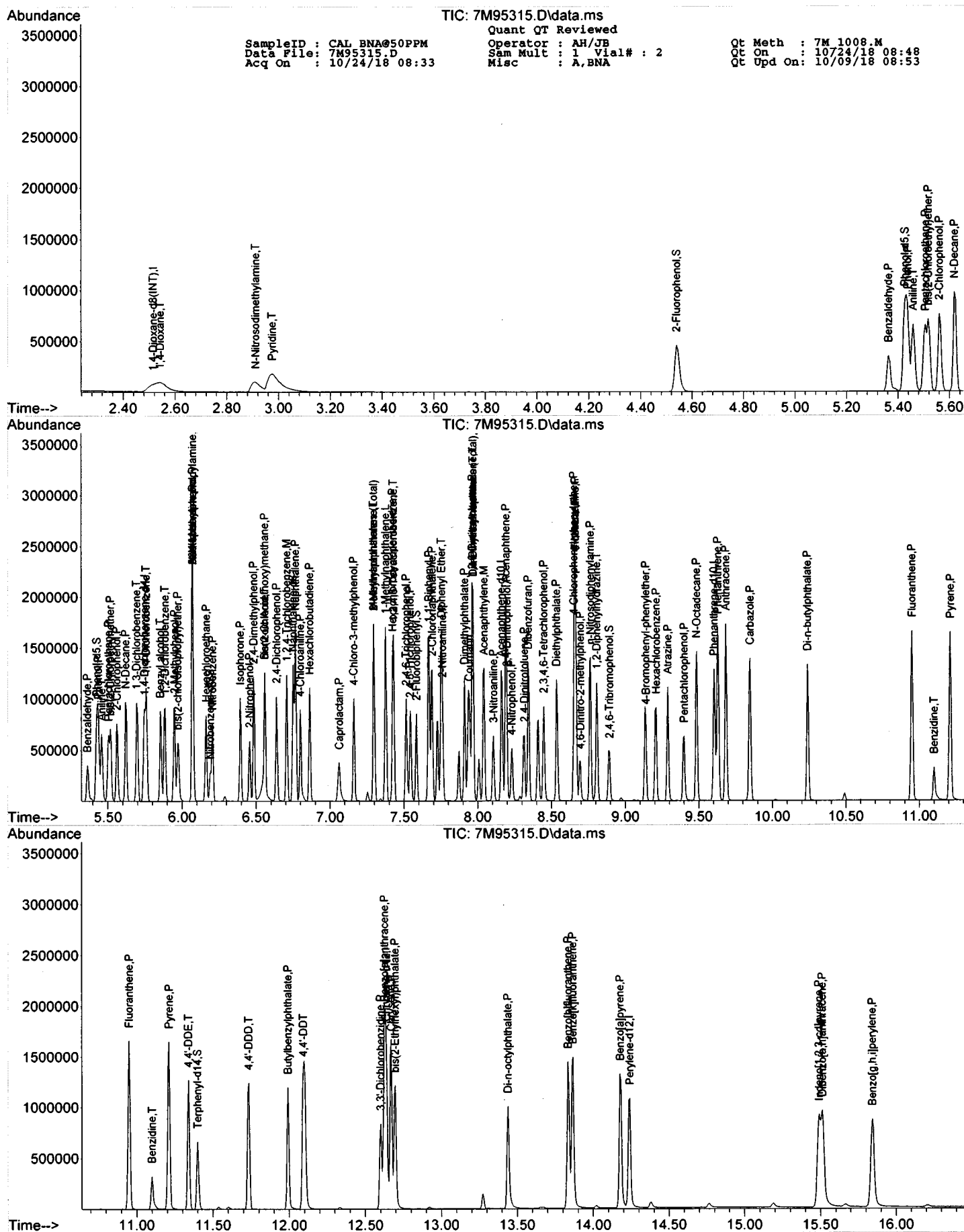
Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/24/18 08:48
 Qt Upd On: 10/09/18 08:53

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-24-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.108	138	109481	53.7288	ng	74
67) 2,4-Dinitrophenol	8.199	184	47423	55.4210	ng	41
68) Dibenzofuran	8.343	168	547692	49.0365	ng	86
69) 2,4-Dinitrotoluene	8.317	165	129763	49.9571	ng	55
70) 4-Nitrophenol	8.231	65	73707	51.3902	ng	82
71) 2,3,4,6-Tetrachlorophenol	8.450	232	107552	48.7079	ng	85
72) Fluorene	8.664	166	433000	49.5042	ng	99
73) 4-Chlorophenyl-phenyle...	8.653	204	200387	49.7249	ng	86
74) Diethylphthalate	8.536	149	413944	48.4095	ng	97
75) 4-Nitroaniline	8.664	138	119161	47.5257	ng	67
76) Atrazine	9.289	200	118223	45.9873	ng	97
78) 4,6-Dinitro-2-methylph...	8.696	198	64317	60.5735	ng	71
79) n-Nitrosodiphenylamine	8.765	169	373261	48.5541	ng	98
81) 1,2-Diphenylhydrazine	8.808	77	421462	48.1010	ng	81
82) 4-Bromophenyl-phenylether	9.139	248	116533	47.8167	ng	82
83) Hexachlorobenzene	9.209	284	120460	48.6624	ng	65
84) N-Octadecane	9.487	57	227611	48.2731	ng	63
85) Pentachlorophenol	9.401	266	73611	50.4004	ng	96
86) Phenanthrene	9.631	178	662120	49.4842	ng	100
87) Anthracene	9.684	178	672745	49.5860	ng	99
88) Carbazole	9.850	167	597418	48.2102	ng	97
89) Di-n-butylphthalate	10.240	149	681823	48.2577	ng	97
90) Fluoranthene	10.950	202	689033	49.7112	ng	94
92) Pyrene	11.212	202	705033	50.0566	ng	90
93) Benzidine	11.100	184	137369	28.5641	ng	88
95) 4,4'-DDE	11.340	246	142083	48.7290	ng	94
96) 4,4'-DDD	11.736	235	238712	48.1189	ng	95
97) Butylbenzylphthalate	11.992	149	281576	43.6753	ng	73
98) 4,4'-DDT	12.094	235	212430	57.1719	ng	97
99) 3,3'-Dichlorobenzidine	12.601	252	188297	45.0582	ng	97
100) Benzo[a]anthracene	12.628	228	649207	48.5137	ng	99
101) Chrysene	12.671	228	633578	51.4147	ng	99
102) bis(2-Ethylhexyl)phtha...	12.697	149	388819	44.2194	ng	94
104) Di-n-octylphthalate	13.440	149	574151	38.8174	ng	99
105) Benzo[b]fluoranthene	13.835	252	589377m	48.7927	ng	
106) Benzo[k]fluoranthene	13.867	252	608358	52.4220	ng	94
107) Benzo[a]pyrene	14.177	252	571758	49.9955	ng	95
108) Indeno[1,2,3-cd]pyrene	15.491	276	603943	49.3999	ng	89
109) Dibenzo[a,h]anthracene	15.513	278	499885	49.1030	ng	94
110) Benzo[g,h,i]perylene	15.844	276	516519	50.4045	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/23/2018 8:34:00

Data File: 7M95311.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.51	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	50.51	50	5	70	0.940	0.949	1.03	
Pyridine	1	0		2.97	50.48	50	2.5	75	2.543	2.516	0.97	
N-Nitrosodimethylamine	1	0		2.91	48.95	50	15	70	1.450	1.420	2.09	
2-Fluorophenol	1	0	S	4.54	49.31	50	**		2.146	2.116	1.37	
Benzaldehyde	1	0		5.36	34.57	50	2.5	115	1.115	0.771	30.86	
Aniline	1	0		5.46	50.17	50	5	70	2.833	2.842	0.35	
Pentachloroethane	1	0		5.51	51.55	50	30	70	0.725	0.747	3.11	
bis(2-Chloroethyl)ether	1	0		5.52	50.89	50	26	65	2.222	2.231	1.77	
Phenol-d5	1	0	S	5.43	49.50	50	**		3.039	3.009	1.00	
Phenol	1	0		5.44	49.66	50	24	65	3.018	2.998	0.68	
2-Chlorophenol	1	0		5.56	50.24	50	27.5	65	2.243	2.254	0.47	
N-Decane	1	0		5.62	50.04	50	30	70	1.935	1.937	0.07	
1,3-Dichlorobenzene	1	0		5.69	51.15	50	30	70	2.413	2.469	2.31	
1,4-Dichlorobenzene-d4	1	0	I	5.75	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.76	49.33	50	30	70	1.460	1.440	1.33	
1,2-Dichlorobenzene	1	0		5.89	49.63	50	30	70	1.379	1.369	0.75	
Benzyl alcohol	1	0		5.85	46.18	50	30	70	0.881	0.814	7.65	
bis(2-chloroisopropyl)ether	1	0		5.97	48.55	50	31.5	69.5	1.346	1.307	2.91	
2-Methylphenol	1	0		5.95	47.75	50	30	70	1.205	1.151	4.49	
Acetophenone	1	0		6.07	49.49	50	30	70	1.723	1.705	1.03	
Hexachloroethane	1	0		6.16	50.34	50	27.5	65	0.534	0.538	0.67	
N-Nitroso-di-n-propylamine	1	0		6.07	46.23	50	29.5	85	0.837	0.774	7.53	
3&4-Methylphenol	1	0		6.07	48.60	50	30	70	1.203	1.169	2.80	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.19	24.89	25	**		0.126	0.125	0.46	
Nitrobenzene	1	0		6.21	50.49	50	27	79	0.334	0.338	0.98	
Isophorone	1	0		6.39	48.74	50	26	90	0.617	0.602	2.53	
2-Nitrophenol	1	0		6.46	51.16	50	30.5	81.5	0.178	0.181	2.32	
2,4-Dimethylphenol	1	0		6.48	48.82	50	29	65	0.332	0.325	2.35	
Benzoic Acid	1	0		6.56	43.36	50	5	70	0.326	0.285	13.28	
bis(2-Chloroethoxy)methane	1	0		6.56	50.04	50	26	82	0.418	0.418	0.07	
2,4-Dichlorophenol	1	0		6.64	50.30	50	27	65	0.280	0.281	0.60	
1,2,4-Trichlorobenzene	1	0		6.71	50.39	50	25.5	65	0.312	0.314	0.78	
Naphthalene	1	0		6.77	48.78	50	35	65	1.067	1.041	2.45	
4-Chloroaniline	1	0		6.80	48.34	50	15	115	0.353	0.385	3.32	
Hexachlorobutadiene	1	0		6.86	50.08	50	34	65	0.158	0.158	0.17	
Caprolactam	1	0		7.06	46.23	50	30	70	0.116	0.108	7.54	
4-Chloro-3-methylphenol	1	0		7.16	49.84	50	34	65	0.279	0.278	0.31	
2-Methylnaphthalene	1	0		7.30	50.79	50	30	70	0.696	0.707	1.58	
1-Methylnaphthalene	1	0		7.38	50.32	50	30	70	0.677	0.681	0.64	
Methylnaphthalenes	1	0		7.38	101.06	100	**			0.694	1.06	
1,1'-Biphenyl	1	0		7.67	50.08	50	30	70	0.811	0.813	0.17	
Acenaphthene-d10	1	0	I	8.17	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	50.39	50	30	70	0.528	0.533	0.79	
Hexachlorocyclopentadiene	1	0		7.42	56.81	50	5	70	0.243	0.287	13.62	
2,4,6-Trichlorophenol	1	0		7.52	54.04	50	34.5	65	0.344	0.371	8.08	
2,4,5-Trichlorophenol	1	0		7.55	45.96	50	30	70	0.354	0.325	8.07	
2-Fluorobiphenyl	1	0	S	7.58	25.11	25	**		1.270	1.276	0.44	
2-Chloronaphthalene	1	0		7.69	50.35	50	35	65	1.087	1.094	0.69	
1,4-Dimethylnaphthalene	1	0		7.97	50.15	50	30	70	0.944	0.946	0.29	
Dimethylnaphthalenes	1	0		7.97	50.15		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 1 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

8101509 0493

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/23/2018 8:34:00

Data File: 7M95311.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.76	49.66	50	30	70	0.809	0.803	0.67	
2-Nitroaniline	1	0		7.76	50.99	50	30	70	0.325	0.332	1.99	
Coumarin	1	0		7.94	49.84	50	30	70	0.453	0.452	0.32	
Acenaphthylene	1	0		8.04	49.82	50	30	65	1.623	1.617	0.36	
Dimethylphthalate	1	0		7.91	50.23	50	25	65	1.193	1.198	0.45	
2,6-Dinitrotoluene	1	0		7.96	53.90	50	34	68.5	0.258	0.278	7.80	
Acenaphthene	1	0		8.19	49.78	50	35	65	1.110	1.106	0.44	
3-Nitroaniline	1	0		8.11	53.93	50	30	70	0.286	0.308	7.86	
2,4-Dinitrophenol	1	0		8.20	58.41	50	19.5	86.5	0.112	0.141	16.82	
Dibenzofuran	1	0		8.34	49.25	50	30	70	1.566	1.542	1.49	
2,4-Dinitrotoluene	1	0		8.32	50.44	50	26.5	65	0.338	0.367	0.88	
4-Nitrophenol	1	0		8.23	50.78	50	12.5	65	0.194	0.204	1.55	
2,3,4,6-Tetrachlorophenol	1	0		8.45	48.69	50	30	70	0.301	0.301	2.63	
Fluorene	1	0		8.66	49.80	50	35	65	1.226	1.221	0.41	
4-Chlorophenyl-phenylether	1	0		8.66	49.84	50	28.5	72.5	0.565	0.563	0.31	
Diethylphthalate	1	0		8.54	49.25	50	23.5	65	1.199	1.181	1.51	
4-Nitroaniline	1	0		8.66	47.57	50	30	70	0.327	0.334	4.85	
Atrazine	1	0		9.29	46.52	50	5	70	0.360	0.335	6.97	
Phenanthrene-d10	1	0	I	9.60	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.70	61.84	50	28	65	0.087	0.106	23.67	
n-Nitrosodiphenylamine	1	0		8.77	48.23	50	30	70	0.621	0.599	3.53	
2,4,6-Tribromophenol	1	0	S	8.89	47.59	50	**		0.091	0.090	4.83	
1,2-Diphenylhydrazine	1	0		8.81	47.95	50	30	70	0.708	0.679	4.09	
4-Bromophenyl-phenylether	1	0		9.14	48.15	50	35	65	0.197	0.190	3.70	
Hexachlorobenzene	1	0		9.21	47.92	50	19	71	0.200	0.192	4.16	
N-Octadecane	1	0		9.49	48.97	50	30	70	0.381	0.373	2.05	
Pentachlorophenol	1	0		9.40	50.10	50	21	76	0.122	0.118	0.20	
Phenanthrene	1	0		9.63	48.84	50	33.5	65	1.081	1.056	2.32	
Anthracene	1	0		9.68	49.00	50	29	65	1.096	1.074	2.00	
Carbazole	1	0		9.85	48.44	50	30	70	1.001	0.970	3.11	
Di-n-butylphthalate	1	0		10.24	47.85	50	26	65	1.141	1.092	4.30	
Fluoranthene	1	0		10.95	49.19	50	23.5	65	1.120	1.101	1.63	
Chrysene-d12	1	0	I	12.64	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.21	49.87	50	35	65	1.158	1.155	0.26	
Benzidine	1	0		11.10	31.82	50	2.5	75	0.347	0.251	36.36	
Terphenyl-d14	1	0	S	11.40	24.60	25	**		0.686	0.675	1.61	
4,4'-DDE	1	0		11.34	48.32		**		0.240			
4,4'-DDD	1	0		11.74	47.98		**		0.408			
Butylbenzylphthalate	1	0		11.99	44.58	50	21.5	70	0.509	0.473	10.84	
4,4'-DDT	1	0		12.09	58.07		**		0.309			
3,3'-Dichlorobenzidine	1	0		12.60	46.34	50	9	107	0.316	0.318	7.32	
Benzo[a]anthracene	1	0		12.63	48.15	50	21	66.5	1.100	1.060	3.69	
Chrysene	1	0		12.67	50.99	50	22	70	1.013	1.033	1.97	
bis(2-Ethylhexyl)phthalate	1	0		12.70	45.19	50	21.5	68.5	0.688	0.654	9.62	
Perylene-d12	1	0	I	14.24	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	40.57	50	10.5	66	1.287	1.139	18.86	
Benzo[b]fluoranthene	1	0		13.84	51.34	50	21	70	1.146	1.179	2.68	
Benzo[k]fluoranthene	1	0		13.87	54.16	50	12.5	73	1.101	1.193	8.32	
Benzo[a]pyrene	1	0		14.18	49.93	50	16	74	1.085	1.084	0.13	
Indeno[1,2,3-cd]pyrene	1	0		15.50	50.10	50	6.5	75.5	1.160	1.162	0.19	
Dibenzo[a,h]anthracene	1	0		15.52	49.53	50	6.5	100	0.966	0.957	0.94	
Benzo[g,h,i]perylene	1	0		15.85	50.28	50	6.5	97.5	0.972	0.978	0.56	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 2 of 3
**- No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0494

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/23/2018 8:34:00

Data File: 7M95311.D
 Method: EPA 625.I

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.686	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.944	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 CI-Compound %Diff exceeds limits

Page 3 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA50PPM
Data File: 7M95311.D
Acq On : 10/23/18 08:34

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/23/18 08:53
Qt Upd On: 10/09/18 08:53

Data Path : G:\GCMSDATA\2018\GCMS_7\Data\10-23-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	79519	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.747	152	136612	40.00	ng	0.00
31) Naphthalene-d8	6.751	136	496237	40.00	ng	0.00
50) Acenaphthene-d10	8.167	164	284638	40.00	ng	0.00
77) Phenanthrene-d10	9.604	188	500542	40.00	ng	-0.01
91) Chrysene-d12	12.639	240	489701	40.00	ng	-0.01
103) Perylene-d12	14.241	264	426187	40.00	ng	-0.03
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	210360	49.31	ng	0.00
Spiked Amount 100.000			Recovery =	49.31%		
16) Phenol-d5	5.427	99	299097	49.50	ng	0.00
Spiked Amount 100.000			Recovery =	49.50%		
32) Nitrobenzene-d5	6.191	128	38764	24.89	ng	0.00
Spiked Amount 50.000			Recovery =	49.78%		
55) 2-Fluorobiphenyl	7.585	172	226937	25.11	ng	0.00
Spiked Amount 50.000			Recovery =	50.22%		
80) 2,4,6-Tribromophenol	8.894	330	56139	47.59	ng	0.00
Spiked Amount 100.000			Recovery =	47.59%		
94) Terphenyl-d14	11.399	244	206672	24.60	ng	-0.01
Spiked Amount 50.000			Recovery =	49.20%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	94359	50.5149	ng	90
9) Pyridine	2.975	79	250124	50.4834	ng	60
10) N-Nitrosodimethylamine	2.905	74	141105	48.9530	ng	66
12) Benzaldehyde	5.363	77	76654	34.5708	ng	69
13) Aniline	5.459	93	282540	50.1728	ng	82
14) Pentachloroethane	5.507	117	74276	51.5526	ng	84
15) bis(2-Chloroethyl)ether	5.517	93	221771	50.8873	ng	75
17) Phenol	5.437	94	297969	49.6594	ng	77
18) 2-Chlorophenol	5.560	128	224010	50.2364	ng	77
19) N-Decane	5.619	57	192503	50.0363	ng	86
20) 1,3-Dichlorobenzene	5.694	146	245405	51.1536	ng	98
22) 1,4-Dichlorobenzene	5.758	146	245948	49.3329	ng	98
23) 1,2-Dichlorobenzene	5.886	146	233735	49.6256	ng	97
24) Benzyl alcohol	5.854	108	139001	46.1769	ng	67
25) bis(2-chloroisopropyl)...	5.972	45	223202	48.5453	ng	94
26) 2-Methylphenol	5.950	108	196611	47.7548	ng	97
27) Acetophenone	6.073	105	291204	49.4850	ng	68
28) Hexachloroethane	6.164	117	91839	50.3363	ng	87
29) N-Nitroso-di-n-propyla...	6.073	70	132197	46.2349	ng	87
30) 3&4-Methylphenol	6.073	108	199704	48.5989	ng	99
33) Nitrobenzene	6.207	77	209392	50.4914	ng	74
34) Isophorone	6.394	82	373186	48.7371	ng	86
35) 2-Nitrophenol	6.458	139	112352	51.1593	ng	78
36) 2,4-Dimethylphenol	6.484	107	201319	48.8230	ng	88
37) Benzoic Acid	6.559	105	177000	43.3602	ng	43
38) bis(2-Chloroethoxy)met...	6.559	93	259399	50.0358	ng	96
39) 2,4-Dichlorophenol	6.639	162	174440	50.2975	ng	87
40) 1,2,4-Trichlorobenzene	6.709	180	194955	50.3915	ng	97
41) Naphthalene	6.768	128	645435	48.7766	ng	99
42) 4-Chloroaniline	6.800	127	238918m	48.3414	ng	
43) Hexachlorobutadiene	6.864	225	98266	50.0833	ng	97
44) Caprolactam	7.061	113	66695	46.2277	ng	56
45) 4-Chloro-3-methylphenol	7.163	107	172232	49.8446	ng	77
46) 2-Methylnaphthalene	7.296	142	438349	50.7896	ng	99
47) 1-Methylnaphthalene	7.377	142	422362	50.3218	ng	91
48) Methylnaphthalenes (To...	7.377	142	860479m	101.0618	ng	
49) 1,1'-Biphenyl	7.670	154	504029	50.0848	ng	94
51) 1,2,4,5-Tetrachloroben...	7.430	216	189464	50.3940	ng	99
52) Hexachlorocyclopentadiene	7.425	237	101950	56.8111	ng	99
53) 2,4,6-Trichlorophenol	7.515	196	132143	54.0421	ng	98
54) 2,4,5-Trichlorophenol	7.547	196	115778	45.9641	ng	99
56) 2-Chloronaphthalene	7.692	162	389410	50.3467	ng	90
57) 1,4-Dimethylnaphthalene	7.970	156	336708	50.1464	ng	85
58) Dimethylnaphthalenes (...)	7.970	156	336708	50.1464	ng	85
59) Diphenyl Ether	7.756	170	285829	49.6635	ng	75
60) 2-Nitroaniline	7.761	65	118081	50.9926	ng	44
61) Coumarin	7.943	146	160749	49.8418	ng	85
62) Acenaphthylene	8.044	152	575443	49.8216	ng	99
63) Dimethylphthalate	7.911	163	426407	50.2252	ng	99
64) 2,6-Dinitrotoluene	7.964	165	98876	53.9008	ng	59
65) Acenaphthene	8.194	153	393375	49.7810	ng	99

Quantitation Report (QT Reviewed)

SampleID : CAL_BNA@50PPM
 Data File: 7M95311.D
 Acq On : 10/23/18 08:34

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/23/18 08:53
 Qt Upd On: 10/09/18 08:53

Data Path : G:\GCMSDATA\2018\GCMS_7\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.108	138	109620	53.9312	ng	75
67) 2,4-Dinitrophenol	8.199	184	50172	58.4121	ng	46
68) Dibenzofuran	8.343	168	548743	49.2531	ng	85
69) 2,4-Dinitrotoluene	8.317	165	130729	50.4416	ng	57
70) 4-Nitrophenol	8.231	65	72602	50.7765	ng	85
71) 2,3,4,6-Tetrachlorophenol	8.450	232	107237	48.6869	ng	85
72) Fluorene	8.664	166	434473	49.7965	ng	99
73) 4-Chlorophenyl-phenyle...	8.659	204	200368	49.8442	ng	81
74) Diethylphthalate	8.536	149	420058	49.2471	ng	97
75) 4-Nitroaniline	8.664	138	118986	47.5742	ng	67
76) Atrazine	9.289	200	119288	46.5173	ng	98
78) 4,6-Dinitro-2-methylph...	8.696	198	66598	61.8370	ng	71
79) n-Nitrosodiphenylamine	8.766	169	374817	48.2342	ng	99
81) 1,2-Diphenylhydrazine	8.808	77	424712	47.9526	ng	80
82) 4-Bromophenyl-phenylether	9.139	248	118622	48.1524	ng	79
83) Hexachlorobenzene	9.209	284	119902	47.9181	ng	66
84) N-Octadecane	9.487	57	233414	48.9735	ng	66
85) Pentachlorophenol	9.401	266	73928	50.1010	ng	95
86) Phenanthrene	9.631	178	660554	48.8383	ng	99
87) Anthracene	9.684	178	672008	49.0011	ng	99
88) Carbazole	9.850	167	606814	48.4439	ng	98
89) Di-n-butylphthalate	10.240	149	683352	47.8478	ng	97
90) Fluoranthene	10.950	202	689136	49.1860	ng	94
92) Pyrene	11.212	202	707069	49.8705	ng	92
93) Benzidine	11.100	184	153782	31.8203	ng	89
95) 4,4'-DDE	11.340	246	141831	48.3222	ng	95
96) 4,4'-DDD	11.736	235	239587	47.9772	ng	94
97) Butylbenzylphthalate	11.992	149	289421	44.5796	ng	71
98) 4,4'-DDT	12.094	235	217548	58.0729	ng	98
99) 3,3'-Dichlorobenzidine	12.601	252	194848	46.3419	ng	97
100) Benzo[a]anthracene	12.628	228	648668	48.1542	ng	99
101) Chrysene	12.671	228	632475	50.9872	ng	100
102) bis(2-Ethylhexyl)phtha...	12.697	149	400107	45.1887	ng	93
104) Di-n-octylphthalate	13.440	149	606871	40.5685	ng	99
105) Benzo[b]fluoranthene	13.841	252	628087	51.3422	ng	94
106) Benzo[k]fluoranthene	13.867	252	635339	54.1604	ng	95
107) Benzo[a]pyrene	14.183	252	577239	49.9340	ng	96
108) Indeno[1,2,3-cd]pyrene	15.497	276	619104	50.0975	ng	89
109) Dibenzo[a,h]anthracene	15.518	278	509704	49.5312	ng	94
110) Benzo[g,h,i]perylene	15.849	276	520824	50.2800	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/25/2018 9:19:00Data File: 5M105967.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.51	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.55	52.77	50	5	70	0.979	1.074	5.54	
Pyridine	1	0		3.01	50.84	50	2.5	75	2.530	2.573	1.67	
N-Nitrosodimethylamine	1	0		2.95	50.91	50	15	70	1.441	1.467	1.82	
2-Fluorophenol	1	0	S	4.54	49.16	50	**		2.077	2.042	1.67	
Benzaldehyde	1	0		5.37	37.37	50	2.5	115	1.211	0.905	25.26	
Aniline	1	0		5.46	43.01	50	5	70	2.890	2.911	13.97	
Pentachloroethane	1	0		5.50	47.34	50	30	70	0.798	0.756	5.33	
bis(2-Chloroethyl)ether	1	0		5.52	47.36	50	26	65	2.508	2.376	5.28	
Phenol-d5	1	0	S	5.43	48.37	50	**		3.202	3.098	3.27	
Phenol	1	0		5.44	51.72	50	24	65	3.388	3.443	3.44	
2-Chlorophenol	1	0		5.56	49.06	50	27.5	65	2.390	2.345	1.87	
N-Decane	1	0		5.60	48.55	50	30	70	2.744	2.664	2.91	
1,3-Dichlorobenzene	1	0		5.69	48.68	50	30	70	2.683	2.612	2.64	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.75	49.59	50	30	70	1.495	1.482	0.83	
1,2-Dichlorobenzene	1	0		5.88	50.24	50	30	70	1.389	1.396	0.48	
Benzyl alcohol	1	0		5.86	50.08	50	30	70	0.819	0.820	0.15	
bis(2-chloroisopropyl)ether	1	0		5.97	50.31	50	31.5	69.5	1.886	1.898	0.62	
2-Methylphenol	1	0		5.95	50.30	50	30	70	1.201	1.208	0.60	
Acetophenone	1	0		6.07	51.32	50	30	70	1.751	1.797	2.63	
Hexachloroethane	1	0		6.15	49.56	50	27.5	65	0.555	0.550	0.88	
N-Nitroso-di-n-propylamine	1	0		6.07	46.72	50	29.5	85	0.846	0.896	6.55	
3&4-Methylphenol	1	0		6.07	47.12	50	30	70	1.137	1.245	5.75	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.20	25.59	25	**		0.118	0.121	2.35	
Nitrobenzene	1	0		6.21	50.61	50	27	79	0.369	0.373	1.21	
Isophorone	1	0		6.39	51.24	50	26	90	0.639	0.654	2.49	
2-Nitrophenol	1	0		6.46	48.63	50	30.5	81.5	0.172	0.172	2.74	
2,4-Dimethylphenol	1	0		6.48	47.90	50	29	65	0.338	0.347	4.20	
Benzoic Acid	1	0		6.57	18.99	50	5	70	0.250	0.071	62.01	
bis(2-Chloroethoxy)methane	1	0		6.56	50.41	50	26	82	0.416	0.419	0.83	
2,4-Dichlorophenol	1	0		6.64	50.29	50	27	65	0.260	0.286	0.58	
1,2,4-Trichlorobenzene	1	0		6.70	48.29	50	25.5	65	0.311	0.301	3.41	
Naphthalene	1	0		6.76	50.17	50	35	65	1.070	1.073	0.34	
4-Chloroaniline	1	0		6.81	50.38	50	15	115	0.321	0.384	0.75	
Hexachlorobutadiene	1	0		6.85	49.83	50	34	65	0.167	0.166	0.33	
Caprolactam	1	0		7.08	47.01	50	30	70	0.100	0.102	5.99	
4-Chloro-3-methylphenol	1	0		7.17	50.14	50	34	65	0.282	0.286	0.28	
2-Methylnaphthalene	1	0		7.30	50.45	50	30	70	0.687	0.694	0.90	
1-Methylnaphthalene	1	0		7.37	51.22	50	30	70	0.676	0.693	2.43	
Methylnaphthalenes	1	0		7.30	101.51	100	**			0.688	1.51	
1,1'-Biphenyl	1	0		7.67	50.06	50	30	70	0.807	0.808	0.12	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	50.71	50	30	70	0.554	0.562	1.43	
Hexachlorocyclopentadiene	1	0		7.41	45.01	50	5	70	0.189	0.174	9.97	
2,4,6-Trichlorophenol	1	0		7.52	47.96	50	34.5	65	0.304	0.312	4.07	
2,4,5-Trichlorophenol	1	0		7.55	51.49	50	30	70	0.335	0.349	2.98	
2-Fluorobiphenyl	1	0	S	7.58	24.20	25	**		1.279	1.238	3.22	
2-Chloronaphthalene	1	0		7.69	49.51	50	35	65	1.076	1.065	0.98	
1,4-Dimethylnaphthalene	1	0		7.96	51.37	50	30	70	0.902	0.927	2.74	
Dimethylnaphthalenes	1	0		7.96	51.37		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limitsPage 1 of 3
** - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/25/2018 9:19:00Data File: 5M105967.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.75	52.68	50	30	70	0.798	0.841	5.36	
2-Nitroaniline	1	0		7.77	48.12	50	30	70	0.407	0.417	3.75	
Coumarin	1	0		7.95	52.76	50	30	70	0.414	0.437	5.51	
Acenaphthylene	1	0		8.04	50.51	50	30	65	1.618	1.634	1.03	
Dimethylphthalate	1	0		7.91	50.05	50	25	65	1.205	1.206	0.10	
2,6-Dinitrotoluene	1	0		7.97	49.24	50	34	68.5	0.264	0.274	1.51	
Acenaphthene	1	0		8.19	51.00	50	35	65	1.114	1.136	2.01	
3-Nitroaniline	1	0		8.13	50.70	50	30	70	0.272	0.312	1.40	
2,4-Dinitrophenol	1	0		8.22	37.57	50	19.5	86.5	0.121	0.082	24.85	
Dibenzofuran	1	0		8.35	48.77	50	30	70	1.562	1.571	2.47	
2,4-Dinitrotoluene	1	0		8.33	48.70	50	26.5	65	0.345	0.360	2.60	
4-Nitrophenol	1	0		8.25	46.07	50	12.5	65	0.215	0.201	7.85	
2,3,4,6-Tetrachlorophenol	1	0		8.46	49.65	50	30	70	0.270	0.297	0.71	
Fluorene	1	0		8.66	51.60	50	35	65	1.229	1.269	3.20	
4-Chlorophenyl-phenylether	1	0		8.65	51.28	50	28.5	72.5	0.557	0.572	2.55	
Diethylphthalate	1	0		8.54	50.25	50	23.5	65	1.193	1.199	0.51	
4-Nitroaniline	1	0		8.69	48.76	50	30	70	0.314	0.336	2.48	
Atrazine	1	0		9.29	49.77	50	5	70	0.338	0.339	0.46	
Phenanthrene-d10	1	0	I	9.62	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.71	45.80	50	28	65	0.101	0.085	8.40	
n-Nitrosodiphenylamine	1	0		8.77	51.12	50	30	70	0.625	0.639	2.25	
2,4,6-Tribromophenol	1	0	S	8.90	51.69	50	**		0.069	0.076	3.37	
1,2-Diphenylhydrazine	1	0		8.81	50.43	50	30	70	0.891	0.899	0.87	
4-Bromophenyl-phenylether	1	0		9.14	51.03	50	35	65	0.188	0.192	2.06	
Hexachlorobenzene	1	0		9.21	51.30	50	19	71	0.181	0.185	2.61	
N-Octadecane	1	0		9.47	48.31	50	30	70	0.493	0.516	3.39	
Pentachlorophenol	1	0		9.41	50.54	50	21	76	0.087	0.081	1.09	
Phenanthrene	1	0		9.64	50.06	50	33.5	65	1.085	1.086	0.11	
Anthracene	1	0		9.70	51.03	50	29	65	1.089	1.111	2.06	
Carbazole	1	0		9.87	50.50	50	30	70	1.010	1.020	1.00	
Di-n-butylphthalate	1	0		10.24	46.39	50	26	65	1.063	1.164	7.22	
Fluoranthene	1	0		10.97	50.44	50	23.5	65	1.087	1.134	0.87	
Chrysene-d12	1	0	I	12.67	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.23	51.41	50	35	65	1.141	1.173	2.81	
Benzidine	1	0		11.13	37.91	50	2.5	75	0.357	0.309	24.17	
Terphenyl-d14	1	0	S	11.41	25.98	25	**		0.640	0.665	3.91	
4,4'-DDE	1	0		11.35	52.31		**		0.231			
4,4'-DDD	1	0		11.75	54.46		**		0.370			
Butylbenzylphthalate	1	0		12.00	50.47	50	21.5	70	0.470	0.502	0.94	
4,4'-DDT	1	0		12.10	52.46		**		0.330			
3,3'-Dichlorobenzidine	1	0		12.63	50.29	50	9	107	0.271	0.322	0.59	
Benzo[a]anthracene	1	0		12.66	49.52	50	21	66.5	1.082	1.071	0.96	
Chrysene	1	0		12.70	51.22	50	22	70	1.036	1.061	2.44	
bis(2-Ethylhexyl)phthalate	1	0		12.69	45.64	50	21.5	68.5	0.664	0.705	8.71	
Perylene-d12	1	0	I	14.28	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	46.85	50	10.5	66	1.269	1.289	6.30	
Benzo[b]fluoranthene	1	0		13.87	51.22	50	21	70	1.126	1.153	2.44	
Benzo[k]fluoranthene	1	0		13.90	51.80	50	12.5	73	1.133	1.174	3.59	
Benzo[a]pyrene	1	0		14.22	52.43	50	16	74	1.085	1.133	4.85	
Indeno[1,2,3-cd]pyrene	1	0		15.56	51.88	50	6.5	75.5	1.189	1.218	3.76	
Dibenzo[a,h]anthracene	1	0		15.57	50.48	50	6.5	100	1.011	1.033	0.96	
Benzo[g,h,i]perylene	1	0		15.92	50.44	50	6.5	97.5	1.012	1.004	0.88	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits** - No limit specified in method
Page 2 of 3Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0500

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/25/2018 9:19:00

Data File: 5M105967.D
 Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.678	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.902	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 CI-Compound %Diff exceeds limits

Page 3 of 3
 ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 5M105967.D
Acq On : 10/25/18 09:19

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/25/18 09:34
Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-25-18\
Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	57222	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	103123	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	376807	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	216505	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	361026	40.00	ng	0.00
91) Chrysene-d12	12.666	240	363834	40.00	ng	0.00
103) Perylene-d12	14.279	264	295643	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	146046	49.16	ng	0.00
Spiked Amount 100.000			Recovery =	49.16%		
16) Phenol-d5	5.427	99	221569	48.37	ng	0.00
Spiked Amount 100.000			Recovery =	48.37%		
32) Nitrobenzene-d5	6.197	128	28452	25.59	ng	0.00
Spiked Amount 50.000			Recovery =	51.18%		
55) 2-Fluorobiphenyl	7.580	172	167549	24.20	ng	0.00
Spiked Amount 50.000			Recovery =	48.40%		
80) 2,4,6-Tribromophenol	8.900	330	34458	51.69	ng	0.00
Spiked Amount 100.000			Recovery =	51.69%		
94) Terphenyl-d14	11.411	244	151183	25.98	ng	0.00
Spiked Amount 50.000			Recovery =	51.96%		
Target Compounds						
8) 1,4-Dioxane	2.548	88	76810m	52.7705	ng	Qvalue
9) Pyridine	3.013	79	184022	50.8371	ng	72
10) N-Nitrosodimethylamine	2.948	74	104929	50.9120	ng	80
12) Benzaldehyde	5.374	77	64726	37.3706	ng	80
13) Aniline	5.465	93	208218	43.0145	ng	63
14) Pentachloroethane	5.497	117	54064	47.3350	ng	77
15) bis(2-Chloroethyl) ether	5.518	93	169943	47.3624	ng	86
17) Phenol	5.443	94	246299	51.7194	ng	83
18) 2-Chlorophenol	5.561	128	167737	49.0636	ng	83
19) N-Decane	5.598	57	190543	48.5450	ng	85
20) 1,3-Dichlorobenzene	5.689	146	186828	48.6800	ng	97
22) 1,4-Dichlorobenzene	5.753	146	191056	49.5864	ng	99
23) 1,2-Dichlorobenzene	5.876	146	179978	50.2424	ng	98
24) Benzyl alcohol	5.860	108	105692	50.0754	ng	74
25) bis(2-chloroisopropyl) ...	5.967	45	244649	50.3105	ng	99
26) 2-Methylphenol	5.951	108	155760	50.3002	ng	97
27) Acetophenone	6.074	105	231619	51.3165	ng	79
28) Hexachloroethane	6.148	117	70949	49.5588	ng	83
29) N-Nitroso-di-n-propyla...	6.074	70	115449	46.7242	ng	75
30) 3&4-Methylphenol	6.074	108	160540	47.1238	ng	97
33) Nitrobenzene	6.213	77	175866	50.6051	ng	81
34) Isophorone	6.394	82	308273	51.2436	ng	90
35) 2-Nitrophenol	6.458	139	80914	48.6314	ng	89
36) 2,4-Dimethylphenol	6.485	107	163342	47.8988	ng	94
37) Benzoic Acid	6.570	105	33367	18.9929	ng	86
38) bis(2-Chloroethoxy)met...	6.560	93	197361	50.4127	ng	98
39) 2,4-Dichlorophenol	6.640	162	134580	50.2914	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	141603	48.2937	ng	97
41) Naphthalene	6.763	128	505505	50.1683	ng	99
42) 4-Chloroaniline	6.806	127	180902	50.3752	ng	92
43) Hexachlorobutadiene	6.848	225	78254	49.8337	ng	95
44) Caprolactam	7.083	113	48107	47.0070	ng	68
45) 4-Chloro-3-methylphenol	7.169	107	134503	50.1386	ng	81
46) 2-Methylnaphthalene	7.297	142	326731	50.4510	ng	99
47) 1-Methylnaphthalene	7.372	142	326263	51.2163	ng	93
48) Methylnaphthalenes (To...	7.297	142	647987m	101.5097	ng	
49) 1,1'-Biphenyl	7.666	154	380380	50.0624	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	152165	50.7128	ng	97
52) Hexachlorocyclopentadiene	7.415	237	47077	45.0149	ng	98
53) 2,4,6-Trichlorophenol	7.516	196	84353	47.9644	ng	98
54) 2,4,5-Trichlorophenol	7.548	196	94550	51.4903	ng	97
56) 2-Chloronaphthalene	7.692	162	288331	49.5120	ng	91
57) 1,4-Dimethylnaphthalene	7.965	156	250906	51.3706	ng	90
58) Dimethylnaphthalenes (...)	7.965	156	250906	51.3706	ng	90
59) Diphenyl Ether	7.746	170	227616	52.6808	ng	84
60) 2-Nitroaniline	7.772	65	112783	48.1230	ng	58
61) Coumarin	7.954	146	118215	52.7553	ng	72
62) Acenaphthylene	8.045	152	442273	50.5147	ng	99
63) Dimethylphthalate	7.911	163	326482	50.0486	ng	99
64) 2,6-Dinitrotoluene	7.970	165	74048	49.2445	ng	70
65) Acenaphthene	8.194	153	307395	51.0027	ng	95

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 5M105967.D
 Acq On : 10/25/18 09:19

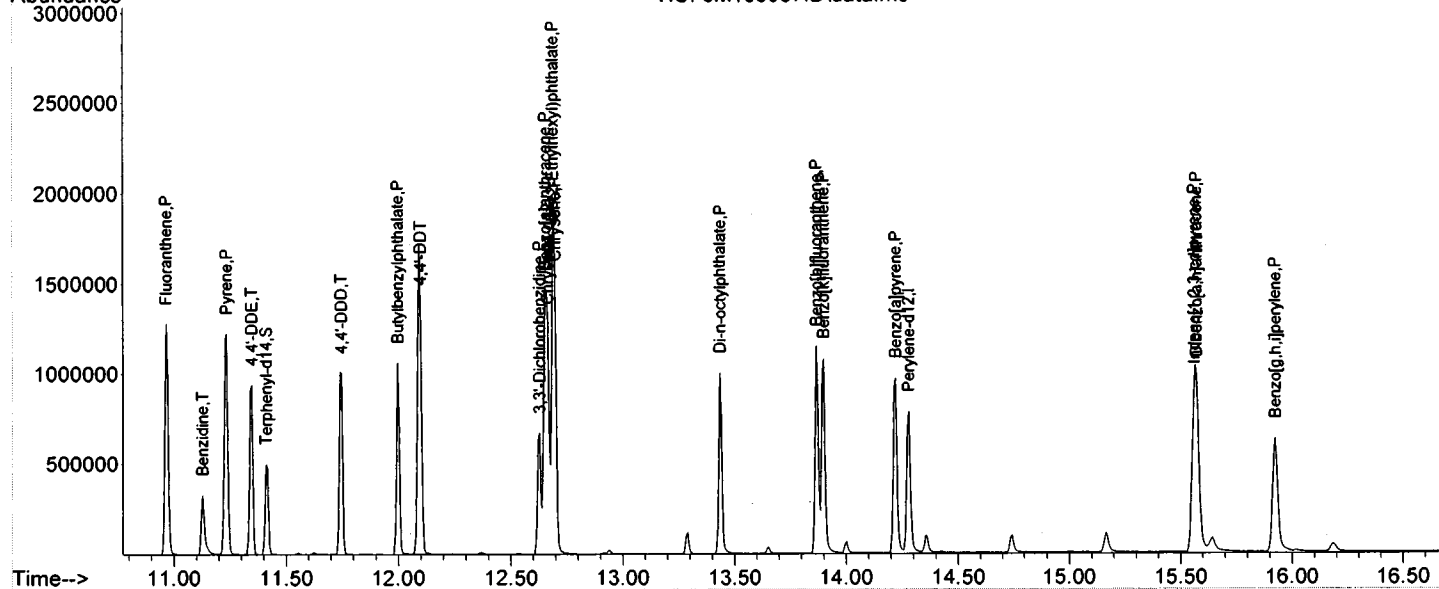
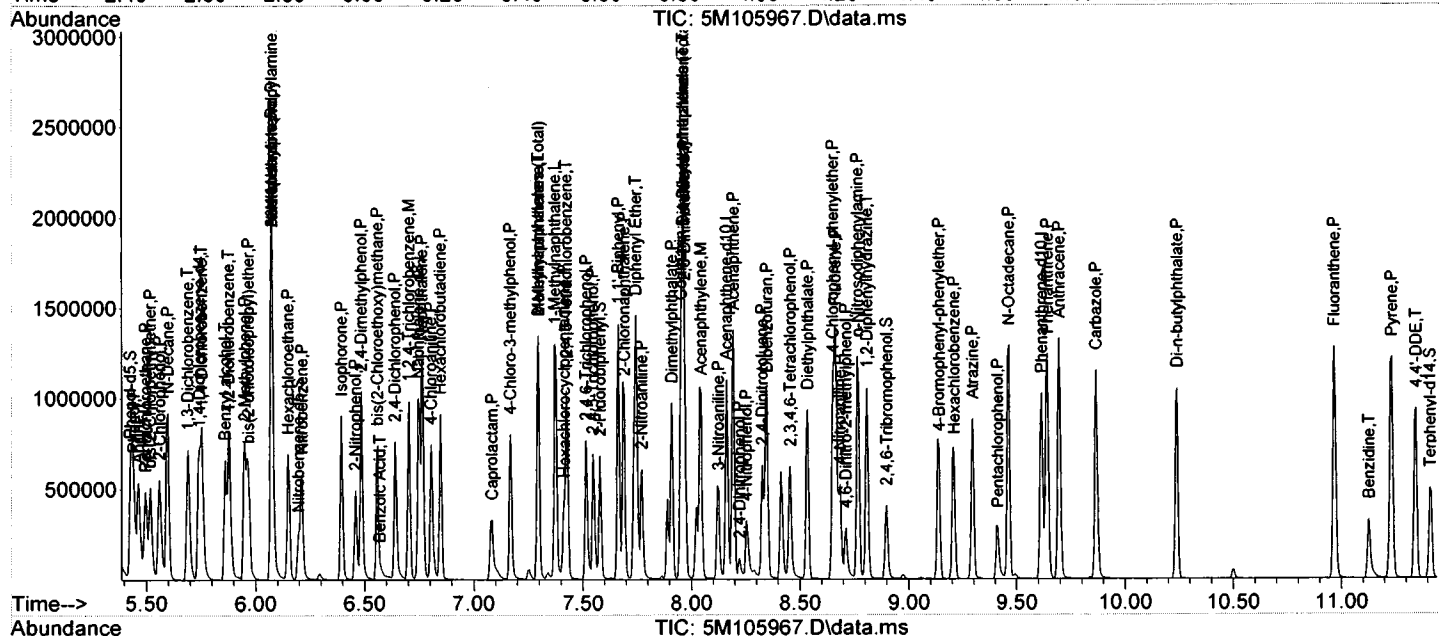
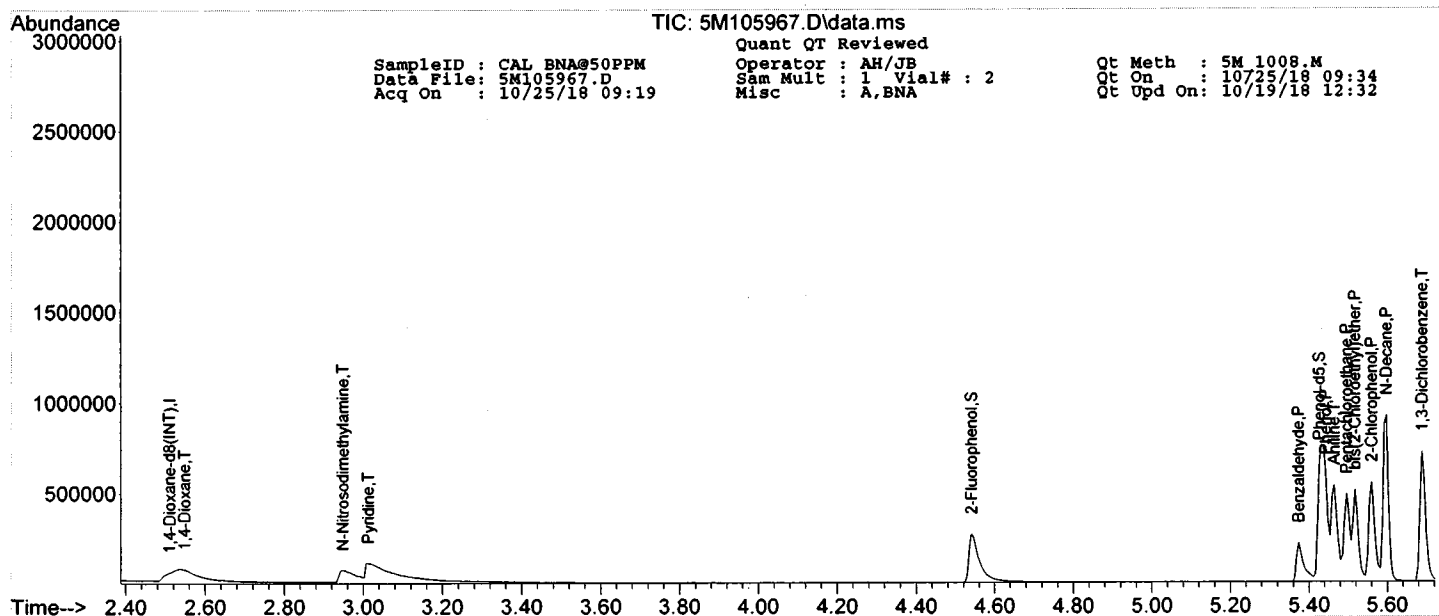
Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/25/18 09:34
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-25-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	84413	50.6998	ng	71
67)	2,4-Dinitrophenol	8.221	184	22174	37.5730	ng	44
68)	Dibenzofuran	8.349	168	425030	48.7658	ng	86
69)	2,4-Dinitrotoluene	8.328	165	97460	48.7008	ng	71
70)	4-Nitrophenol	8.253	65	54302	46.0739	ng	90
71)	2,3,4,6-Tetrachlorophenol	8.456	232	80451	49.6457	ng	79
72)	Fluorene	8.665	166	343329	51.6010	ng	100
73)	4-Chlorophenyl-phenyle...	8.654	204	154719	51.2768	ng	86
74)	Diethylphthalate	8.536	149	324433	50.2529	ng	97
75)	4-Nitroaniline	8.686	138	90943	48.7615	ng	80
76)	Atrazine	9.295	200	91699	49.7723	ng	96
78)	4,6-Dinitro-2-methylph...	8.713	198	38550	45.7976	ng	55
79)	n-Nitrosodiphenylamine	8.766	169	288278	51.1242	ng	99
81)	1,2-Diphenylhydrazine	8.809	77	405567	50.4341	ng	89
82)	4-Bromophenyl-phenylether	9.140	248	86648	51.0323	ng	83
83)	Hexachlorobenzene	9.210	284	83670	51.3048	ng	71
84)	N-Octadecane	9.466	57	232671	48.3063	ng	83
85)	Pentachlorophenol	9.413	266	36597	50.5439	ng	96
86)	Phenanthrene	9.642	178	490147	50.0566	ng	99
87)	Anthracene	9.696	178	501329	51.0287	ng	99
88)	Carbazole	9.867	167	460212	50.4975	ng	97
89)	Di-n-butylphthalate	10.241	149	525403	46.3902	ng	98
90)	Fluoranthene	10.967	202	511919	50.4364	ng	94
92)	Pyrene	11.234	202	533280	51.4059	ng	89
93)	Benzidine	11.127	184	140646	37.9142	ng	89
95)	4,4'-DDE	11.346	246	109829	52.3137	ng	92
96)	4,4'-DDD	11.747	235	183204	54.4579	ng	91
97)	Butylbenzylphthalate	11.998	149	228173	50.4680	ng	80
98)	4,4'-DDT	12.100	235	157569	52.4557	ng	93
99)	3,3'-Dichlorobenzidine	12.629	252	146372	50.2930	ng	97
100)	Benzo[a]anthracene	12.655	228	487168	49.5179	ng	99
101)	Chrysene	12.698	228	482581	51.2191	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.687	149	320434	45.6445	ng	98
104)	Di-n-octylphthalate	13.435	149	476302	46.8509	ng	99
105)	Benzo[b]fluoranthene	13.868	252	426270	51.2191	ng	96
106)	Benzo[k]fluoranthene	13.900	252	433757m	51.7971	ng	
107)	Benzo[a]pyrene	14.221	252	418681	52.4252	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.561	276	449987	51.8794	ng	96
109)	Dibenzo[a,h]anthracene	15.572	278	381706	50.4777	ng	93
110)	Benzo[g,h,i]perylene	15.925	276	370884	50.4375	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form7

Continuing Calibration

8101509 0504

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/26/2018 8:35:00

Data File: 5M105989.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.55	52.04	50	5	70	0.979	1.059	4.08	
Pyridine	1	0		3.03	49.08	50	2.5	75	2.530	2.484	1.84	
N-Nitrosodimethylamine	1	0		2.95	49.89	50	15	70	1.441	1.437	0.22	
2-Fluorophenol	1	0	S	4.55	48.56	50	**		2.077	2.017	2.89	
Benzaldehyde	1	0		5.37	37.45	50	2.5	115	1.211	0.907	25.10	
Aniline	1	0		5.46	43.72	50	5	70	2.890	2.960	12.56	
Pentachloroethane	1	0		5.50	47.39	50	30	70	0.798	0.757	5.22	
bis(2-Chloroethyl)ether	1	0		5.52	47.40	50	26	65	2.508	2.378	5.21	
Phenol-d5	1	0	S	5.43	48.15	50	**		3.202	3.084	3.70	
Phenol	1	0		5.44	51.80	50	24	65	3.388	3.449	3.59	
2-Chlorophenol	1	0		5.56	47.71	50	27.5	65	2.390	2.280	4.58	
N-Decane	1	0		5.60	48.06	50	30	70	2.744	2.638	3.87	
1,3-Dichlorobenzene	1	0		5.75	48.78	50	30	70	2.683	2.617	2.44	
1,4-Dichlorobenzene-d4	1	0	I	5.74	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.75	49.97	50	30	70	1.495	1.494	0.06	
1,2-Dichlorobenzene	1	0		5.88	51.57	50	30	70	1.389	1.433	3.13	
Benzyl alcohol	1	0		5.86	52.01	50	30	70	0.819	0.852	4.02	
bis(2-chloroisopropyl)ether	1	0		5.97	51.90	50	31.5	69.5	1.886	1.958	3.81	
2-Methylphenol	1	0		5.95	51.05	50	30	70	1.201	1.226	2.10	
Acetophenone	1	0		6.07	52.28	50	30	70	1.751	1.830	4.55	
Hexachloroethane	1	0		6.15	50.66	50	27.5	65	0.555	0.563	1.32	
N-Nitroso-di-n-propylamine	1	0		6.07	47.80	50	29.5	85	0.846	0.915	4.40	
3&4-Methylphenol	1	0		6.07	47.03	50	30	70	1.137	1.243	5.93	
Naphthalene-d8	1	0	I	6.75	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.20	26.09	25	**		0.118	0.123	4.35	
Nitrobenzene	1	0		6.21	51.38	50	27	79	0.369	0.379	2.75	
Isophorone	1	0		6.39	51.06	50	26	90	0.639	0.652	2.13	
2-Nitrophenol	1	0		6.46	51.58	50	30.5	81.5	0.172	0.183	3.15	
2,4-Dimethylphenol	1	0		6.48	49.36	50	29	65	0.338	0.358	1.29	
Benzoic Acid	1	0		6.58	37.11	50	5	70	0.250	0.156	25.78	
bis(2-Chloroethoxy)methane	1	0		6.56	50.77	50	26	82	0.416	0.422	1.54	
2,4-Dichlorophenol	1	0		6.64	51.54	50	27	65	0.260	0.293	3.07	
1,2,4-Trichlorobenzene	1	0		6.70	50.03	50	25.5	65	0.311	0.311	0.06	
Naphthalene	1	0		6.76	50.60	50	35	65	1.070	1.083	1.21	
4-Chloroaniline	1	0		6.81	51.08	50	15	115	0.321	0.389	2.16	
Hexachlorobutadiene	1	0		6.85	51.40	50	34	65	0.167	0.171	2.80	
Caprolactam	1	0		7.08	48.94	50	30	70	0.100	0.107	2.12	
4-Chloro-3-methylphenol	1	0		7.17	50.46	50	34	65	0.282	0.287	0.92	
2-Methylnaphthalene	1	0		7.30	50.52	50	30	70	0.687	0.695	1.04	
1-Methylnaphthalene	1	0		7.37	50.72	50	30	70	0.676	0.686	1.44	
Methylnaphthalenes	1	0		7.30	101.05	100	**			0.685	1.05	
1,1'-Biphenyl	1	0		7.67	51.26	50	30	70	0.807	0.827	2.52	
Acenaphthene-d10	1	0	I	8.16	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.43	49.94	50	30	70	0.554	0.554	0.13	
Hexachlorocyclopentadiene	1	0		7.41	44.11	50	5	70	0.189	0.170	11.78	
2,4,6-Trichlorophenol	1	0		7.52	48.76	50	34.5	65	0.304	0.317	2.49	
2,4,5-Trichlorophenol	1	0		7.55	51.23	50	30	70	0.335	0.347	2.45	
2-Fluorobiphenyl	1	0	S	7.58	25.01	25	**		1.279	1.280	0.06	
2-Chloronaphthalene	1	0		7.69	50.41	50	35	65	1.076	1.085	0.82	
1,4-Dimethylnaphthalene	1	0		7.96	52.19	50	30	70	0.902	0.942	4.38	
Dimethylnaphthalenes	1	0		7.96	52.19		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 1 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

8101509 0505

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/26/2018 8:35:00

Data File: 5M105989.D
Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.75	51.85	50	30	70	0.798	0.828	3.70	
2-Nitroaniline	1	0		7.77	48.50	50	30	70	0.407	0.420	3.01	
Coumarin	1	0		7.95	53.50	50	30	70	0.414	0.443	7.01	
Acenaphthylene	1	0		8.04	50.72	50	30	65	1.618	1.641	1.43	
Dimethylphthalate	1	0		7.91	49.95	50	25	65	1.205	1.204	0.10	
2,6-Dinitrotoluene	1	0		7.97	50.63	50	34	68.5	0.264	0.281	1.26	
Acenaphthene	1	0		8.19	49.98	50	35	65	1.114	1.113	0.04	
3-Nitroaniline	1	0		8.12	51.26	50	30	70	0.272	0.315	2.53	
2,4-Dinitrophenol	1	0		8.22	43.78	50	19.5	86.5	0.121	0.098	12.45	
Dibenzofuran	1	0		8.34	48.19	50	30	70	1.562	1.552	3.63	
2,4-Dinitrotoluene	1	0		8.33	48.93	50	26.5	65	0.345	0.362	2.14	
4-Nitrophenol	1	0		8.25	46.27	50	12.5	65	0.215	0.202	7.45	
2,3,4,6-Tetrachlorophenol	1	0		8.46	48.86	50	30	70	0.270	0.292	2.29	
Fluorene	1	0		8.66	49.98	50	35	65	1.229	1.229	0.04	
4-Chlorophenyl-phenylether	1	0		8.65	50.30	50	28.5	72.5	0.557	0.561	0.59	
Diethylphthalate	1	0		8.54	49.67	50	23.5	65	1.193	1.185	0.66	
4-Nitroaniline	1	0		8.69	48.51	50	30	70	0.314	0.334	2.99	
Atrazine	1	0		9.29	48.53	50	5	70	0.338	0.330	2.94	
Phenanthrene-d10	1	0	I	9.62	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.71	52.22	50	28	65	0.101	0.100	4.45	
n-Nitrosodiphenylamine	1	0		8.77	51.57	50	30	70	0.625	0.644	3.13	
2,4,6-Tribromophenol	1	0	S	8.90	51.67	50	**		0.069	0.076	3.34	
1,2-Diphenylhydrazine	1	0		8.81	45.78	50	30	70	0.891	0.816	8.44	
4-Bromophenyl-phenylether	1	0		9.13	50.04	50	35	65	0.188	0.188	0.08	
Hexachlorobenzene	1	0		9.20	50.97	50	19	71	0.181	0.184	1.94	
N-Octadecane	1	0		9.46	47.96	50	30	70	0.493	0.512	4.09	
Pentachlorophenol	1	0		9.41	53.36	50	21	76	0.087	0.086	6.71	
Phenanthrene	1	0		9.64	49.61	50	33.5	65	1.085	1.076	0.78	
Anthracene	1	0		9.70	50.59	50	29	65	1.089	1.101	1.17	
Carbazole	1	0		9.87	49.93	50	30	70	1.010	1.008	0.13	
Di-n-butylphthalate	1	0		10.24	47.12	50	26	65	1.063	1.183	5.76	
Fluoranthene	1	0		10.97	51.68	50	23.5	65	1.087	1.164	3.36	
Chrysene-d12	1	0	I	12.67	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.23	50.98	50	35	65	1.141	1.163	1.95	
Benidine	1	0		11.13	41.42	50	2.5	75	0.357	0.338	17.15	
Terphenyl-d14	1	0	S	11.41	25.27	25	**		0.640	0.647	1.06	
4,4'-DDE	1	0		11.34	50.39		**		0.231			
4,4'-DDD	1	0		11.74	52.46		**		0.370			
Butylbenzylphthalate	1	0		12.00	49.62	50	21.5	70	0.470	0.493	0.75	
4,4'-DDT	1	0		12.10	52.47		**		0.330			
3,3'-Dichlorobenzidine	1	0		12.62	51.63	50	9	107	0.271	0.330	3.26	
Benzo[a]anthracene	1	0		12.65	51.17	50	21	66.5	1.082	1.107	2.35	
Chrysene	1	0		12.70	50.21	50	22	70	1.036	1.040	0.41	
bis(2-Ethylhexyl)phthalate	1	0		12.69	46.75	50	21.5	68.5	0.664	0.722	6.50	
Perylene-d12	1	0	I	14.28	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.44	47.89	50	10.5	66	1.269	1.320	4.23	
Benzo[b]fluoranthene	1	0		13.87	51.67	50	21	70	1.126	1.164	3.34	
Benzo[k]fluoranthene	1	0		13.90	50.68	50	12.5	73	1.133	1.149	1.37	
Benzo[a]pyrene	1	0		14.22	51.26	50	16	74	1.085	1.105	2.52	
Indeno[1,2,3-cd]pyrene	1	0		15.56	51.34	50	6.5	75.5	1.189	1.204	2.68	
Dibenzo[a,h]anthracene	1	0		15.57	49.78	50	6.5	100	1.011	1.018	0.44	
Benzo[g,h,i]perylene	1	0		15.92	50.37	50	6.5	97.5	1.012	1.002	0.74	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

Page 2 of 3
** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0506

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/26/2018 8:35:00

Data File: 5M105989.D
 Method: EPA 625.1

Instrument: GCMS 5

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.678	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.902	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 CI-Compound %Diff exceeds limits

Page 3 of 3
 ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 5M105989.D
Acq On : 10/26/18 08:35

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/26/18 08:50
Qt Upd On: 10/25/18 12:46

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-26-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.521	96	58050	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	101726	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	371947	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	216928	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	357326	40.00	ng	0.00
91) Chrysene-d12	12.666	240	367827	40.00	ng	0.00
103) Perylene-d12	14.279	264	305241	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	146330	48.56	ng	0.00
Spiked Amount 100.000			Recovery =	48.56%		
16) Phenol-d5	5.432	99	223771	48.15	ng	0.00
Spiked Amount 100.000			Recovery =	48.15%		
32) Nitrobenzene-d5	6.196	128	28633	26.09	ng	0.00
Spiked Amount 50.000			Recovery =	52.18%		
55) 2-Fluorobiphenyl	7.580	172	173556	25.01	ng	0.00
Spiked Amount 50.000			Recovery =	50.02%		
80) 2,4,6-Tribromophenol	8.900	330	34095	51.67	ng	0.00
Spiked Amount 100.000			Recovery =	51.67%		
94) Terphenyl-d14	11.410	244	148653	25.27	ng	0.00
Spiked Amount 50.000			Recovery =	50.54%		
Target Compounds						
8) 1,4-Dioxane	2.553	88	76823m	52.0396	ng	Qvalue
9) Pyridine	3.028	79	180239	49.0819	ng	74
10) N-Nitrosodimethylamine	2.954	74	104306	49.8878	ng	81
12) Benzaldehyde	5.374	77	65798	37.4477	ng	75
13) Aniline	5.464	93	214763	43.7209	ng	63
14) Pentachloroethane	5.497	117	54911	47.3908	ng	77
15) bis(2-Chloroethyl)ether	5.518	93	172528	47.3970	ng	83
17) Phenol	5.443	94	250246	51.7956	ng	84
18) 2-Chlorophenol	5.561	128	165461	47.7076	ng	82
19) N-Decane	5.598	57	191388	48.0648	ng	88
20) 1,3-Dichlorobenzene	5.753	146	189927	48.7816	ng	95
22) 1,4-Dichlorobenzene	5.753	146	189927	49.9703	ng	98
23) 1,2-Dichlorobenzene	5.881	146	182218	51.5663	ng	96
24) Benzyl alcohol	5.860	108	108292	52.0119	ng	74
25) bis(2-chloroisopropyl)...	5.967	45	248978	51.9039	ng	99
26) 2-Methylphenol	5.951	108	155939	51.0495	ng	97
27) Acetophenone	6.073	105	232756	52.2766	ng	80
28) Hexachloroethane	6.148	117	71541	50.6586	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	116402	47.8007	ng	77
30) 3&4-Methylphenol	6.073	108	158078	47.0337	ng	98
33) Nitrobenzene	6.212	77	176239	51.3750	ng	80
34) Isophorone	6.394	82	303222	51.0626	ng	88
35) 2-Nitrophenol	6.458	139	85043	51.5770	ng	90
36) 2,4-Dimethylphenol	6.485	107	166256	49.3559	ng	96
37) Benzoic Acid	6.581	105	72301	37.1096	ng	88
38) bis(2-Chloroethoxy)met...	6.560	93	196204	50.7720	ng	97
39) 2,4-Dichlorophenol	6.640	162	136258	51.5365	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	144802	50.0300	ng	98
41) Naphthalene	6.763	128	503307	50.6029	ng	99
42) 4-Chloroaniline	6.805	127	180905	51.0816	ng	92
43) Hexachlorobutadiene	6.848	225	79675	51.4016	ng	95
44) Caprolactam	7.083	113	49557	48.9387	ng	68
45) 4-Chloro-3-methylphenol	7.169	107	133668	50.4621	ng	77
46) 2-Methylnaphthalene	7.297	142	322961	50.5205	ng	99
47) 1-Methylnaphthalene	7.372	142	318933	50.7198	ng	94
48) Methylnaphthalenes (To...	7.297	142	636733m	101.0500	ng	
49) 1,1'-Biphenyl	7.665	154	384469	51.2618	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	150127	49.9360	ng	96
52) Hexachlorocyclopentadiene	7.414	237	46090	44.1125	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	85964	48.7556	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	94219	51.2268	ng	98
56) 2-Chloronaphthalene	7.687	162	294136	50.4103	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	255411	52.1910	ng	87
58) Dimethylnaphthalenes (...)	7.965	156	255411	52.1910	ng	87
59) Diphenyl Ether	7.746	170	224463	51.8498	ng	81
60) 2-Nitroaniline	7.772	65	113898	48.4957	ng	53
61) Coumarin	7.954	146	120127	53.5040	ng	73
62) Acenaphthylene	8.039	152	444897	50.7153	ng	99
63) Dimethylphthalate	7.911	163	326490	49.9522	ng	99
64) 2,6-Dinitrotoluene	7.970	165	76304	50.6295	ng	65
65) Acenaphthene	8.194	153	301814	49.9790	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
 Data File: 5M105989.D
 Acq On : 10/26/18 08:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 2
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/26/18 08:50
 Qt Upd On: 10/25/18 12:46

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-26-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.120	138	85492	51.2633	ng	77
67)	2,4-Dinitrophenol	8.221	184	26547	43.7774	ng	38
68)	Dibenzofuran	8.344	168	420806	48.1875	ng	87
69)	2,4-Dinitrotoluene	8.328	165	98123	48.9279	ng	67
70)	4-Nitrophenol	8.253	65	54667	46.2728	ng	86
71)	2,3,4,6-Tetrachlorophenol	8.456	232	79289	48.8574	ng	81
72)	Fluorene	8.664	166	333191	49.9796	ng	100
73)	4-Chlorophenyl-phenyle...	8.654	204	152056	50.2960	ng	85
74)	Diethylphthalate	8.536	149	321305	49.6713	ng	97
75)	4-Nitroaniline	8.686	138	90625	48.5073	ng	77
76)	Atrazine	9.295	200	89433	48.5290	ng	96
78)	4,6-Dinitro-2-methylph...	8.713	198	44456	52.2233	ng	62
79)	n-Nitrosodiphenylamine	8.766	169	287793	51.5666	ng	98
81)	1,2-Diphenylhydrazine	8.809	77	364358	45.7788	ng	88
82)	4-Bromophenyl-phenylether	9.135	248	84091	50.0391	ng	88
83)	Hexachlorobenzene	9.204	284	82270	50.9687	ng	78
84)	N-Octadecane	9.460	57	228611	47.9569	ng	87
85)	Pentachlorophenol	9.407	266	38628	53.3563	ng	99
86)	Phenanthrene	9.642	178	480784	49.6088	ng	99
87)	Anthracene	9.695	178	491891	50.5865	ng	99
88)	Carbazole	9.866	167	450419	49.9347	ng	98
89)	Di-n-butylphthalate	10.235	149	528402	47.1175	ng	98
90)	Fluoranthene	10.967	202	519716	51.6789	ng	93
92)	Pyrene	11.229	202	534622	50.9758	ng	92
93)	Benzidine	11.127	184	155520	41.4235	ng	86
95)	4,4'-DDE	11.341	246	106961	50.3945	ng	93
96)	4,4'-DDD	11.742	235	178404	52.4554	ng	91
97)	Butylbenzylphthalate	11.998	149	226519	49.6248	ng	76
98)	4,4'-DDT	12.100	235	159345	52.4711	ng	93
99)	3,3'-Dichlorobenzidine	12.623	252	151829	51.6297	ng	98
100)	Benzo[a]anthracene	12.650	228	508974	51.1728	ng	99
101)	Chrysene	12.698	228	478228	50.2061	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.687	149	331900	46.7477	ng	98
104)	Di-n-octylphthalate	13.435	149	503791	47.8869	ng	99
105)	Benzo[b]fluoranthene	13.868	252	443974	51.6689	ng	96
106)	Benzo[k]fluoranthene	13.900	252	438219m	50.6845	ng	
107)	Benzo[a]pyrene	14.220	252	421800	51.2580	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.561	276	459324	51.3400	ng	98
109)	Dibenzo[a,h]anthracene	15.572	278	388245	49.7787	ng	93
110)	Benzo[g,h,i]perylene	15.925	276	382351	50.3680	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form7

8101509 0510

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/26/2018 8:36:00Data File: 7M95342.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.52	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.54	50.56	50	5	70	0.940	0.950	1.11	
Pyridine	1	0		2.97	49.82	50	2.5	75	2.543	2.483	0.36	
N-Nitrosodimethylamine	1	0		2.91	47.92	50	15	70	1.450	1.390	4.16	
2-Fluorophenol	1	0	S	4.54	48.04	50	**		2.146	2.062	3.93	
Benzaldehyde	1	0		5.36	34.68	50	2.5	115	1.115	0.774	30.65	
Aniline	1	0		5.46	48.89	50	5	70	2.833	2.770	2.22	
Pentachloroethane	1	0		5.51	50.39	50	30	70	0.725	0.730	0.79	
bis(2-Chloroethyl)ether	1	0		5.52	50.01	50	26	65	2.222	2.193	0.02	
Phenol-d5	1	0	S	5.43	48.26	50	**		3.039	2.934	3.48	
Phenol	1	0		5.44	48.97	50	24	65	3.018	2.956	2.05	
2-Chlorophenol	1	0		5.56	49.53	50	27.5	65	2.243	2.222	0.93	
N-Decane	1	0		5.62	48.69	50	30	70	1.935	1.884	2.62	
1,3-Dichlorobenzene	1	0		5.69	50.53	50	30	70	2.413	2.439	1.07	
1,4-Dichlorobenzene-d4	1	0	I	5.75	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.76	49.32	50	30	70	1.460	1.440	1.35	
1,2-Dichlorobenzene	1	0		5.89	49.91	50	30	70	1.379	1.377	0.18	
Benzyl alcohol	1	0		5.85	44.64	50	30	70	0.881	0.787	10.72	
bis(2-chloroisopropyl)ether	1	0		5.97	48.42	50	31.5	69.5	1.346	1.304	3.16	
2-Methylphenol	1	0		5.95	47.54	50	30	70	1.205	1.146	4.92	
Acetophenone	1	0		6.07	49.46	50	30	70	1.723	1.704	1.09	
Hexachloroethane	1	0		6.16	50.37	50	27.5	65	0.534	0.538	0.73	
N-Nitroso-di-n-propylamine	1	0		6.07	46.31	50	29.5	85	0.837	0.775	7.38	
3&4-Methylphenol	1	0		6.07	47.94	50	30	70	1.203	1.154	4.11	
Naphthalene-d8	1	0	I	6.76	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.19	24.60	25	**		0.126	0.124	1.58	
Nitrobenzene	1	0		6.21	49.84	50	27	79	0.334	0.333	0.32	
Isophorone	1	0		6.39	47.78	50	26	90	0.617	0.590	4.44	
2-Nitrophenol	1	0		6.46	50.80	50	30.5	81.5	0.178	0.180	1.60	
2,4-Dimethylphenol	1	0		6.48	48.01	50	29	65	0.332	0.319	3.98	
Benzoic Acid	1	0		6.56	43.51	50	5	70	0.326	0.286	12.98	
bis(2-Chloroethoxy)methane	1	0		6.56	49.90	50	26	82	0.418	0.417	0.20	
2,4-Dichlorophenol	1	0		6.64	49.76	50	27	65	0.280	0.278	0.48	
1,2,4-Trichlorobenzene	1	0		6.71	50.34	50	25.5	65	0.312	0.314	0.69	
Naphthalene	1	0		6.77	49.49	50	35	65	1.067	1.056	1.02	
4-Chloroaniline	1	0		6.80	47.70	50	15	115	0.353	0.380	4.60	
Hexachlorobutadiene	1	0		6.87	50.40	50	34	65	0.158	0.159	0.80	
Caprolactam	1	0		7.07	45.13	50	30	70	0.116	0.105	9.74	
4-Chloro-3-methylphenol	1	0		7.16	48.66	50	34	65	0.279	0.271	2.69	
2-Methylnaphthalene	1	0		7.30	50.37	50	30	70	0.696	0.701	0.73	
1-Methylnaphthalene	1	0		7.38	50.03	50	30	70	0.677	0.677	0.06	
Methylnaphthalenes	1	0		7.30	100.34	100	**			0.689	0.34	
1,1'-Biphenyl	1	0		7.67	50.01	50	30	70	0.811	0.811	0.02	
Acenaphthene-d10	1	0	I	8.17	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.44	51.03	50	30	70	0.528	0.539	2.06	
Hexachlorocyclopentadiene	1	0		7.43	55.71	50	5	70	0.243	0.281	11.43	
2,4,6-Trichlorophenol	1	0		7.52	49.95	50	34.5	65	0.344	0.343	0.09	
2,4,5-Trichlorophenol	1	0		7.55	49.51	50	30	70	0.354	0.351	0.97	
2-Fluorobiphenyl	1	0	S	7.59	25.06	25	**		1.270	1.273	0.24	
2-Chloronaphthalene	1	0		7.69	50.80	50	35	65	1.087	1.104	1.61	
1,4-Dimethylnaphthalene	1	0		7.97	50.50	50	30	70	0.944	0.953	0.99	
Dimethylnaphthalenes	1	0		7.97	50.50		**					

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limitsPage 1 of 3
** - No limit specified in methodNote: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0511

Continuing Calibration

Calibration Name: CAL BNA@50PPM
Cont Calibration Date/Time 10/26/2018 8:36:00

Data File: 7M95342.D
Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.76	50.44	50	30	70	0.809	0.816	0.88	
2-Nitroaniline	1	0		7.77	50.96	50	30	70	0.325	0.332	1.92	
Coumarin	1	0		7.95	50.10	50	30	70	0.453	0.454	0.21	
Acenaphthylene	1	0		8.04	49.61	50	30	65	1.623	1.610	0.78	
Dimethylphthalate	1	0		7.92	50.00	50	25	65	1.193	1.193	0.00	
2,6-Dinitrotoluene	1	0		7.96	54.47	50	34	68.5	0.258	0.281	8.93	
Acenaphthene	1	0		8.19	50.08	50	35	65	1.110	1.112	0.15	
3-Nitroaniline	1	0		8.11	54.54	50	30	70	0.286	0.312	9.08	
2,4-Dinitrophenol	1	0		8.20	56.84	50	19.5	86.5	0.112	0.137	13.68	
Dibenzofuran	1	0		8.35	49.39	50	30	70	1.566	1.547	1.22	
2,4-Dinitrotoluene	1	0		8.32	51.11	50	26.5	65	0.338	0.372	2.22	
4-Nitrophenol	1	0		8.24	51.44	50	12.5	65	0.194	0.207	2.88	
2,3,4,6-Tetrachlorophenol	1	0		8.46	49.77	50	30	70	0.301	0.308	0.46	
Fluorene	1	0		8.67	50.20	50	35	65	1.226	1.231	0.40	
4-Chlorophenyl-phenylether	1	0		8.66	50.82	50	28.5	72.5	0.565	0.574	1.63	
Diethylphthalate	1	0		8.54	49.39	50	23.5	65	1.199	1.184	1.21	
4-Nitroaniline	1	0		8.66	47.64	50	30	70	0.327	0.335	4.72	
Atrazine	1	0		9.29	46.49	50	5	70	0.360	0.335	7.03	
Phenanthrene-d10	1	0	I	9.61	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.70	54.93	50	28	65	0.087	0.102	9.86	
n-Nitrosodiphenylamine	1	0		8.77	48.22	50	30	70	0.621	0.599	3.57	
2,4,6-Tribromophenol	1	0	S	8.89	47.96	50	**		0.091	0.090	4.09	
1,2-Diphenylhydrazine	1	0		8.81	47.69	50	30	70	0.708	0.675	4.62	
4-Bromophenyl-phenylether	1	0		9.14	48.28	50	35	65	0.197	0.190	3.45	
Hexachlorobenzene	1	0		9.21	48.77	50	19	71	0.200	0.195	2.47	
N-Octadecane	1	0		9.49	48.04	50	30	70	0.381	0.366	3.91	
Pentachlorophenol	1	0		9.40	49.01	50	21	76	0.122	0.115	1.98	
Phenanthrene	1	0		9.64	48.87	50	33.5	65	1.081	1.056	2.27	
Anthracene	1	0		9.69	49.09	50	29	65	1.096	1.076	1.83	
Carbazole	1	0		9.85	48.03	50	30	70	1.001	0.962	3.93	
Di-n-butylphthalate	1	0		10.24	47.76	50	26	65	1.141	1.090	4.49	
Fluoranthene	1	0		10.95	48.85	50	23.5	65	1.120	1.094	2.30	
Chrysene-d12	1	0	I	12.64	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.21	49.67	50	35	65	1.158	1.150	0.66	
Benzidine	1	0		11.10	31.55	50	2.5	75	0.347	0.249	36.89	
Terphenyl-d14	1	0	S	11.40	24.38	25	**		0.686	0.669	2.46	
4,4'-DDE	1	0		11.34	48.45		**		0.240			
4,4'-DDD	1	0		11.74	48.79		**		0.408			
Butylbenzylphthalate	1	0		11.99	43.69	50	21.5	70	0.509	0.463	12.63	
4,4'-DDT	1	0		12.09	57.24		**		0.309			
3,3'-Dichlorobenzidine	1	0		12.60	45.39	50	9	107	0.316	0.312	9.22	
Benzo[a]anthracene	1	0		12.63	49.77	50	21	66.5	1.100	1.095	0.47	
Chrysene	1	0		12.67	49.56	50	22	70	1.013	1.004	0.88	
bis(2-Ethylhexyl)phthalate	1	0		12.70	43.82	50	21.5	68.5	0.688	0.634	12.37	
Perylene-d12	1	0	I	14.26	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.45	39.00	50	10.5	66	1.287	1.095	22.00	
Benzo[b]fluoranthene	1	0		13.85	47.45	50	21	70	1.146	1.086	5.10	
Benzo[k]fluoranthene	1	0		13.88	53.73	50	12.5	73	1.101	1.183	7.46	
Benzo[a]pyrene	1	0		14.20	49.81	50	16	74	1.085	1.081	0.39	
Indeno[1,2,3-cd]pyrene	1	0		15.51	50.20	50	6.5	75.5	1.160	1.164	0.39	
Dibenzo[a,h]anthracene	1	0		15.54	50.37	50	6.5	100	0.966	0.973	0.74	
Benzo[g,h,i]perylene	1	0		15.87	50.64	50	6.5	97.5	0.972	0.985	1.27	

S-Surrogate Compound

N/O or N/Q - Not applicable for this run

I-Internal Standard Compound

C1-Compound %Diff exceeds limits

Page 2 of 3

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

8101509 0512

Continuing Calibration

Calibration Name: CAL BNA@50PPM
 Cont Calibration Date/Time 10/26/2018 8:36:00

Data File: 7M95342.D
 Method: EPA 625.1

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.686	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.944	0.000	100.00	

S-Surrogate Compound
 N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
 CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 3 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.
 624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
 524.2 limits are compared against the %DIFF

SampleID : CAL BNA@50PPM
Data File: 7M95342.D
Acq On : 10/26/18 08:36

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 7M_1008.M
Qt On : 10/26/18 08:52
Qt Upd On: 10/17/18 08:02

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-26-18\
Qt Path : G:\GCMSData\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.515	96	79559	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.747	152	135075	40.00	ng	0.00
31) Naphthalene-d8	6.757	136	495876	40.00	ng	0.00
50) Acenaphthene-d10	8.167	164	282515	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	500947	40.00	ng	0.00
91) Chrysene-d12	12.639	240	493917	40.00	ng	-0.01
103) Perylene-d12	14.257	264	429218	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	205014	48.04	ng	0.00
Spiked Amount 100.000			Recovery =	48.04%		
16) Phenol-d5	5.427	99	291757	48.26	ng	0.00
Spiked Amount 100.000			Recovery =	48.26%		
32) Nitrobenzene-d5	6.191	128	38298	24.60	ng	0.00
Spiked Amount 50.000			Recovery =	49.20%		
55) 2-Fluorobiphenyl	7.590	172	224783	25.06	ng	0.00
Spiked Amount 50.000			Recovery =	50.12%		
80) 2,4,6-Tribromophenol	8.894	330	56641	47.96	ng	0.00
Spiked Amount 100.000			Recovery =	47.96%		
94) Terphenyl-d14	11.405	244	206645	24.38	ng	0.00
Spiked Amount 50.000			Recovery =	48.76%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	94484	50.5564	ng	91
9) Pyridine	2.975	79	246918	49.8206	ng	59
10) N-Nitrosodimethylamine	2.905	74	138203	47.9221	ng	68
12) Benzaldehyde	5.362	77	76929	34.6774	ng	70
13) Aniline	5.459	93	275444m	48.8882	ng	
14) Pentachloroethane	5.507	117	72644	50.3945	ng	82
15) bis(2-Chloroethyl)ether	5.517	93	218113	50.0116	ng	75
17) Phenol	5.437	94	294005	48.9741	ng	76
18) 2-Chlorophenol	5.560	128	220988	49.5338	ng	77
19) N-Decane	5.619	57	187411	48.6883	ng	86
20) 1,3-Dichlorobenzene	5.694	146	242550	50.5330	ng	98
22) 1,4-Dichlorobenzene	5.758	146	243131	49.3228	ng	97
23) 1,2-Dichlorobenzene	5.886	146	232420	49.9079	ng	98
24) Benzyl alcohol	5.854	108	132857	44.6380	ng	68
25) bis(2-chloroisopropyl)...	5.972	45	220125	48.4209	ng	96
26) 2-Methylphenol	5.950	108	193518	47.5384	ng	98
27) Acetophenone	6.073	105	287765	49.4570	ng	67
28) Hexachloroethane	6.164	117	90858	50.3653	ng	87
29) N-Nitroso-di-n-propyla...	6.073	70	130920	46.3093	ng	89
30) 3&4-Methylphenol	6.073	108	194798	47.9444	ng	99
33) Nitrobenzene	6.207	77	206530	49.8375	ng	74
34) Isophorone	6.394	82	365606	47.7819	ng	86
35) 2-Nitrophenol	6.458	139	111443	50.7998	ng	79
36) 2,4-Dimethylphenol	6.484	107	197821	48.0096	ng	89
37) Benzoic Acid	6.559	105	177541	43.5107	ng	40
38) bis(2-Chloroethoxy)met...	6.559	93	258506	49.8998	ng	96
39) 2,4-Dichlorophenol	6.639	162	172458	49.7622	ng	88
40) 1,2,4-Trichlorobenzene	6.709	180	194626	50.3431	ng	97
41) Naphthalene	6.773	128	654421	49.4917	ng	99
42) 4-Chloroaniline	6.805	127	235784m	47.6988	ng	
43) Hexachlorobutadiene	6.869	225	98817	50.4008	ng	97
44) Caprolactam	7.067	113	65062	45.1287	ng	54
45) 4-Chloro-3-methylphenol	7.163	107	168006	48.6570	ng	79
46) 2-Methylnaphthalene	7.302	142	434369	50.3651	ng	100
47) 1-Methylnaphthalene	7.382	142	419614	50.0308	ng	92
48) Methylnaphthalenes (To...	7.302	142	853726m	100.3416	ng	
49) 1,1'-Biphenyl	7.670	154	502929	50.0119	ng	95
51) 1,2,4,5-Tetrachloroben...	7.435	216	190430	51.0316	ng	98
52) Hexachlorocyclopentadiene	7.430	237	99135	55.7139	ng	99
53) 2,4,6-Trichlorophenol	7.521	196	121237	49.9545	ng	99
54) 2,4,5-Trichlorophenol	7.547	196	123792	49.5149	ng	98
56) 2-Chloronaphthalene	7.692	162	390010	50.8032	ng	91
57) 1,4-Dimethylnaphthalene	7.970	156	336529	50.4964	ng	87
58) Dimethylnaphthalenes (...)	7.970	156	336529	50.4964	ng	87
59) Diphenyl Ether	7.756	170	288141	50.4415	ng	77
60) 2-Nitroaniline	7.766	65	117123	50.9590	ng	37
61) Coumarin	7.948	146	160388	50.1036	ng	85
62) Acenaphthylene	8.044	152	568730	49.6104	ng	99
63) Dimethylphthalate	7.916	163	421338	50.0010	ng	99
64) 2,6-Dinitrotoluene	7.964	165	99166	54.4652	ng	61
65) Acenaphthene	8.194	153	392753	50.0758	ng	97

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1008.M
 Data File: 7M95342.D Sam Mult : 1 Vial# : 2 Qt On : 10/26/18 08:52
 Acq On : 10/26/18 08:36 Misc : A,BNA Qt Upd On: 10/17/18 08:02

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.114	138	110030	54.5397	ng	71
67) 2,4-Dinitrophenol	8.199	184	48297	56.8388	ng	64
68) Dibenzofuran	8.349	168	546146	49.3884	ng	84
69) 2,4-Dinitrotoluene	8.317	165	131520	51.1100	ng	61
70) 4-Nitrophenol	8.237	65	73049	51.4396	ng	81
71) 2,3,4,6-Tetrachlorophenol	8.456	232	108869	49.7680	ng	84
72) Fluorene	8.669	166	434748	50.2025	ng	99
73) 4-Chlorophenyl-phenyle...	8.659	204	202754	50.8167	ng	84
74) Diethylphthalate	8.541	149	418168	49.3939	ng	97
75) 4-Nitroaniline	8.664	138	118266	47.6417	ng	70
76) Atrazine	9.294	200	118317	46.4854	ng	95
78) 4,6-Dinitro-2-methylph...	8.696	198	63587	54.9294	ng	66
79) n-Nitrosodiphenylamine	8.765	169	374974	48.2154	ng	99
81) 1,2-Diphenylhydrazine	8.814	77	422738	47.6912	ng	76
82) 4-Bromophenyl-phenylether	9.139	248	119024	48.2765	ng	81
83) Hexachlorobenzene	9.209	284	122125	48.7671	ng	72
84) N-Octadecane	9.487	57	229165	48.0431	ng	68
85) Pentachlorophenol	9.401	266	72241	49.0104	ng	95
86) Phenanthrene	9.636	178	661454	48.8653	ng	100
87) Anthracene	9.690	178	673711	49.0856	ng	100
88) Carbazole	9.850	167	602173	48.0345	ng	97
89) Di-n-butylphthalate	10.240	149	682580	47.7551	ng	97
90) Fluoranthene	10.950	202	684956	48.8482	ng	96
92) Pyrene	11.212	202	710298	49.6706	ng	90
93) Benzidine	11.100	184	153830	31.5541	ng	90
95) 4,4'-DDE	11.340	246	143430	48.4499	ng	94
96) 4,4'-DDD	11.736	235	245755	48.7923	ng	96
97) Butylbenzylphthalate	11.992	149	285949	43.6852	ng	73
98) 4,4'-DDT	12.094	235	215949	57.2369	ng	98
99) 3,3'-Dichlorobenzidine	12.601	252	192557	45.3893	ng	97
100) Benzo[a]anthracene	12.628	228	676162	49.7667	ng	99
101) Chrysene	12.671	228	620036	49.5577	ng	98
102) bis(2-Ethylhexyl)phtha...	12.697	149	391122	43.8171	ng	94
104) Di-n-octylphthalate	13.445	149	587260	38.9988	ng	100
105) Benzo[b]fluoranthene	13.851	252	582879	47.4484	ng	95
106) Benzo[k]fluoranthene	13.878	252	634785m	53.7310	ng	
107) Benzo[a]pyrene	14.199	252	579853	49.8059	ng	94
108) Indeno[1,2,3-cd]pyrene	15.513	276	624746	50.1970	ng	90
109) Dibenzo[a,h]anthracene	15.539	278	522020	50.3698	ng	92
110) Benzo[g,h,i]perylene	15.871	276	528249	50.6367	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

GC/MS Base Neutral/Acid Extractable Data
Raw QC Data

Form 5

8101509 0517

Tune Name: CAL DFTPP

Data File: 10M71228.D

Instrument: GCMS 10

Analysis Date: 10/08/18 08:27

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.071 to 10.076 min

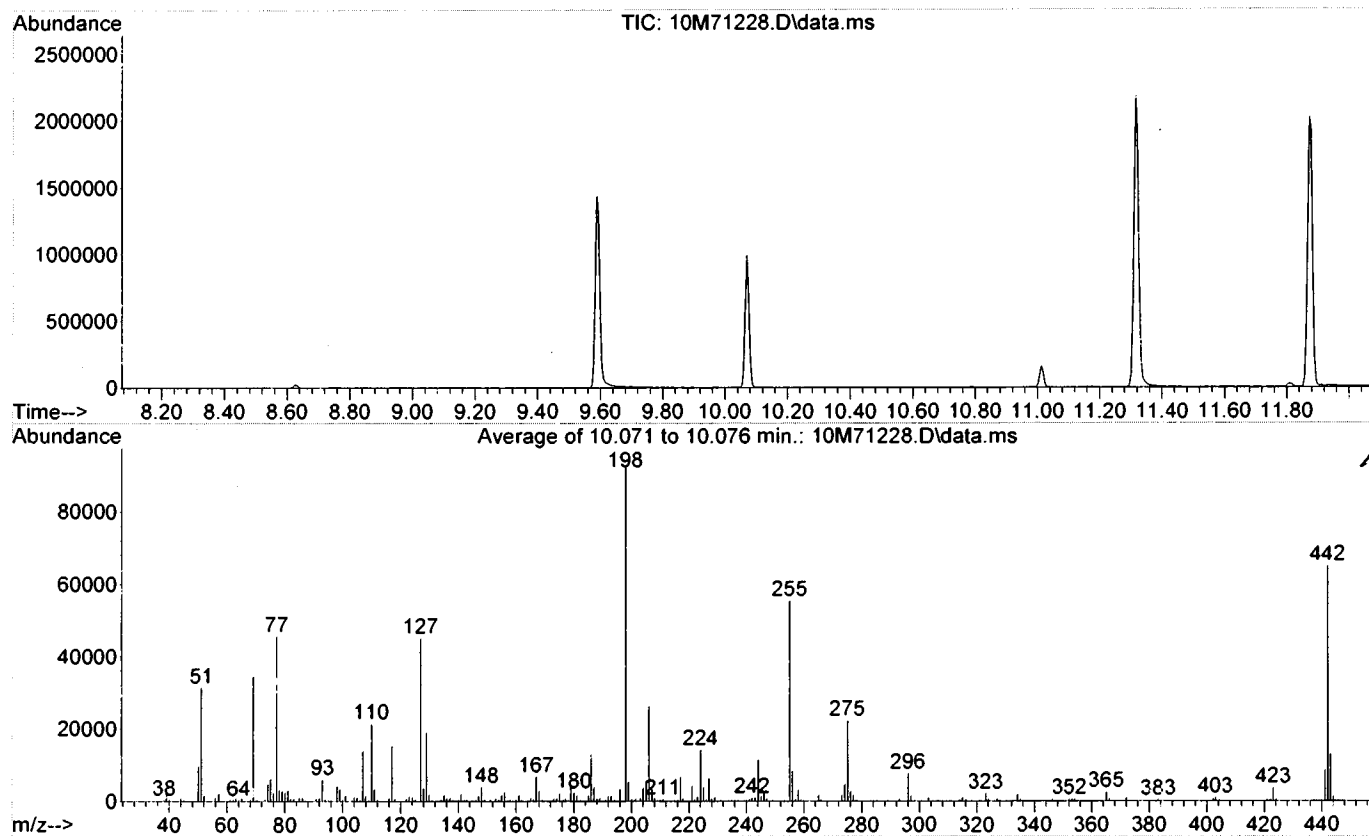
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	33.7	31368	PASS
68	69	0.00	2	1.5	506	PASS
69	198	0.00	100	37.0	34444	PASS
70	69	0.00	2	0.4	151	PASS
127	198	40	60	48.5	45148	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93088	PASS
199	198	5	9	5.8	5379	PASS
275	198	10	30	23.9	22288	PASS
365	198	1	100	2.8	2610	PASS
441	443	0.01	100	66.2	8665	PASS
442	198	40	100	69.8	64968	PASS
443	442	17	23	20.2	13098	PASS

Data File	Sample Number	Analysis Date:
10M71229.D	CAL BNA@10PPM	10/08/18 08:51
10M71230.D	CAL BNA@2PPM	10/08/18 09:15
10M71231.D	CAL BNA@196PP	10/08/18 09:38
10M71232.D	CAL BNA@160PP	10/08/18 10:00
10M71233.D	CAL BNA@120PP	10/08/18 10:22
10M71234.D	CAL BNA@80PPM	10/08/18 10:44
10M71235.D	CAL BNA@20PPM	10/08/18 11:06
10M71236.D	CAL BNA@.5PPM	10/08/18 11:28
10M71237.D	CAL BNA@50PPM	10/08/18 11:51
10M71238.D	ICV BNA@50PPM	10/08/18 12:15

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-08-18\
 Data File : 10M71228.D
 Acq On : 8 Oct 2018 8:27
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_0823.M
 Title : @GCMS_10,mg,625,8270
 Last Update : Thu Aug 23 12:21:53 2018



Spectrum Information: Average of 10.071 to 10.076 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.7	31368	PASS
68	69	0.00	2	1.5	506	PASS
69	198	0.00	100	37.0	34444	PASS
70	69	0.00	2	0.4	151	PASS
127	198	40	60	48.5	45148	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93088	PASS
199	198	5	9	5.8	5379	PASS
275	198	10	30	23.9	22288	PASS
365	198	1	100	2.8	2610	PASS
441	443	0.01	100	66.2	8665	PASS
442	198	40	100	69.8	64968	PASS
443	442	17	23	20.2	13098	PASS

Form 5

8101509 0519

Tune Name: CAL DFTPP

Data File: 5M105686.D

Instrument: GCMS 5

Analysis Date: 10/08/18 08:31

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.893 to 9.898 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	42.9	49432	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.9	48280	PASS
70	69	0.00	2	0.6	274	PASS
127	198	40	60	51.9	59880	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	115296	PASS
199	198	5	9	6.9	7977	PASS
275	198	10	30	19.9	22916	PASS
365	198	1	100	2.2	2483	PASS
441	443	0.01	100	78.8	7853	PASS
442	198	40	100	43.7	50428	PASS
443	442	17	23	19.8	9961	PASS

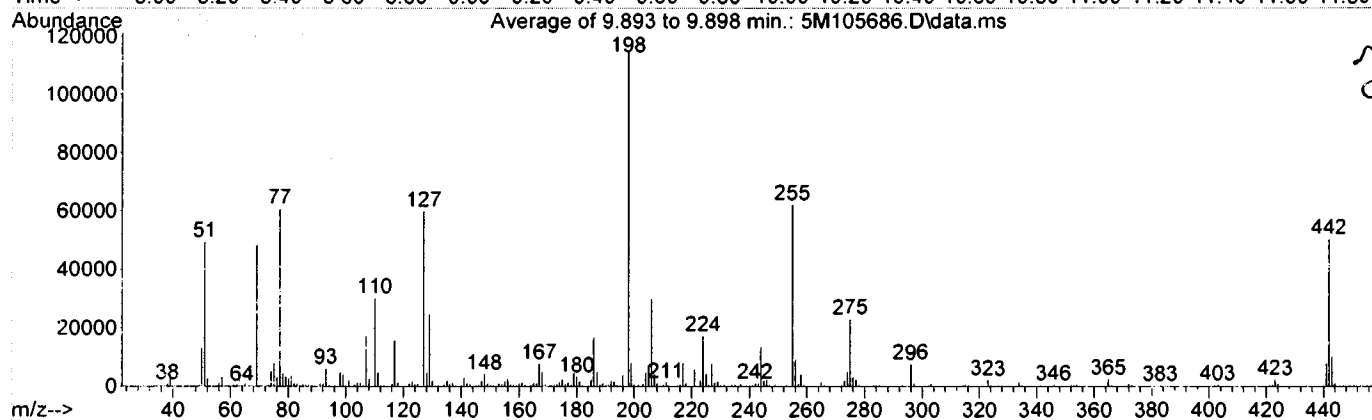
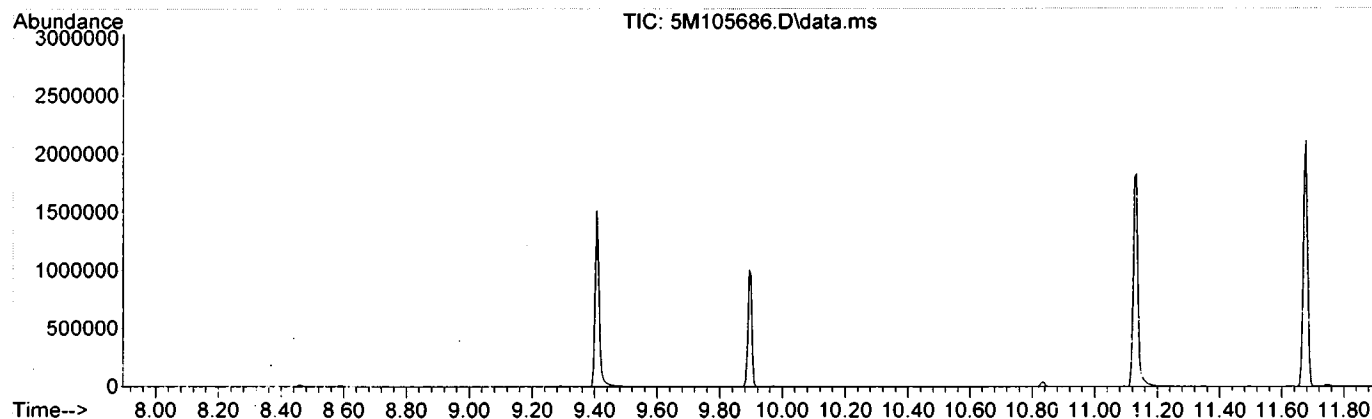
Data File	Sample Number	Analysis Date:
5M105687.D	CAL BNA@10PPM	10/08/18 08:57
5M105688.D	CAL BNA@2PPM	10/08/18 09:20
5M105689.D	CAL BNA@196PP	10/08/18 09:45
5M105690.D	CAL BNA@160PP	10/08/18 10:11
5M105691.D	CAL BNA@120PP	10/08/18 10:34
5M105692.D	CAL BNA@80PPM	10/08/18 10:57
5M105693.D	CAL BNA@20PPM	10/08/18 11:26
5M105694.D	CAL BNA@.5PPM	10/08/18 11:49
5M105695.D	CAL BNA@50PPM	10/08/18 12:12
5M105696.D	CAL BNA@2PPM	10/08/18 12:40
5M105697.D	ICV BNA@50PPM	10/08/18 13:09

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-08-18\
 Data File : 5M105686.D
 Acq On : 8 Oct 2018 8:31
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

8101509 0520

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_0821.M
 Title : @GCMS_5,mg,625,8270
 Last Update : Tue Aug 21 13:22:25 2018



Spectrum Information: Average of 9.893 to 9.898 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.9	49432	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.9	48280	PASS
70	69	0.00	2	0.6	274	PASS
127	198	40	60	51.9	59880	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	115296	PASS
199	198	5	9	6.9	7977	PASS
275	198	10	30	19.9	22916	PASS
365	198	1	100	2.2	2483	PASS
441	443	0.01	100	78.8	7853	PASS
442	198	40	100	43.7	50428	PASS
443	442	17	23	19.8	9961	PASS

Form 5

Tune Name: CAL DFTPP

Data File: 7M95168.D

Instrument: GCMS 7

Analysis Date: 10/08/18 12:40

Method: EPA 625.1

Tune Scan/Time Range: Scan 1442

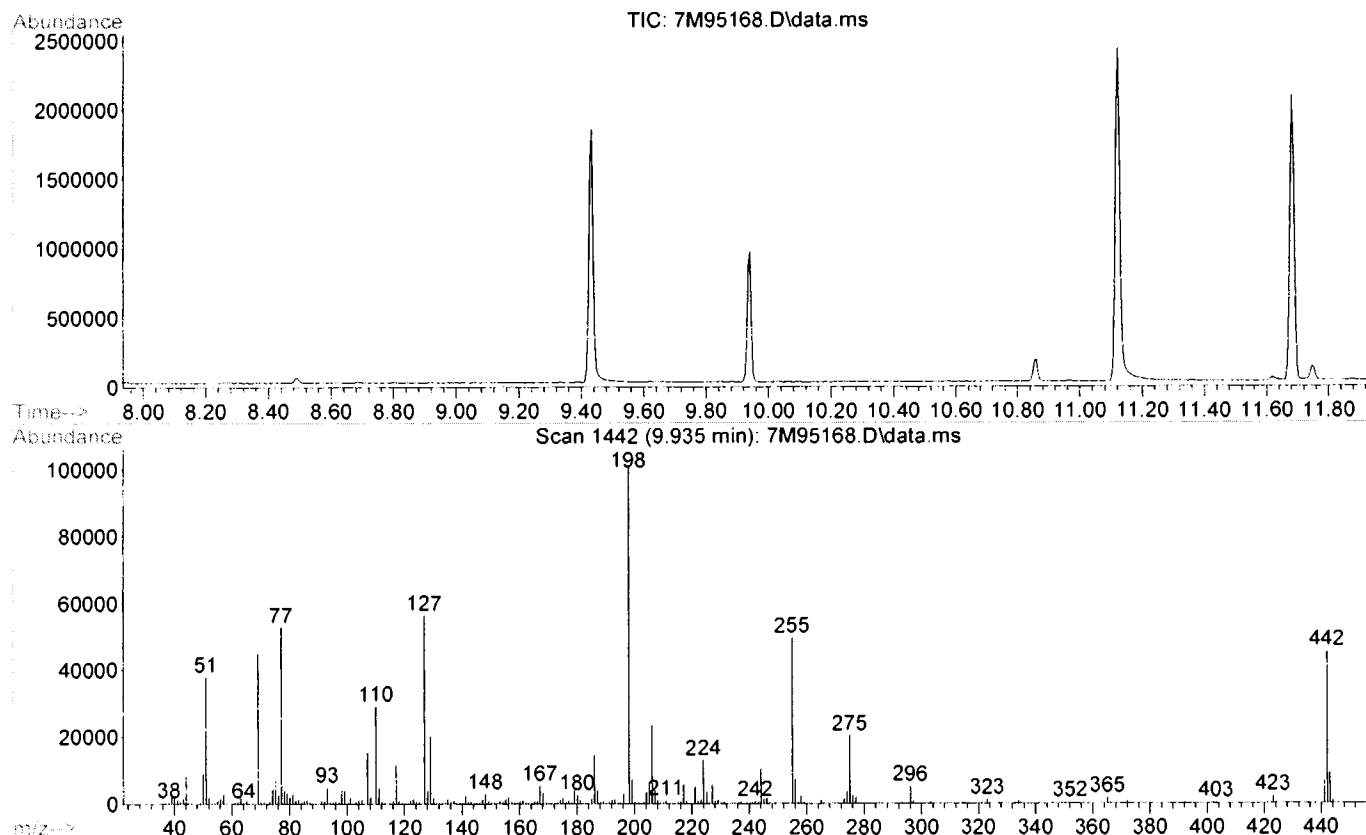
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
51	198	30	60	37.5	38048		PASS
68	69	0.00	2	0.0	0		PASS
69	198	0.00	100	44.4	45008		PASS
70	69	0.00	2	1.5	676		PASS
127	198	40	60	55.7	56512		PASS
197	198	0.00	1	0.0	0		PASS
198	198	100	100	100.0	101376		PASS
199	198	5	9	7.2	7306		PASS
275	198	10	30	20.2	20520		PASS
365	198	1	100	1.9	1910		PASS
441	443	0.01	100	71.6	6775		PASS
442	198	40	100	44.9	45488		PASS
443	442	17	23	20.8	9464		PASS

Data File	Sample Number	Analysis Date:
7M95169.D	CAL BNA@10PPM	10/08/18 13:05
7M95170.D	CAL BNA@196PP	10/08/18 13:29
7M95171.D	CAL BNA@160PP	10/08/18 13:53
7M95172.D	CAL BNA@120PP	10/08/18 14:16
7M95173.D	CAL BNA@80PPM	10/08/18 14:40
7M95174.D	CAL BNA@20PPM	10/08/18 15:03
7M95175.D	CAL BNA@2PPM	10/08/18 15:27
7M95176.D	CAL BNA@0.5PP	10/08/18 15:50
7M95177.D	CAL BNA@50PPM	10/08/18 16:13
7M95178.D	ICV BNA@50PPM	10/08/18 16:37
7M95179.D	OMB71379	10/08/18 17:00
7M95180.D	OMB71380	10/08/18 17:23
7M95181.D	AD06831-001	10/08/18 17:47
7M95182.D	AD06831-003	10/08/18 18:10
7M95183.D	AD06831-004	10/08/18 18:33
7M95184.D	AD06831-005	10/08/18 18:56
7M95185.D	AD06832-001	10/08/18 19:20
7M95186.D	AD06832-002	10/08/18 19:43
7M95187.D	AD06832-003	10/08/18 20:06
7M95188.D	AD06832-004	10/08/18 20:29
7M95189.D	AD06832-005	10/08/18 20:52
7M95190.D	06832-005	10/08/18 21:15
7M95191.D	AD06832-006	10/08/18 21:38
7M95192.D	AD06832-004(MS)	10/08/18 22:01
7M95193.D	AD06832-004(MSD)	10/08/18 22:24

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-08-18\
 Data File : 7M95168.D
 Acq On : 8 Oct 2018 12:40
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_1008.M
 Title : @GCMS_7,mg,625,8270
 Last Update : Mon Oct 08 16:32:32 2018



Spectrum Information: Scan 1442

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.5	38048	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.4	45008	PASS
70	69	0.00	2	1.5	676	PASS
127	198	40	60	55.7	56512	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	101376	PASS
199	198	5	9	7.2	7306	PASS
275	198	10	30	20.2	20520	PASS
365	198	1	100	1.9	1910	PASS
441	443	0.01	100	71.6	6775	PASS
442	198	40	100	44.9	45488	PASS
443	442	17	23	20.8	9464	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M88300.D
Analysis Date: 10/08/18 09:00
Method: EPA 8270D

Tune Scan/Time Range: Scan 2729

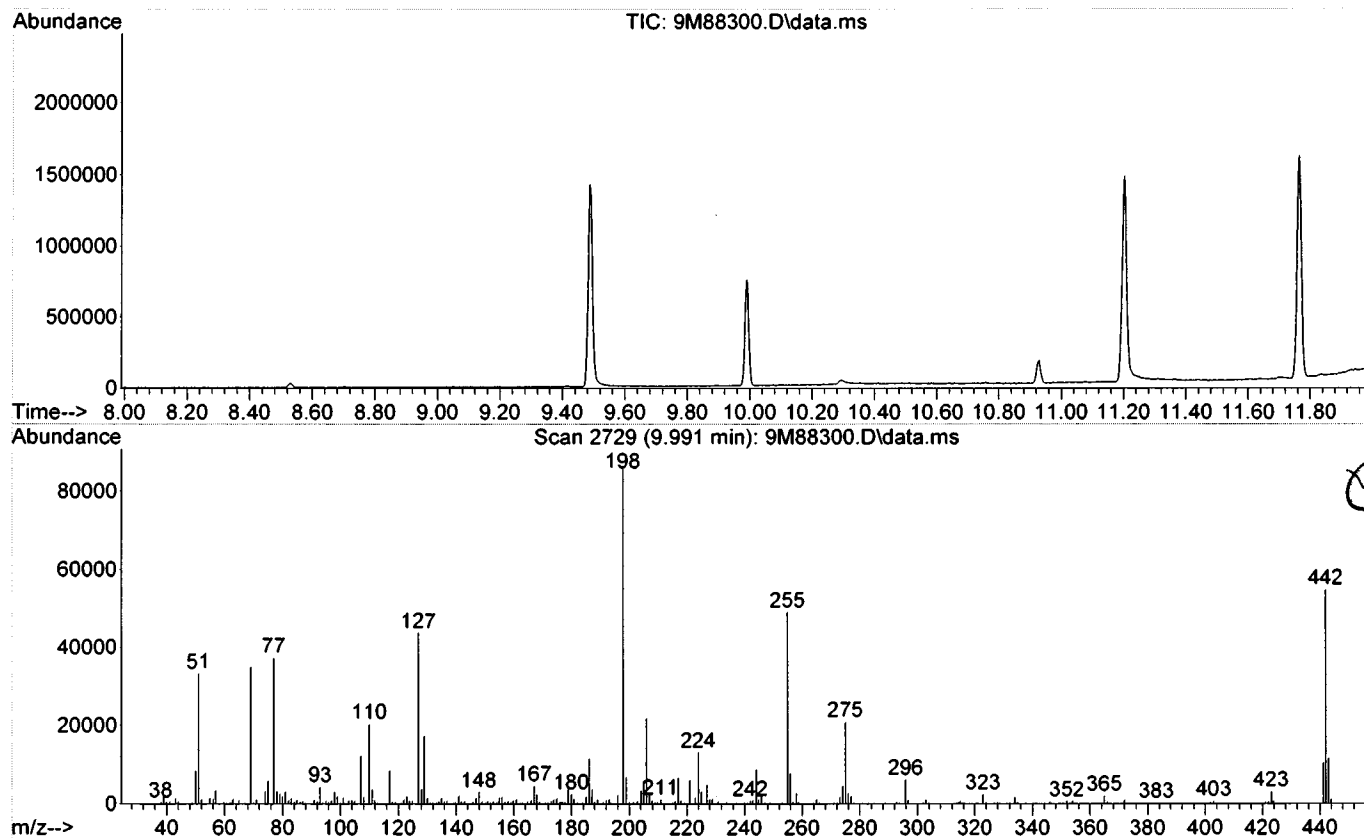
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.5	33312	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	35104	PASS
70	69	0.00	2	1.1	399	PASS
127	198	40	60	50.6	43800	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	86488	PASS
199	198	5	9	7.9	6819	PASS
275	198	10	30	24.2	20936	PASS
365	198	1	100	2.4	2041	PASS
441	443	0.01	100	90.6	10462	PASS
442	198	40	100	63.4	54824	PASS
443	442	17	23	21.1	11550	PASS

Data File	Sample Number	Analysis Date:
9M88301.D	CAL BNA@10PPM	10/08/18 10:20
9M88302.D	CAL BNA@2PPM	10/08/18 10:42
9M88303.D	CAL BNA@196PP	10/08/18 11:05
9M88304.D	CAL BNA@160PP	10/08/18 11:29
9M88305.D	CAL BNA@120PP	10/08/18 11:52
9M88306.D	CAL BNA@80PPM	10/08/18 12:15
9M88307.D	CAL BNA@20PPM	10/08/18 12:38
9M88308.D	CAL BNA@.5PPM	10/08/18 13:02
9M88309.D	CAL BNA@50PPM	10/08/18 13:26
9M88310.D	ICV BNA@50PPM	10/08/18 13:50

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-08-18\
Data File : 9M88300.D
Acq On : 8 Oct 2018 9:00
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_9\METHODQT\9M_0823.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Aug 23 13:21:38 2018



Spectrum Information: Scan 2729

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.5	33312	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.6	35104	PASS
70	69	0.00	2	1.1	399	PASS
127	198	40	60	50.6	43800	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	86488	PASS
199	198	5	9	7.9	6819	PASS
275	198	10	30	24.2	20936	PASS
365	198	1	100	2.4	2041	PASS
441	443	0.01	100	90.6	10462	PASS
442	198	40	100	63.4	54824	PASS
443	442	17	23	21.1	11550	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10

Data File: 10M71436.D
Analysis Date: 10/19/18 09:05
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.060 to 10.071 min

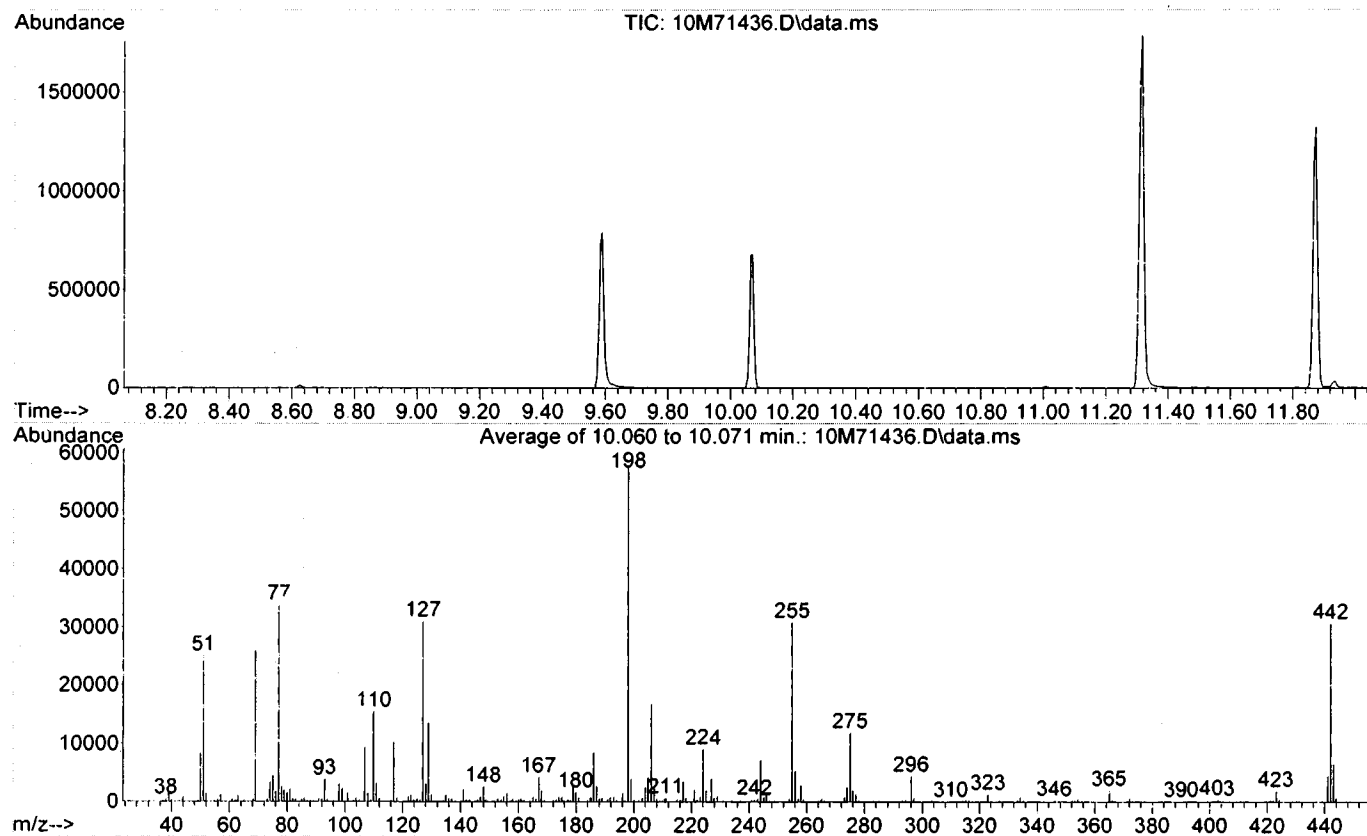
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Data File	Sample Number	Analysis Date:
10M71437.D	CAL BNA@50PPM	10/19/18 09:35
10M71438.D	WMB71471	10/19/18 10:13
10M71439.D	WMB71471(MS)	10/19/18 10:35
10M71440.D	SMB71470	10/19/18 10:58
10M71441.D	AD07093-001(T)	10/19/18 11:20
10M71442.D	AD07093-001(T)(M	10/19/18 11:42
10M71443.D	AD07093-001(T)(M	10/19/18 12:04
10M71444.D	SMB71470	10/19/18 12:26
10M71445.D	AD07121-001	10/19/18 12:48
10M71446.D	WMB71471	10/19/18 13:10
10M71447.D	AD07121-002	10/19/18 13:32
10M71448.D	AD07121-003	10/19/18 13:55
10M71449.D	AD07121-004	10/19/18 14:17
10M71450.D	WMB71479	10/19/18 14:39
10M71451.D	AD07121-006	10/19/18 15:01
10M71452.D	AD07121-007	10/19/18 15:23
10M71453.D	AD07121-008	10/19/18 15:45
10M71454.D	AD07037-001(10X)	10/19/18 16:08
10M71455.D	AD07037-002(20X)	10/19/18 16:30
10M71456.D	SMB71480	10/19/18 17:24
10M71457.D	SMB71481	10/19/18 17:46
10M71458.D	SMB71480(MS)	10/19/18 18:08
10M71459.D	AD07136-003	10/19/18 18:30
10M71460.D	AD07136-003(MS)	10/19/18 18:52
10M71461.D	AD07136-003(MSD	10/19/18 19:14
10M71462.D	AD07185-007	10/19/18 19:37

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-19-18\
 Data File : 10M71436.D
 Acq On : 19 Oct 2018 9:05
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_1008.M
 Title : @GCMS_10,mg,625,8270
 Last Update : Mon Oct 08 12:23:19 2018



Spectrum Information: Average of 10.060 to 10.071 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Form 5

8101509 0527

Tune Name: CAL DFTPP

Data File: 10M71436.D

Instrument: GCMS 10

Analysis Date: 10/19/18 09:05

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.060 to 10.071 min

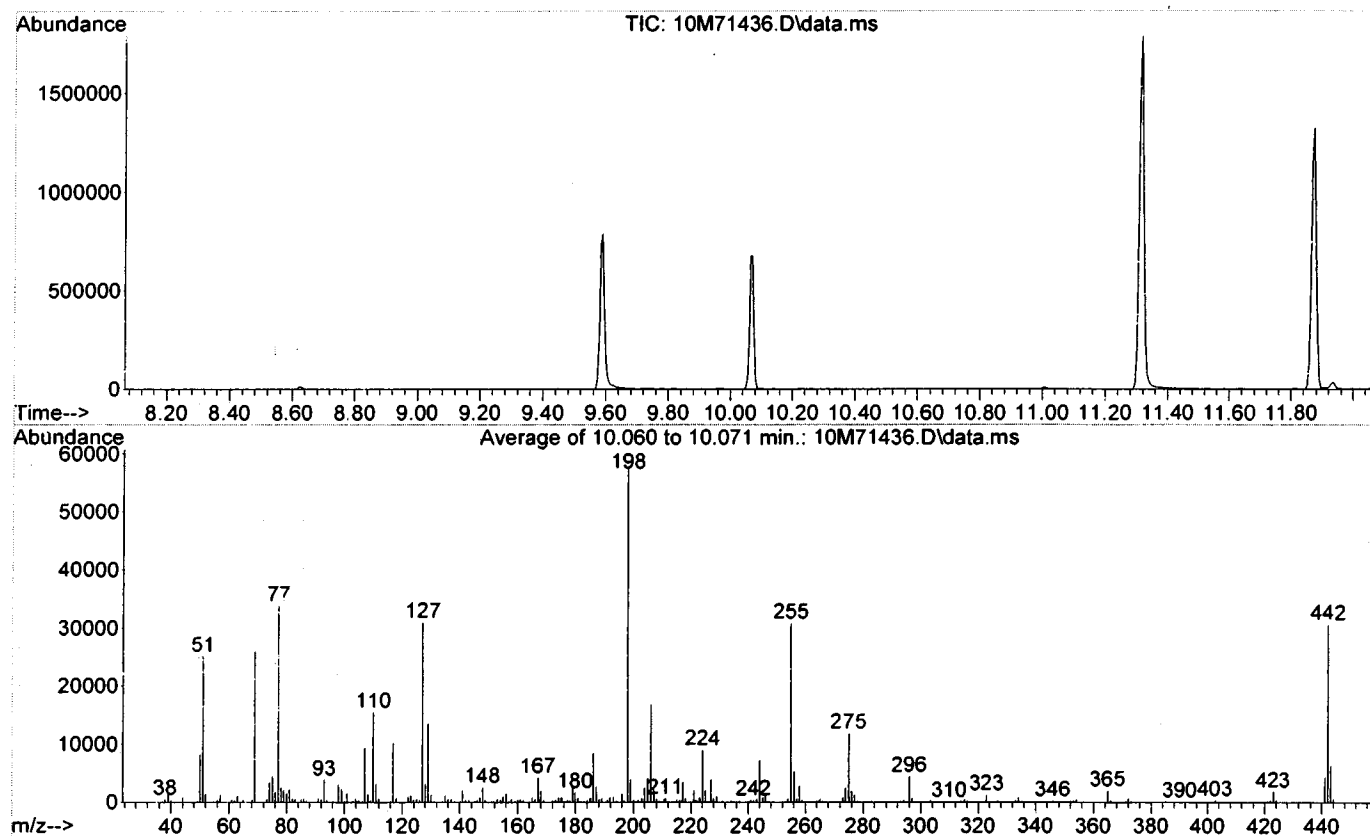
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Data File	Sample Number	Analysis Date:
10M71437.D	CAL BNA@50PPM	10/19/18 09:35
10M71438.D	WMB71471	10/19/18 10:13
10M71439.D	WMB71471(MS)	10/19/18 10:35
10M71440.D	SMB71470	10/19/18 10:58
10M71441.D	AD07093-001(T)	10/19/18 11:20
10M71442.D	AD07093-001(T)(M)	10/19/18 11:42
10M71443.D	AD07093-001(T)(M)	10/19/18 12:04
10M71444.D	SMB71470	10/19/18 12:26
10M71445.D	AD07121-001	10/19/18 12:48
10M71446.D	WMB71471	10/19/18 13:10
10M71447.D	AD07121-002	10/19/18 13:32
10M71448.D	AD07121-003	10/19/18 13:55
10M71449.D	AD07121-004	10/19/18 14:17
10M71450.D	WMB71479	10/19/18 14:39
10M71451.D	AD07121-006	10/19/18 15:01
10M71452.D	AD07121-007	10/19/18 15:23
10M71453.D	AD07121-008	10/19/18 15:45
10M71454.D	AD07037-001(10X)	10/19/18 16:08
10M71455.D	AD07037-002(20X)	10/19/18 16:30
10M71456.D	SMB71480	10/19/18 17:24
10M71457.D	SMB71481	10/19/18 17:46
10M71458.D	SMB71480(MS)	10/19/18 18:08
10M71459.D	AD07136-003	10/19/18 18:30
10M71460.D	AD07136-003(MS)	10/19/18 18:52
10M71461.D	AD07136-003(MSD)	10/19/18 19:14
10M71462.D	AD07185-007	10/19/18 19:37

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Data File : 10M71436.D
 Acq On : 19 Oct 2018 9:05
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_1008.M
 Title : @GCMS_10,mg,625,8270
 Last Update : Mon Oct 08 12:23:19 2018



Spectrum Information: Average of 10.060 to 10.071 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.3	25080	PASS
68	69	0.00	2	1.7	436	PASS
69	198	0.00	100	44.8	25958	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.5	30984	PASS
197	198	0.00	1	0.4	243	PASS
198	198	100	100	100.0	57893	PASS
199	198	5	9	6.8	3942	PASS
275	198	10	30	20.5	11856	PASS
365	198	1	100	3.5	2007	PASS
441	443	0.01	100	68.5	4393	PASS
442	198	40	100	53.0	30661	PASS
443	442	17	23	20.9	6414	PASS

Form 5

8101509 0529

Tune Name: CAL DFTPP

Data File: 5M105870.D

Instrument: GCMS 5

Analysis Date: 10/19/18 09:08

Method: EPA 625.1

Tune Scan/Time Range: Scan 1406

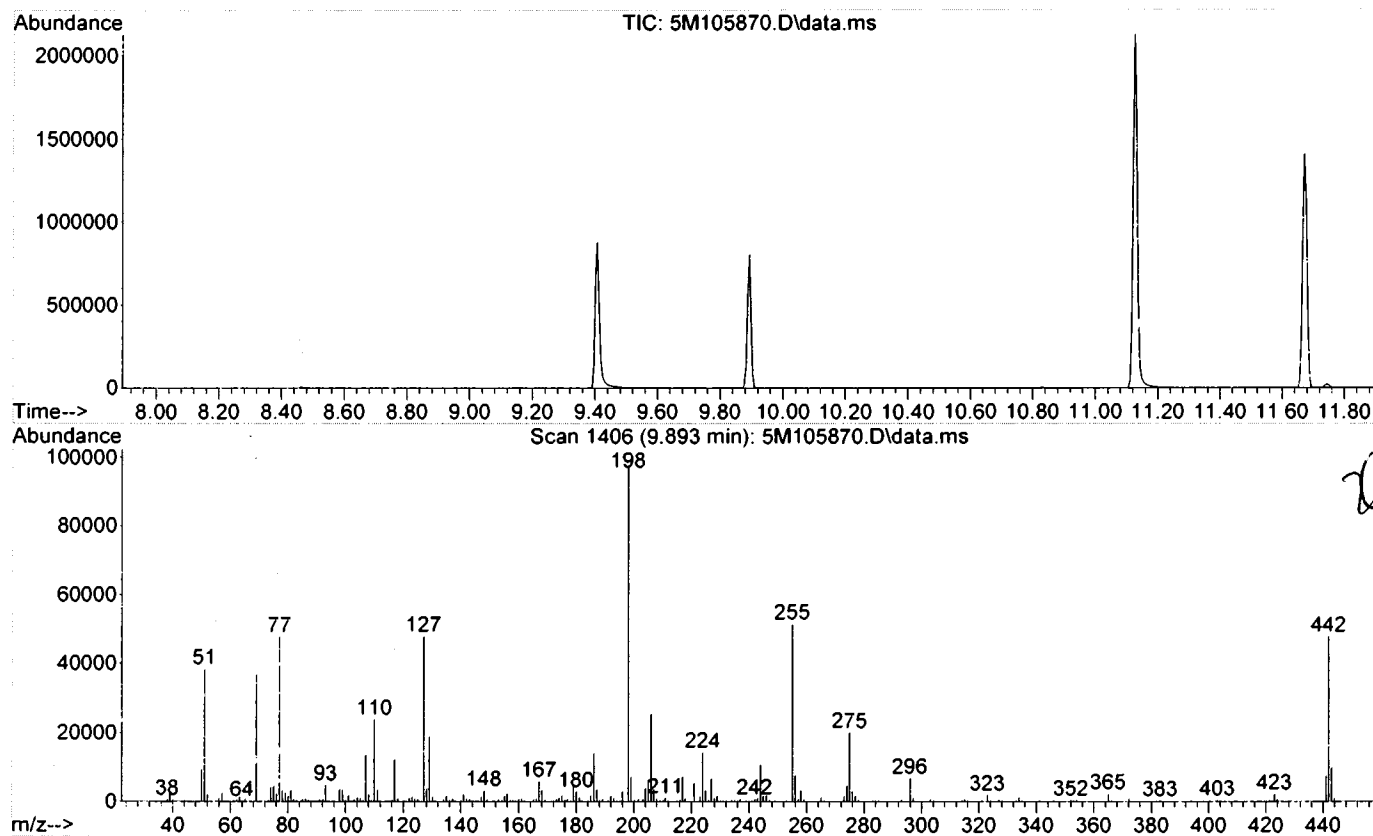
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	39.3	38408	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	36904	PASS
70	69	0.00	2	0.4	155	PASS
127	198	40	60	49.1	47968	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	97704	PASS
199	198	5	9	7.4	7230	PASS
275	198	10	30	20.5	20024	PASS
365	198	1	100	2.3	2243	PASS
441	443	0.01	100	75.7	7521	PASS
442	198	40	100	49.0	47904	PASS
443	442	17	23	20.7	9932	PASS

Data File	Sample Number	Analysis Date:
5M105871.D	CAL BNA@50PPM	10/19/18 09:44
5M105872.D	WMB71471	10/19/18 10:48
5M105873.D	AD07120-001	10/19/18 11:12
5M105874.D	AD07120-002	10/19/18 11:35
5M105875.D	AD07115-001	10/19/18 11:58
5M105876.D	AD07115-002	10/19/18 12:21
5M105877.D	AD07118-001	10/19/18 12:44
5M105878.D	AD07118-003	10/19/18 13:08
5M105879.D	AD07118-005	10/19/18 13:31
5M105880.D	AD07118-007	10/19/18 13:55
5M105881.D	WMB71479	10/19/18 14:23
5M105882.D	AD07072-007(R)	10/19/18 14:46
5M105883.D	AD07081-015(R)	10/19/18 16:02
5M105884.D	AD07081-017(R)	10/19/18 16:25
5M105885.D	AD07113-001(R)	10/19/18 16:48
5M105886.D	AD07113-001(5X)(	10/19/18 17:11
5M105887.D	SMB71481	10/19/18 17:34
5M105888.D	SMB71480	10/19/18 17:57
5M105889.D	SMB71481(MS)	10/19/18 18:21
5M105890.D	AD07178-001	10/19/18 18:43
5M105891.D	AD07178-001(MS)	10/19/18 19:06
5M105892.D	AD07178-001(MSD)	10/19/18 19:29
5M105893.D	AD07178-002	10/19/18 19:52
5M105894.D	AD07113-001(R)	10/19/18 20:15

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-19-18\
 Data File : 5M105870.D
 Acq On : 19 Oct 2018 9:08
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_1008.M
 Title : @GCMS_5,mg,625,8270
 Last Update : Mon Oct 08 13:01:42 2018



Spectrum Information: Scan 1406

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.3	38408	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	36904	PASS
70	69	0.00	2	0.4	155	PASS
127	198	40	60	49.1	47968	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	97704	PASS
199	198	5	9	7.4	7230	PASS
275	198	10	30	20.5	20024	PASS
365	198	1	100	2.3	2243	PASS
441	443	0.01	100	75.7	7521	PASS
442	198	40	100	49.0	47904	PASS
443	442	17	23	20.7	9932	PASS

Form 5

Tune Name: CAL DFTPP

Data File: 7M95304.D

Instrument: GCMS 7

Analysis Date: 10/19/18 09:03

Method: EPA 625.1

Tune Scan/Time Range: Scan 1438

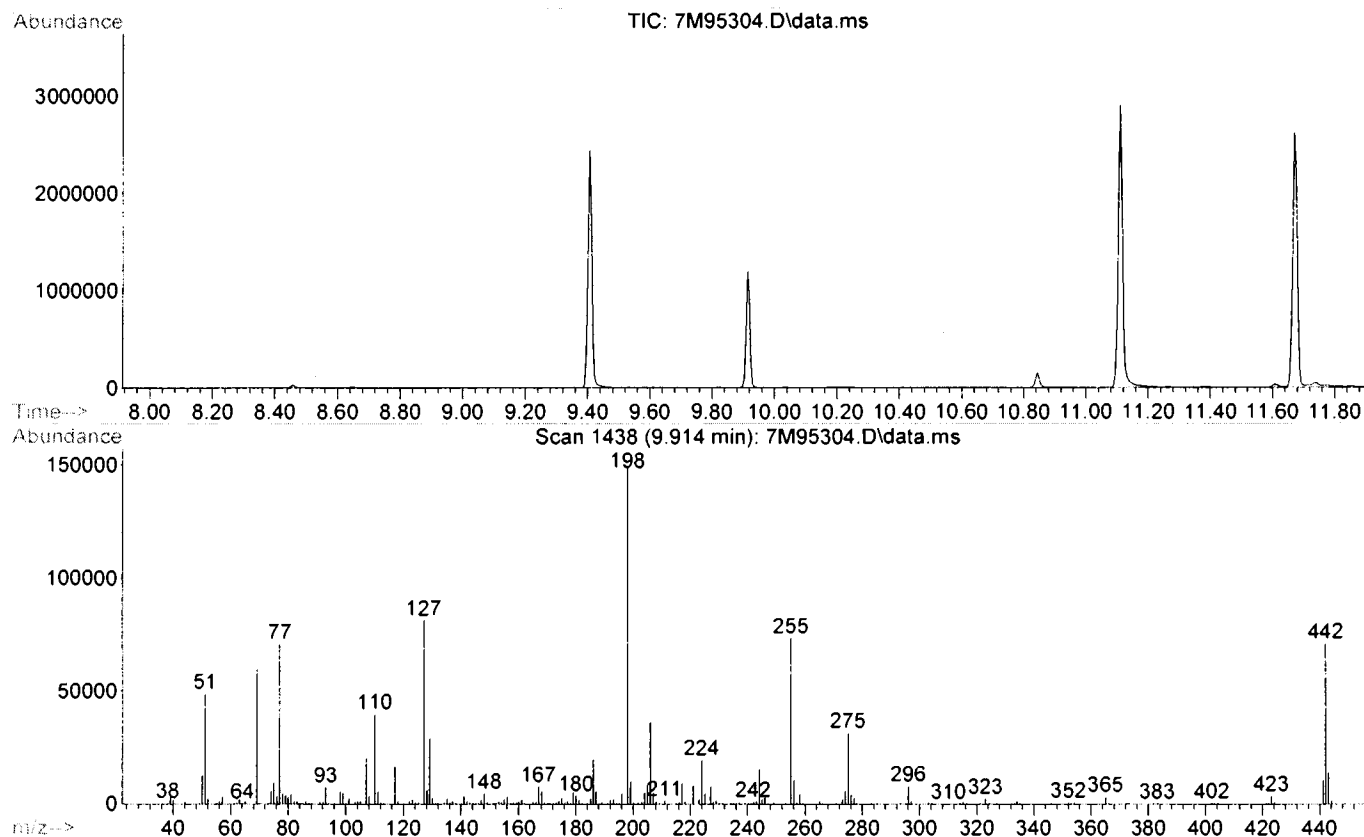
Time Scan/Time Range/Scan 1980							
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/	
Mass	Mass	Lim		Abund	Abund	Fail	
51	198	30	60	32.7	49008	PASS	
68	69	0.00	2	0.0	0	PASS	
69	198	0.00	100	40.0	59872	PASS	
70	69	0.00	2	0.5	286	PASS	
127	198	40	60	54.4	81440	PASS	
197	198	0.00	1	0.0	0	PASS	
198	198	100	100	100.0	149696	PASS	
199	198	5	9	6.8	10117	PASS	
275	198	10	30	21.2	31784	PASS	
365	198	1	100	2.2	3289	PASS	
441	443	0.01	100	75.7	10642	PASS	
442	198	40	100	47.6	71184	PASS	
443	442	17	23	19.7	14052	PASS	

Data File	Sample Number	Analysis Date:
7M95305.D	CAL BNA@50PPM	10/19/18 09:41
7M95306.D	WMB71479(MS)	10/19/18 14:26
7M95307.D	WMB71479	10/19/18 14:49

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-19-18\
 Data File : 7M95304.D
 Acq On : 19 Oct 2018 9:03
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_1008.M
 Title : @GCMS_7,mg,625,8270
 Last Update : Mon Oct 08 16:32:32 2018



Spectrum Information: Scan 1438

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.7	49008	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.0	59872	PASS
70	69	0.00	2	0.5	286	PASS
127	198	40	60	54.4	81440	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	149696	PASS
199	198	5	9	6.8	10117	PASS
275	198	10	30	21.2	31784	PASS
365	198	1	100	2.2	3289	PASS
441	443	0.01	100	75.7	10642	PASS
442	198	40	100	47.6	71184	PASS
443	442	17	23	19.7	14052	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M88659.D
Analysis Date: 10/19/18 15:42
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.983 to 9.994 min

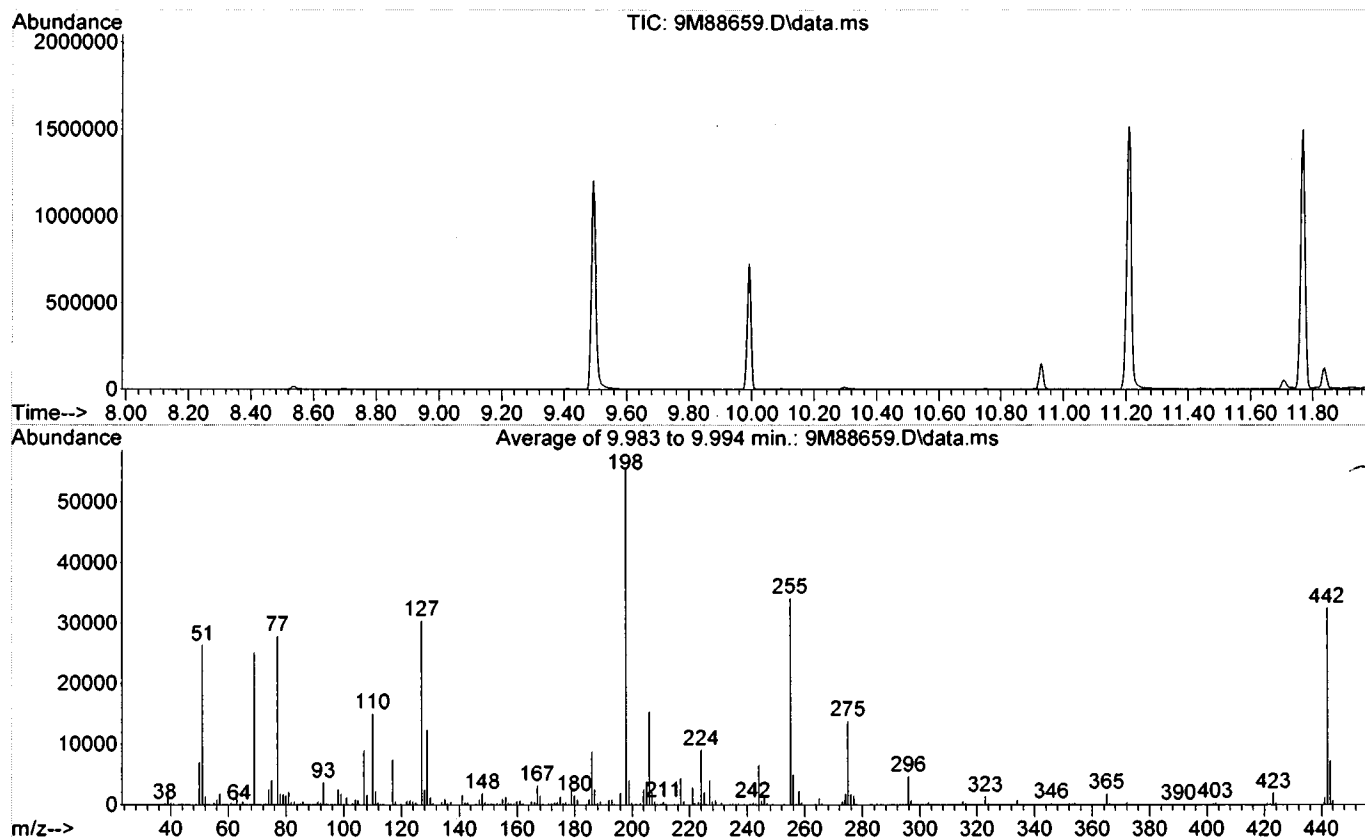
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.2	26370	PASS
68	69	0.00	2	0.6	145	PASS
69	198	0.00	100	45.0	25114	PASS
70	69	0.00	2	0.6	141	PASS
127	198	40	60	54.5	30442	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	55818	PASS
199	198	5	9	7.3	4061	PASS
275	198	10	30	24.8	13844	PASS
365	198	1	100	3.3	1855	PASS
441	443	0.01	100	16.7	1212	PASS
442	198	40	100	58.4	32579	PASS
443	442	17	23	22.2	7246	PASS

Data File	Sample Number	Analysis Date:
9M88660.D	CAL BNA@50PPM	10/19/18 16:02
9M88661.D	AD07079-016	10/19/18 16:43
9M88662.D	AD07079-017	10/19/18 17:06
9M88663.D	AD07116-005	10/19/18 17:30
9M88664.D	AD07116-003	10/19/18 17:52
9M88665.D	SMB71480	10/19/18 18:17
9M88666.D	SMB71481	10/19/18 18:40
9M88667.D	AD07116-001	10/19/18 19:03
9M88668.D	AD07116-002	10/19/18 19:27
9M88669.D	AD07116-004	10/19/18 19:50
9M88670.D	AD07079-013(3X)	10/19/18 20:13
9M88671.D	AD07109-002	10/19/18 20:37
9M88672.D	AD07079-004	10/19/18 21:00
9M88673.D	AD07079-002(3X)	10/19/18 21:24
9M88674.D	AD07079-003(3X)	10/19/18 21:47
9M88675.D	07131-001	10/19/18 22:10
9M88676.D	AD07136-001	10/19/18 22:34
9M88677.D	AD07136-002	10/19/18 22:57
9M88678.D	AD07136-004	10/19/18 23:20
9M88679.D	AD07159-001	10/19/18 23:44
9M88680.D	AD07161-002	10/20/18 00:07
9M88681.D	AD07161-004	10/20/18 00:31
9M88682.D	AD07161-006	10/20/18 00:54
9M88683.D	AD07161-009	10/20/18 01:17
9M88684.D	AD07177-001	10/20/18 01:41
9M88685.D	AD07185-002	10/20/18 02:05
9M88686.D	AD07185-004	10/20/18 02:28
9M88687.D	AD07185-006	10/20/18 02:51
9M88688.D	AD07185-001(3X)	10/20/18 03:15
9M88689.D	AD07185-003(3X)	10/20/18 03:38
9M88690.D	AD07185-005(3X)	10/20/18 04:02
9M88691.D	AD07185-011(3X)	10/20/18 04:25
9M88692.D	AD07152-001(10X)	10/20/18 04:49

Data Path : G:\GcMsData\2018\GCMS_9\Data\10-1918\
Data File : 9M88659.D
Acq On : 19 Oct 2018 15:42
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_9\METHODQT\9M_1008.M
Title : @GCMS_9,mg,625,8270
Last Update : Mon Oct 08 13:43:31 2018



Spectrum Information: Average of 9.983 to 9.994 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	26370	PASS
68	69	0.00	2	0.6	145	PASS
69	198	0.00	100	45.0	25114	PASS
70	69	0.00	2	0.6	141	PASS
127	198	40	60	54.5	30442	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	55818	PASS
199	198	5	9	7.3	4061	PASS
275	198	10	30	24.8	13844	PASS
365	198	1	100	3.3	1855	PASS
441	443	0.01	100	16.7	1212	PASS
442	198	40	100	58.4	32579	PASS
443	442	17	23	22.2	7246	PASS

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M105895.D
Analysis Date: 10/22/18 07:18
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.899 min

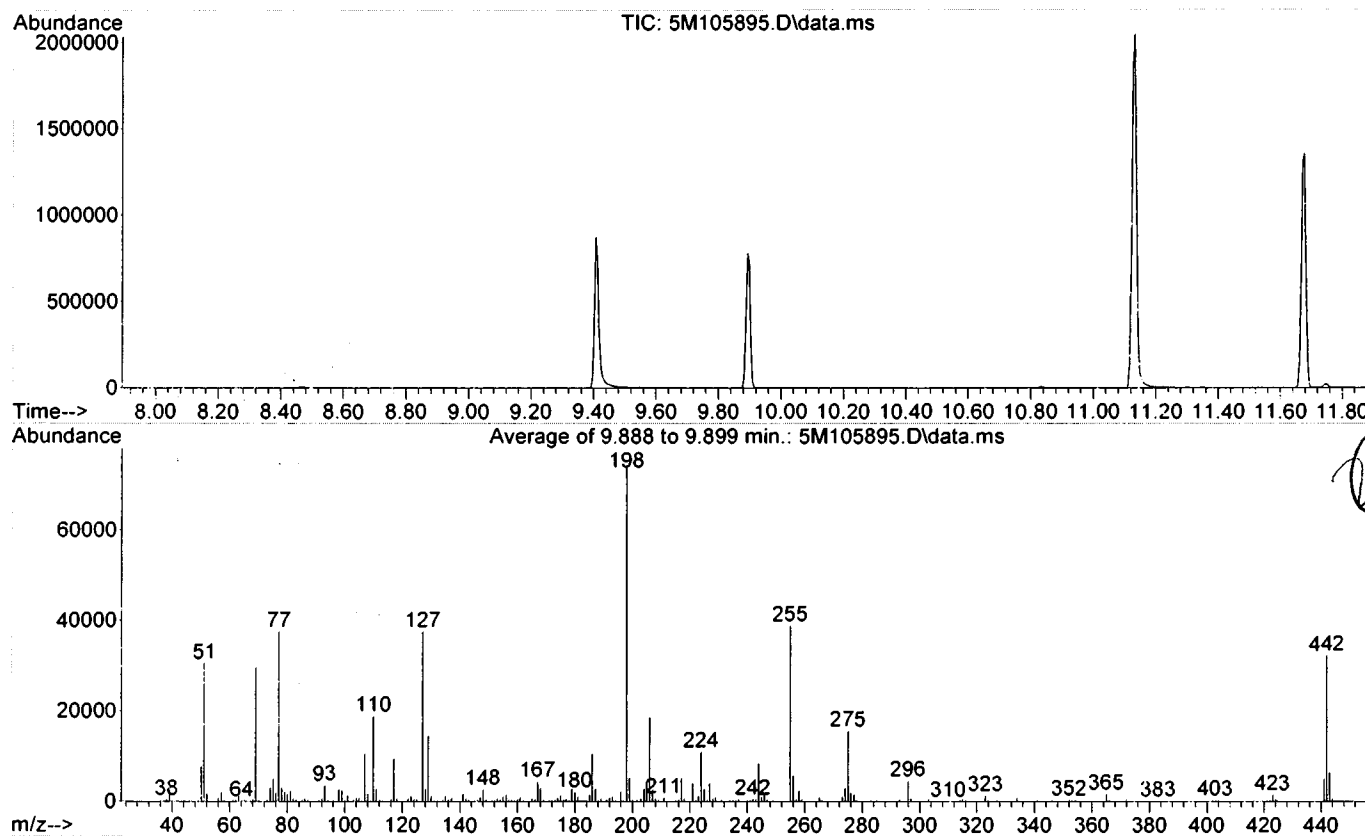
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	41.1	30557	PASS
68	69	0.00	2	2.0	590	PASS
69	198	0.00	100	39.7	29579	PASS
70	69	0.00	2	0.4	129	PASS
127	198	40	60	50.4	37533	PASS
197	198	0.00	1	0.3	230	PASS
198	198	100	100	100.0	74424	PASS
199	198	5	9	7.0	5229	PASS
275	198	10	30	21.0	15595	PASS
365	198	1	100	2.2	1660	PASS
441	443	0.01	100	79.1	5128	PASS
442	198	40	100	43.4	32304	PASS
443	442	17	23	20.1	6483	PASS

Data File	Sample Number	Analysis Date:
5M105896.D	CAL BNA@50PPM	10/22/18 07:52
5M105897.D	AD06939-001(T)	10/22/18 08:35
5M105898.D	AD06939-001(T)(M	10/22/18 08:58
5M105899.D	AD06939-001(T)(M	10/22/18 09:21
5M105900.D	AD07133-001	10/22/18 09:44
5M105901.D	AD07133-002	10/22/18 10:07
5M105902.D	AD07131-001	10/22/18 10:31
5M105903.D	AD07131-002	10/22/18 10:54
5M105904.D	AD07142-001	10/22/18 11:17
5M105905.D	AD07137-001	10/22/18 11:41
5M105906.D	AD07137-003	10/22/18 12:04
5M105907.D	AD07137-005	10/22/18 12:28
5M105908.D	AD06821-001(T)	10/22/18 12:52
5M105909.D	AD06980-005(T)	10/22/18 13:15
5M105910.D	EF-SPLP V-289066	10/22/18 13:38
5M105911.D	WMB71496(MS)	10/22/18 14:01
5M105912.D	AD07157-001(T)	10/22/18 14:25
5M105913.D	WMB71496	10/22/18 14:49
5M105914.D	EF-1 V-289820(10/	10/22/18 15:12
5M105915.D	AD07157-001(T)(M	10/22/18 15:36
5M105916.D	AD07157-001(T)(M	10/22/18 15:59
5M105917.D	AD07132-001(T)	10/22/18 16:22
5M105918.D	AD06943-001(T)	10/22/18 16:45
5M105919.D	EF-1 V-289820(10/	10/22/18 17:08
5M105920.D	EF-1 V-289820(10/	10/22/18 17:31
5M105921.D	EF-SPLP V-289066	10/22/18 17:54
5M105922.D	EF-SPLP V-289066	10/22/18 18:18

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
Data File : 5M105895.D
Acq On : 22 Oct 2018 7:18
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_1008.M
Title : @GCMS_5,mg,625,8270
Last Update : Mon Oct 08 13:01:42 2018



Spectrum Information: Average of 9.888 to 9.899 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.1	30557	PASS
68	69	0.00	2	2.0	590	PASS
69	198	0.00	100	39.7	29579	PASS
70	69	0.00	2	0.4	129	PASS
127	198	40	60	50.4	37533	PASS
197	198	0.00	1	0.3	230	PASS
198	198	100	100	100.0	74424	PASS
199	198	5	9	7.0	5229	PASS
275	198	10	30	21.0	15595	PASS
365	198	1	100	2.2	1660	PASS
441	443	0.01	100	79.1	5128	PASS
442	198	40	100	43.4	32304	PASS
443	442	17	23	20.1	6483	PASS

Form 5

8101509 0537

Tune Name: CAL DFTPP

Data File: 10M71463.D

Instrument: GCMS 10

Analysis Date: 10/22/18 07:18

Method: EPA 625.1

Tune Scan/Time Range: Average of 10.066 to 10.082 min

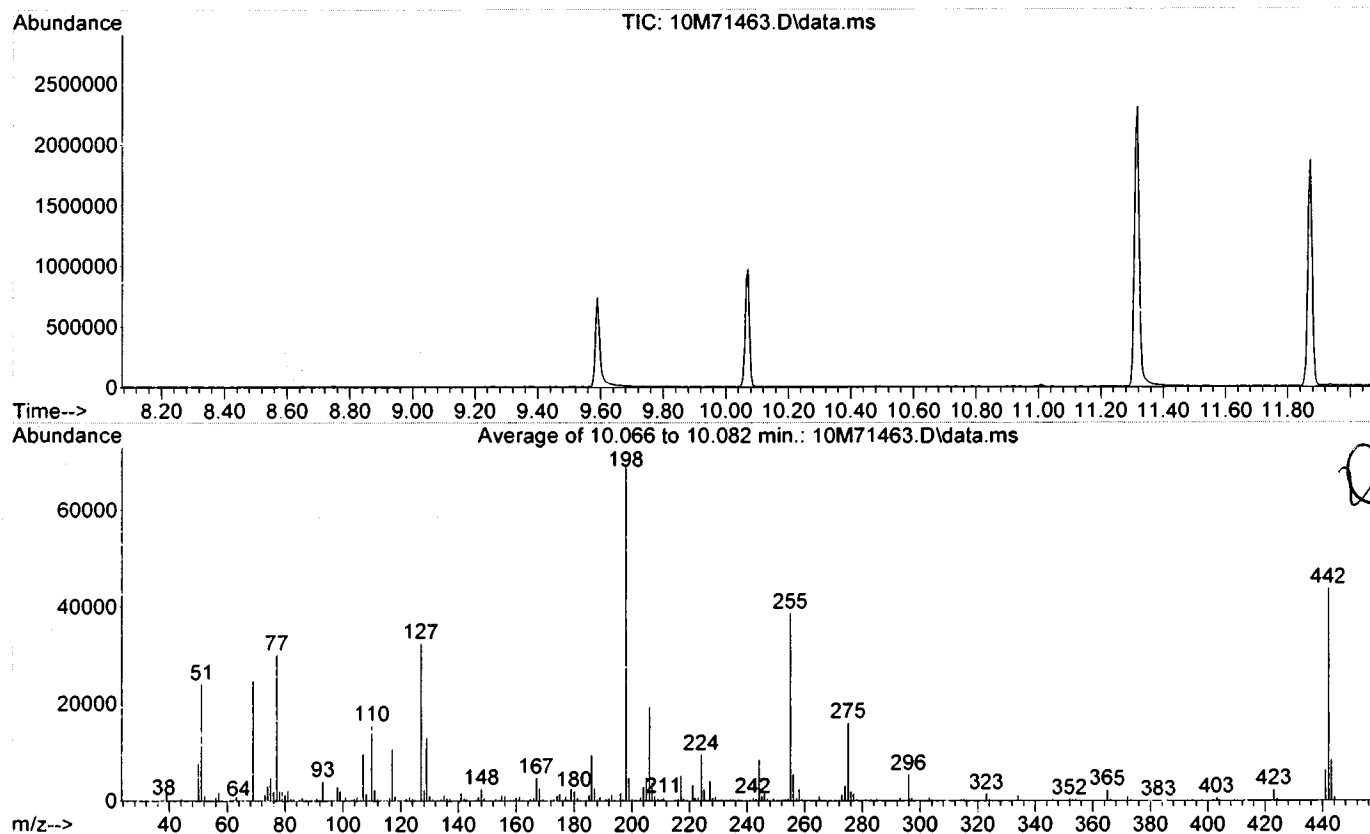
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	34.6	24066	PASS
68	69	0.00	2	1.2	290	PASS
69	198	0.00	100	35.6	24732	PASS
70	69	0.00	2	0.4	91	PASS
127	198	40	60	46.7	32459	PASS
197	198	0.00	1	0.6	395	PASS
198	198	100	100	100.0	69460	PASS
199	198	5	9	6.9	4782	PASS
275	198	10	30	23.1	16073	PASS
365	198	1	100	3.2	2235	PASS
441	443	0.01	100	75.3	6378	PASS
442	198	40	100	63.1	43801	PASS
443	442	17	23	19.3	8467	PASS

Data File	Sample Number	Analysis Date:
10M71464.D	CAL BNA@50PPM	10/22/18 07:45
10M71465.D	SMB71491(MS)	10/22/18 08:30
10M71466.D	SMB71491	10/22/18 08:52
10M71467.D	AD07224-001	10/22/18 09:14
10M71468.D	AD07224-001(MS)	10/22/18 09:36
10M71469.D	AD07224-001(MSD)	10/22/18 09:59
10M71470.D	AD07224-002	10/22/18 10:21
10M71471.D	AD07224-003	10/22/18 10:43
10M71472.D	AD07224-004	10/22/18 11:05
10M71473.D	AD07190-009	10/22/18 11:27
10M71474.D	AD07190-011	10/22/18 11:50
10M71475.D	AD07189-001	10/22/18 12:12
10M71476.D	AD07143-001	10/22/18 12:34
10M71477.D	AD07143-002	10/22/18 12:56
10M71478.D	AD07143-003	10/22/18 13:18
10M71479.D	AD07143-004	10/22/18 13:41
10M71480.D	AD07157-002(T)	10/22/18 14:03
10M71481.D	AD07157-003(T)	10/22/18 14:25
10M71482.D	AD07157-004(T)	10/22/18 14:47
10M71483.D	AD07143-005	10/22/18 15:09
10M71484.D	WMB71496	10/22/18 15:31
10M71485.D	AD07022-012	10/22/18 15:53
10M71486.D	AD07118-003(R)	10/22/18 16:15
10M71487.D	AD07143-004	10/22/18 16:38

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-22-18\
 Data File : 10M71463.D
 Acq On : 22 Oct 2018 7:18
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_1008.M
 Title : @GCMS_10,mg,625,8270
 Last Update : Mon Oct 08 12:23:19 2018



Spectrum Information: Average of 10.066 to 10.082 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.6	24066	PASS
68	69	0.00	2	1.2	290	PASS
69	198	0.00	100	35.6	24732	PASS
70	69	0.00	2	0.4	91	PASS
127	198	40	60	46.7	32459	PASS
197	198	0.00	1	0.6	395	PASS
198	198	100	100	100.0	69460	PASS
199	198	5	9	6.9	4782	PASS
275	198	10	30	23.1	16073	PASS
365	198	1	100	3.2	2235	PASS
441	443	0.01	100	75.3	6378	PASS
442	198	40	100	63.1	43801	PASS
443	442	17	23	19.3	8467	PASS

Form 5

Tune Name: CAL DFTPP

Data File: 5M105923.D

Instrument: GCMS 5

Analysis Date: 10/23/18 08:15

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.893 to 9.899 min

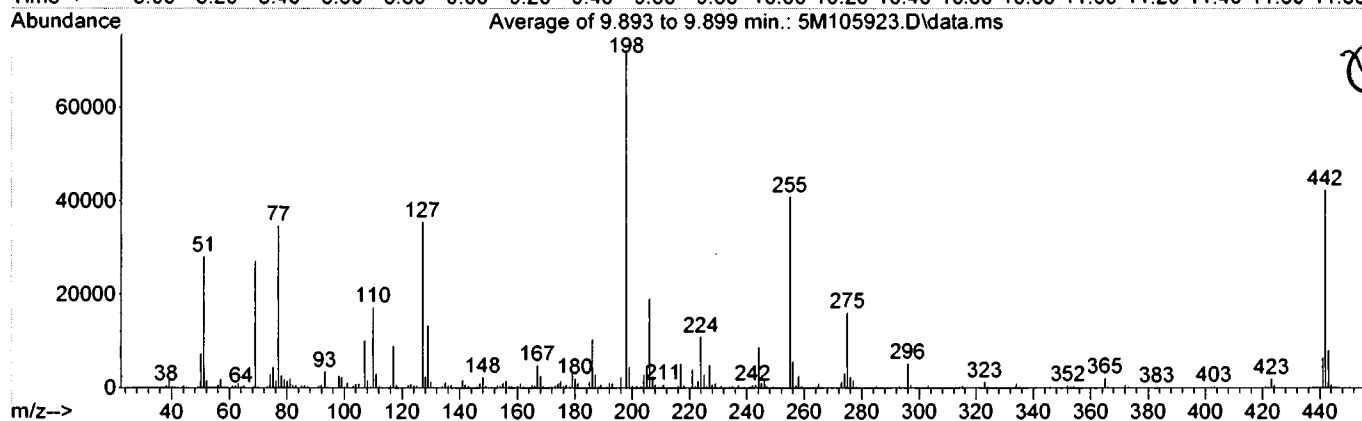
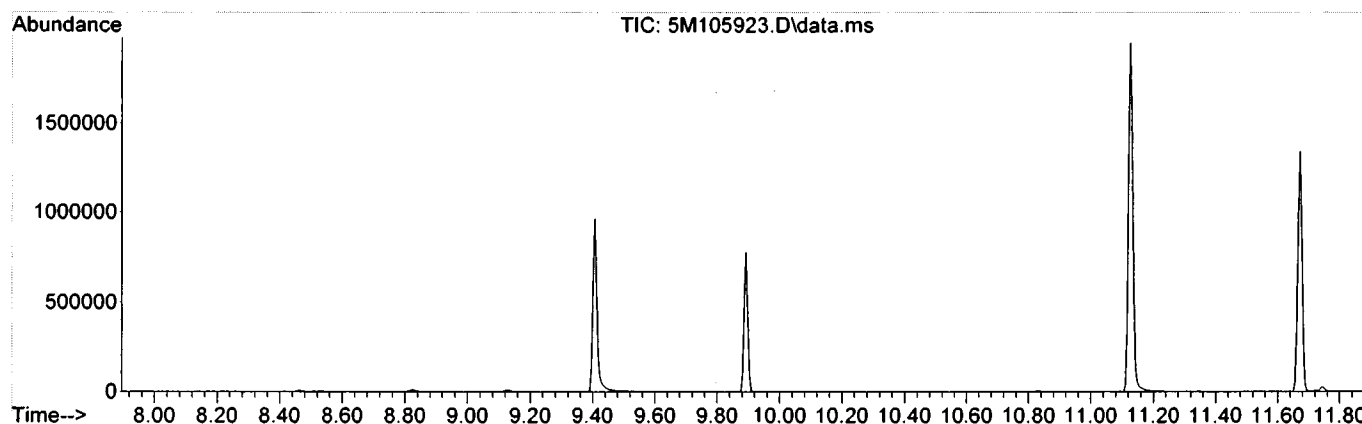
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.7	27993	PASS
68	69	0.00	2	0.6	151	PASS
69	198	0.00	100	37.6	27180	PASS
70	69	0.00	2	0.5	137	PASS
127	198	40	60	49.0	35472	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	72356	PASS
199	198	5	9	6.3	4594	PASS
275	198	10	30	22.2	16051	PASS
365	198	1	100	2.9	2126	PASS
441	443	0.01	100	80.1	6460	PASS
442	198	40	100	58.5	42328	PASS
443	442	17	23	19.0	8061	PASS

Data File	Sample Number	Analysis Date:
5M105924.D	CAL BNA@50PPM	10/23/18 08:44
5M105925.D	WMB71497(MS)	10/23/18 09:35
5M105926.D	WMB71497	10/23/18 09:58
5M105927.D	AD07161-001	10/23/18 10:21
5M105928.D	AD07161-001(MS)	10/23/18 10:45
5M105929.D	AD07161-001(MSD)	10/23/18 11:08
5M105930.D	AD07150-001	10/23/18 11:32
5M105931.D	AD07150-002	10/23/18 11:55
5M105932.D	AD07150-003	10/23/18 12:19
5M105933.D	AD07149-008	10/23/18 12:42
5M105934.D	WMB71497	10/23/18 13:29
5M105935.D	AD07142-003	10/23/18 13:53
5M105936.D	AD07142-004	10/23/18 14:17
5M105937.D	AD07249-006(T)	10/23/18 14:40
5M105938.D	AD07249-009(T)	10/23/18 15:03
5M105939.D	AD07249-010(T)	10/23/18 15:27
5M105940.D	AD07142-005	10/23/18 15:50
5M105941.D	AD07142-006	10/23/18 16:14
5M105942.D	AD07142-007	10/23/18 16:37
5M105943.D	AD07142-008	10/23/18 17:00

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-23-18\
Data File : 5M105923.D
Acq On : 23 Oct 2018 8:15
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_1008.M
Title : @GCMS_5,mg,625,8270
Last Update : Mon Oct 08 13:01:42 2018



Spectrum Information: Average of 9.893 to 9.899 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.7	27993	PASS
68	69	0.00	2	0.6	151	PASS
69	198	0.00	100	37.6	27180	PASS
70	69	0.00	2	0.5	137	PASS
127	198	40	60	49.0	35472	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	72356	PASS
199	198	5	9	6.3	4594	PASS
275	198	10	30	22.2	16051	PASS
365	198	1	100	2.9	2126	PASS
441	443	0.01	100	80.1	6460	PASS
442	198	40	100	58.5	42328	PASS
443	442	17	23	19.0	8061	PASS

Form 5

Tune Name: CAL DFTPP

Data File: 7M95310.D

Instrument: GCMS 7

Analysis Date: 10/23/18 08:10

Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.919 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	33.2	30462	PASS
68	69	0.00	2	0.1	39	PASS
69	198	0.00	100	40.1	36795	PASS
70	69	0.00	2	0.5	197	PASS
127	198	40	60	52.5	48205	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91793	PASS
199	198	5	9	6.7	6186	PASS
275	198	10	30	21.5	19761	PASS
365	198	1	100	2.1	1947	PASS
441	443	0.01	100	78.7	8067	PASS
442	198	40	100	57.9	53157	PASS
443	442	17	23	19.3	10257	PASS

Data File

Sample Number

Analysis Date:

7M95311.D

CAL BNA@50PPM

10/23/18 08:34

7M95312.D

WMB71479

10/23/18 11:31

7M95313.D

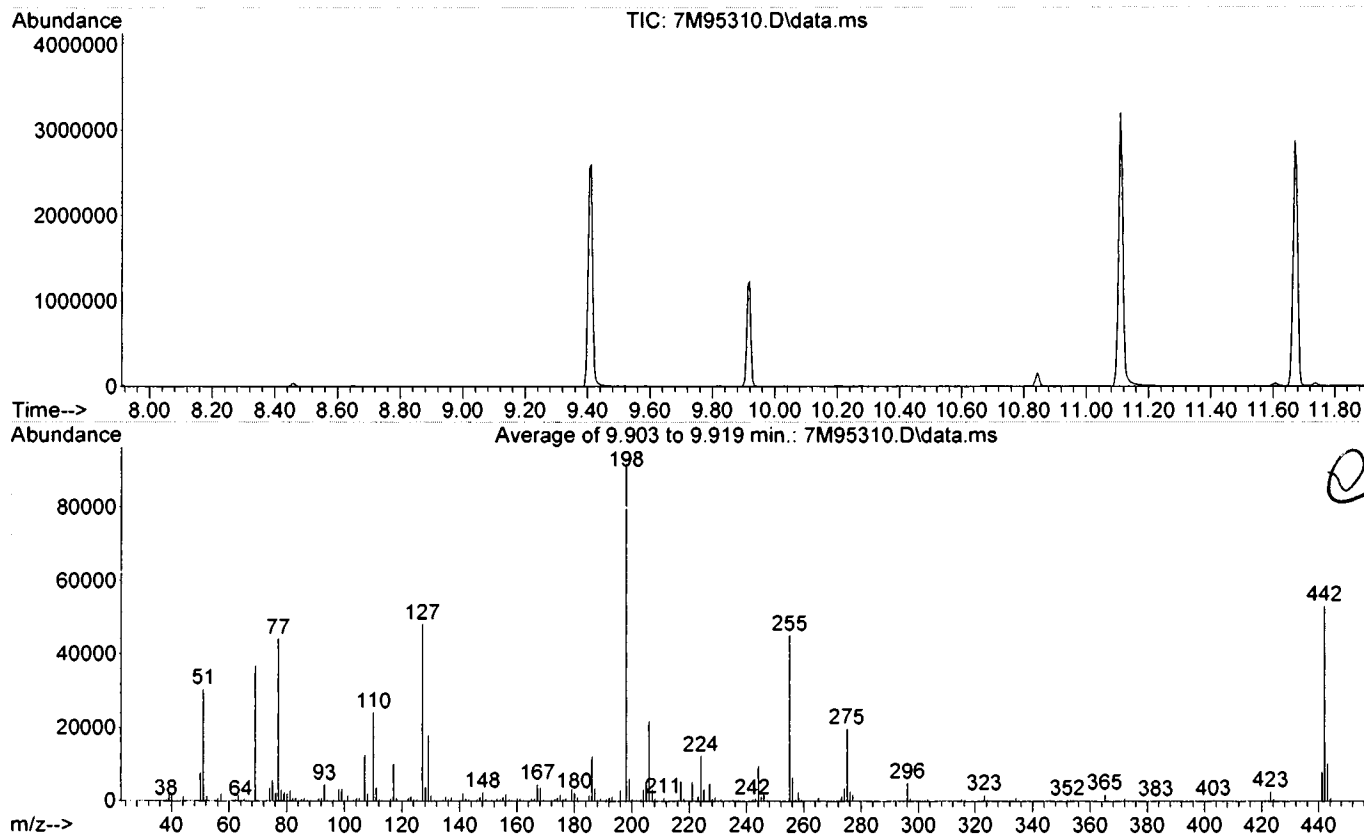
WMB71497

10/23/18 11:54

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-23-18\
Data File : 7M95310.D
Acq On : 23 Oct 2018 8:10
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_1008.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon Oct 08 16:32:32 2018



Spectrum Information: Average of 9.903 to 9.919 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.2	30462	PASS
68	69	0.00	2	0.1	39	PASS
69	198	0.00	100	40.1	36795	PASS
70	69	0.00	2	0.5	197	PASS
127	198	40	60	52.5	48205	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91793	PASS
199	198	5	9	6.7	6186	PASS
275	198	10	30	21.5	19761	PASS
365	198	1	100	2.1	1947	PASS
441	443	0.01	100	78.7	8067	PASS
442	198	40	100	57.9	53157	PASS
443	442	17	23	19.3	10257	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M95314.D
Analysis Date: 10/24/18 08:10
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.914 min

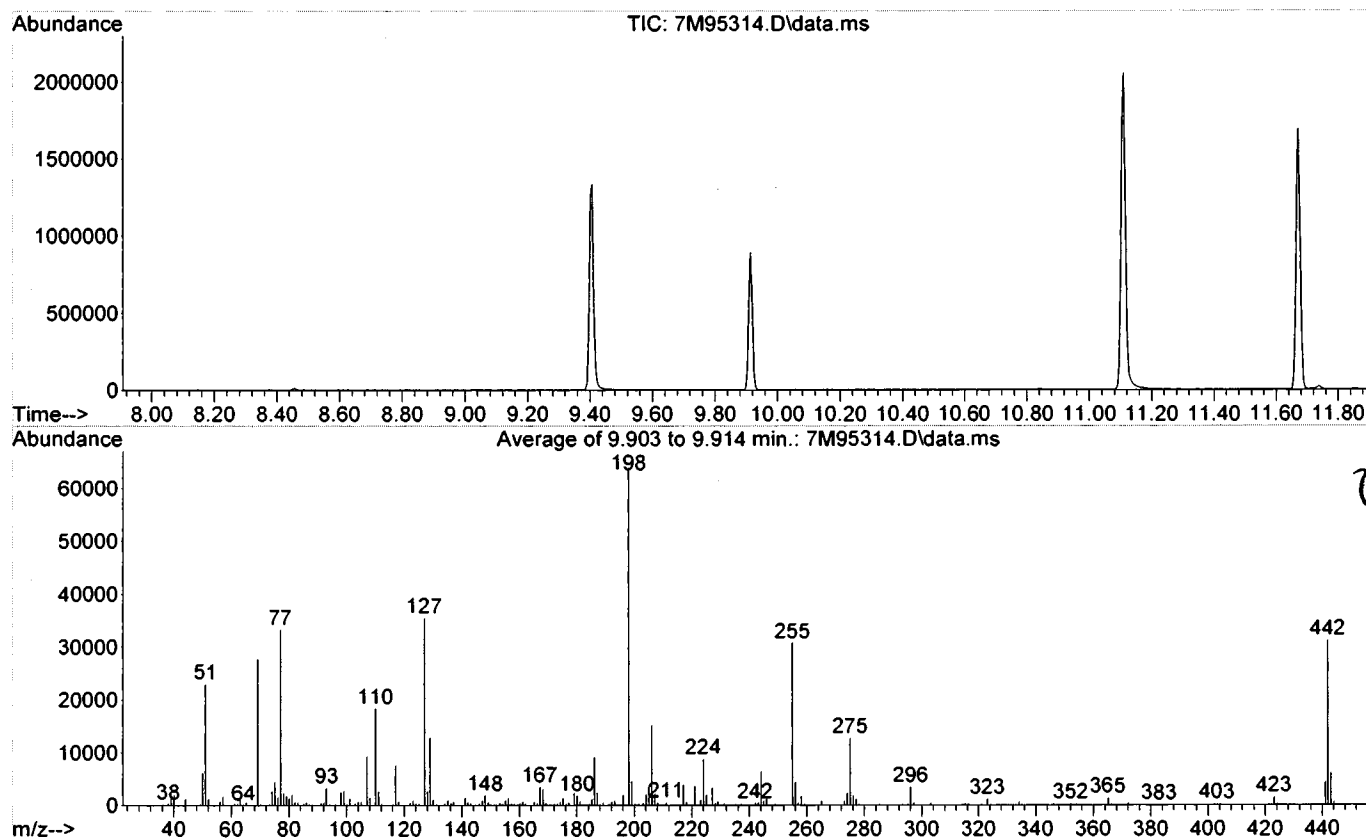
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	36.0	23012	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	27736	PASS
70	69	0.00	2	0.6	171	PASS
127	198	40	60	55.6	35512	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	63895	PASS
199	198	5	9	7.2	4597	PASS
275	198	10	30	19.9	12705	PASS
365	198	1	100	2.2	1395	PASS
441	443	0.01	100	72.3	4336	PASS
442	198	40	100	48.7	31109	PASS
443	442	17	23	19.3	6000	PASS

Data File	Sample Number	Analysis Date:
7M95315.D	CAL BNA@50PPM	10/24/18 08:33
7M95316.D	AD07142-009	10/24/18 09:09
7M95317.D	AD07161-003	10/24/18 09:32
7M95318.D	AD07161-005	10/24/18 09:55
7M95319.D	AD07161-007	10/24/18 10:18
7M95320.D	AD07161-008	10/24/18 10:41
7M95321.D	AD07165-002	10/24/18 11:04
7M95322.D	AD07165-003	10/24/18 11:27
7M95323.D	AD07165-004	10/24/18 11:50
7M95324.D	AD07165-005	10/24/18 12:13
7M95325.D	AD07165-006	10/24/18 12:36
7M95326.D	AD07165-007	10/24/18 12:59
7M95327.D	AD07165-008	10/24/18 13:22
7M95328.D	SMB71506	10/24/18 13:45
7M95329.D	AD07165-009	10/24/18 14:08
7M95330.D	07165-015	10/24/18 14:31
7M95331.D	AD07165-010	10/24/18 14:54
7M95332.D	AD07263-001	10/24/18 15:17
7M95333.D	AD07165-011	10/24/18 15:40
7M95334.D	AD07165-012	10/24/18 16:03
7M95335.D	AD07165-013	10/24/18 16:26
7M95336.D	AD07165-014	10/24/18 16:49
7M95337.D	AD07165-015	10/24/18 17:12
7M95338.D	AD07165-012	10/24/18 17:35

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-24-18\
 Data File : 7M95314.D
 Acq On : 24 Oct 2018 8:10
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_1008.M
 Title : @GCMS_7,mg,625,8270
 Last Update : Mon Oct 08 16:32:32 2018



Spectrum Information: Average of 9.903 to 9.914 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	23012	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	27736	PASS
70	69	0.00	2	0.6	171	PASS
127	198	40	60	55.6	35512	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	63895	PASS
199	198	5	9	7.2	4597	PASS
275	198	10	30	19.9	12705	PASS
365	198	1	100	2.2	1395	PASS
441	443	0.01	100	72.3	4336	PASS
442	198	40	100	48.7	31109	PASS
443	442	17	23	19.3	6000	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M105966.D
Analysis Date: 10/25/18 08:50
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.893 min

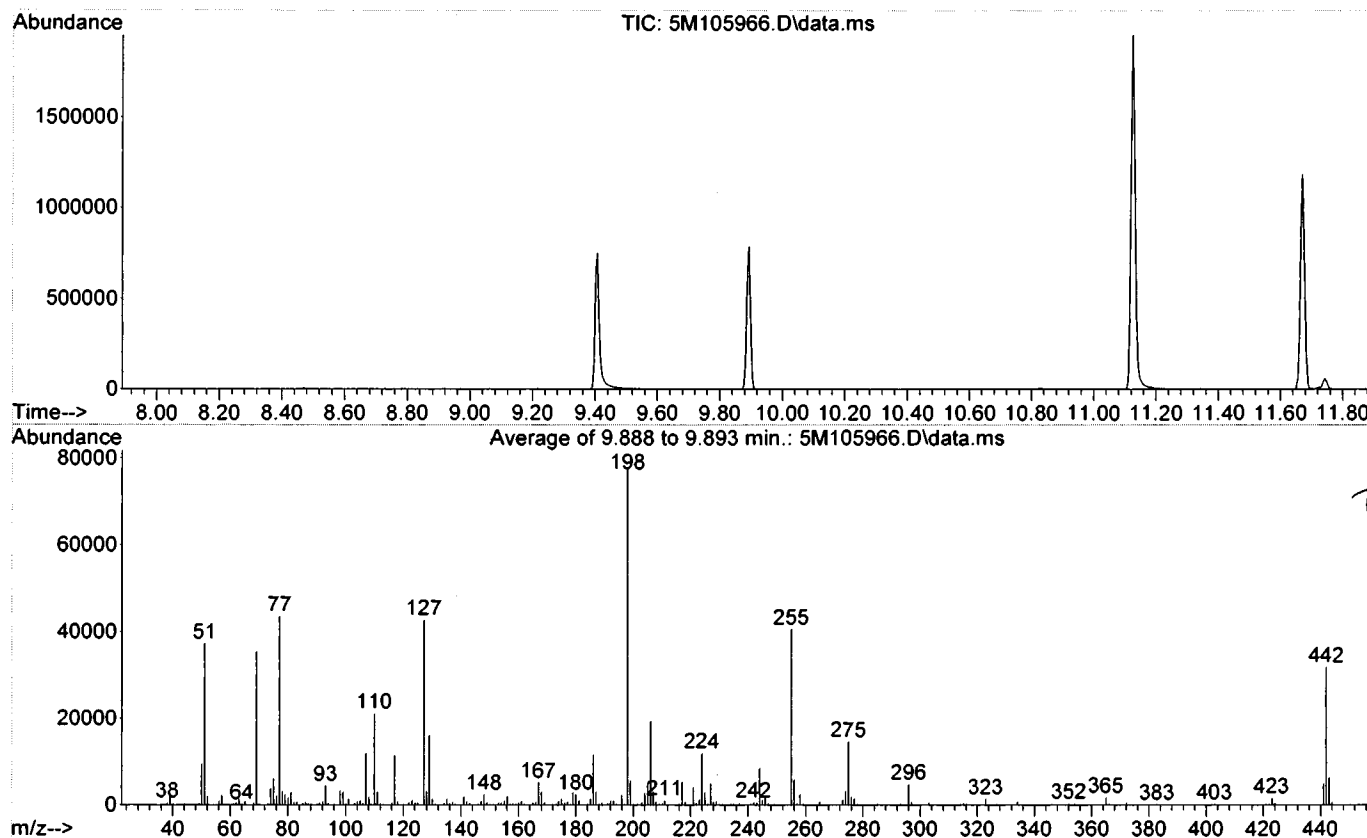
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	47.7	37196	PASS
68	69	0.00	2	1.8	622	PASS
69	198	0.00	100	45.3	35304	PASS
70	69	0.00	2	0.5	181	PASS
127	198	40	60	54.8	42720	PASS
197	198	0.00	1	0.3	246	PASS
198	198	100	100	100.0	77940	PASS
199	198	5	9	7.2	5590	PASS
275	198	10	30	18.8	14668	PASS
365	198	1	100	2.3	1760	PASS
441	443	0.01	100	80.4	5009	PASS
442	198	40	100	40.8	31780	PASS
443	442	17	23	19.6	6232	PASS

Data File	Sample Number	Analysis Date:
5M105967.D	CAL BNA@50PPM	10/25/18 09:19
5M105968.D	WMB71518(MS)	10/25/18 10:04
5M105969.D	WMB71518	10/25/18 10:28
5M105970.D	AD07188-009	10/25/18 10:59
5M105971.D	AD07185-008	10/25/18 11:22
5M105972.D	AD07252-002(T)	10/25/18 11:45
5M105973.D	EF-1 V-289820/10/	10/25/18 12:08
5M105974.D	AD07252-002(T)M	10/25/18 12:32
5M105975.D	AD07252-002(T)M	10/25/18 12:55
5M105976.D	AD07161-001(R)	10/25/18 13:19
5M105977.D	AD07142-003(R)	10/25/18 13:42
5M105978.D	AD07142-004(R)	10/25/18 14:05
5M105979.D	AD07294-001	10/25/18 14:29
5M105980.D	WMB71532	10/25/18 14:53
5M105981.D	AD07204-001	10/25/18 15:16
5M105982.D	AD07205-001	10/25/18 15:39
5M105983.D	AD07180-001	10/25/18 16:03
5M105984.D	AD07180-002	10/25/18 16:26
5M105985.D	AD07186-009	10/25/18 16:50
5M105986.D	AD07207-009	10/25/18 17:13
5M105987.D	AD07212-001	10/25/18 17:37

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-25-18\
Data File : 5M105966.D
Acq On : 25 Oct 2018 8:50
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_1008.M
Title : @GCMS_5,mg,625,8270
Last Update : Mon Oct 08 13:01:42 2018



Spectrum Information: Average of 9.888 to 9.893 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.7	37196	PASS
68	69	0.00	2	1.8	622	PASS
69	198	0.00	100	45.3	35304	PASS
70	69	0.00	2	0.5	181	PASS
127	198	40	60	54.8	42720	PASS
197	198	0.00	1	0.3	246	PASS
198	198	100	100	100.0	77940	PASS
199	198	5	9	7.2	5590	PASS
275	198	10	30	18.8	14668	PASS
365	198	1	100	2.3	1760	PASS
441	443	0.01	100	80.4	5009	PASS
442	198	40	100	40.8	31780	PASS
443	442	17	23	19.6	6232	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M105988.D
Analysis Date: 10/26/18 08:09
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.888 to 9.893 min

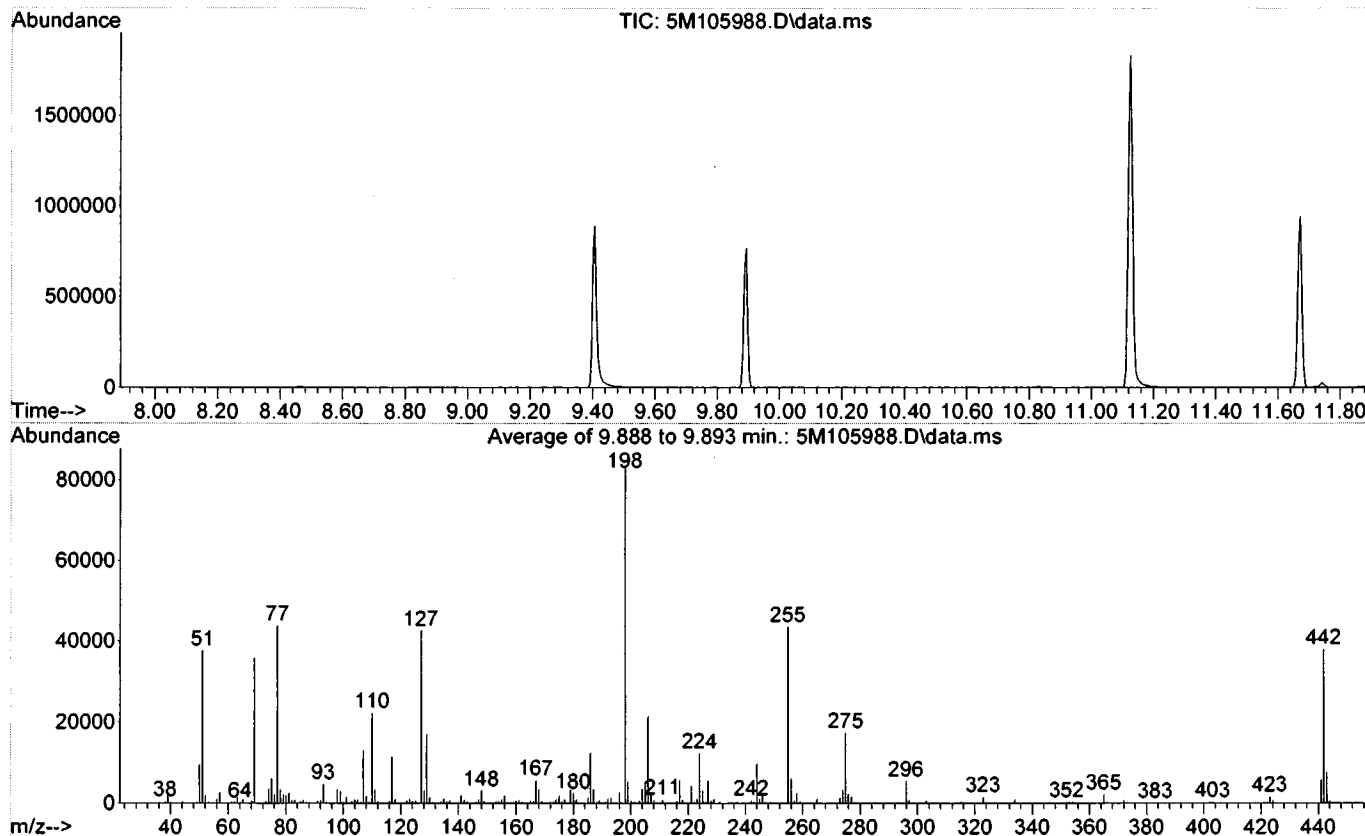
Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
51	198	30	60	45.1	37712	PASS
68	69	0.00	2	1.8	629	PASS
69	198	0.00	100	42.9	35844	PASS
70	69	0.00	2	0.2	90	PASS
127	198	40	60	51.0	42648	PASS
197	198	0.00	1	0.3	244	PASS
198	198	100	100	100.0	83616	PASS
199	198	5	9	6.5	5415	PASS
275	198	10	30	20.8	17381	PASS
365	198	1	100	2.6	2148	PASS
441	443	0.01	100	74.7	5723	PASS
442	198	40	100	45.5	38024	PASS
443	442	17	23	20.1	7662	PASS

Data File	Sample Number	Analysis Date:
5M105989.D	CAL BNA@50PPM	10/26/18 08:35
5M105990.D	WMB71532(MS)	10/26/18 09:22
5M105991.D	AD07212-003	10/26/18 09:45
5M105992.D	AD07212-005	10/26/18 10:08
5M105993.D	AD07212-004	10/26/18 10:32
5M105994.D	AD07142-005(R)	10/26/18 10:55
5M105995.D	AD07142-006(R)	10/26/18 11:18
5M105996.D	AD07142-007(R)	10/26/18 11:41
5M105997.D	AD07142-008(R)	10/26/18 12:05
5M105998.D	AD07142-009(R)	10/26/18 12:28
5M105999.D	AD07294-001(MS)	10/26/18 12:51
5M106000.D	AD07294-001(MSD)	10/26/18 13:14
5M106001.D	WMB71537(MS)	10/26/18 13:37
5M106002.D	AD07212-006	10/26/18 14:00
5M106003.D	AD07204-001(R)	10/26/18 14:24
5M106004.D	AD07205-001(R)	10/26/18 14:47
5M106005.D	WMB71537	10/26/18 15:10
5M106006.D	EF- SPLP V-28996	10/26/18 15:36
5M106007.D	AD07031-001(T)	10/26/18 15:59
5M106008.D	AD07031-001(T)(M)	10/26/18 16:22
5M106009.D	AD07031-001(T)(M)	10/26/18 16:46
5M106010.D	AD07212-002	10/26/18 17:10
5M106011.D	AD07233-001	10/26/18 17:33
5M106012.D	AD07233-002	10/26/18 17:56
5M106013.D	AD07233-003	10/26/18 18:19
5M106014.D	AD07233-004	10/26/18 18:42

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-26-18\
 Data File : 5M105988.D
 Acq On : 26 Oct 2018 8:09
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_5\MethodQt\5M_1008.M
 Title : @GCMS_5,mg,625,8270
 Last Update : Mon Oct 08 13:01:42 2018



Spectrum Information: Average of 9.888 to 9.893 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.1	37712	PASS
68	69	0.00	2	1.8	629	PASS
69	198	0.00	100	42.9	35844	PASS
70	69	0.00	2	0.2	90	PASS
127	198	40	60	51.0	42648	PASS
197	198	0.00	1	0.3	244	PASS
198	198	100	100	100.0	83616	PASS
199	198	5	9	6.5	5415	PASS
275	198	10	30	20.8	17381	PASS
365	198	1	100	2.6	2148	PASS
441	443	0.01	100	74.7	5723	PASS
442	198	40	100	45.5	38024	PASS
443	442	17	23	20.1	7662	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M95341.D
Analysis Date: 10/26/18 08:11
Method: EPA 625.1

Tune Scan/Time Range: Average of 9.903 to 9.909 min

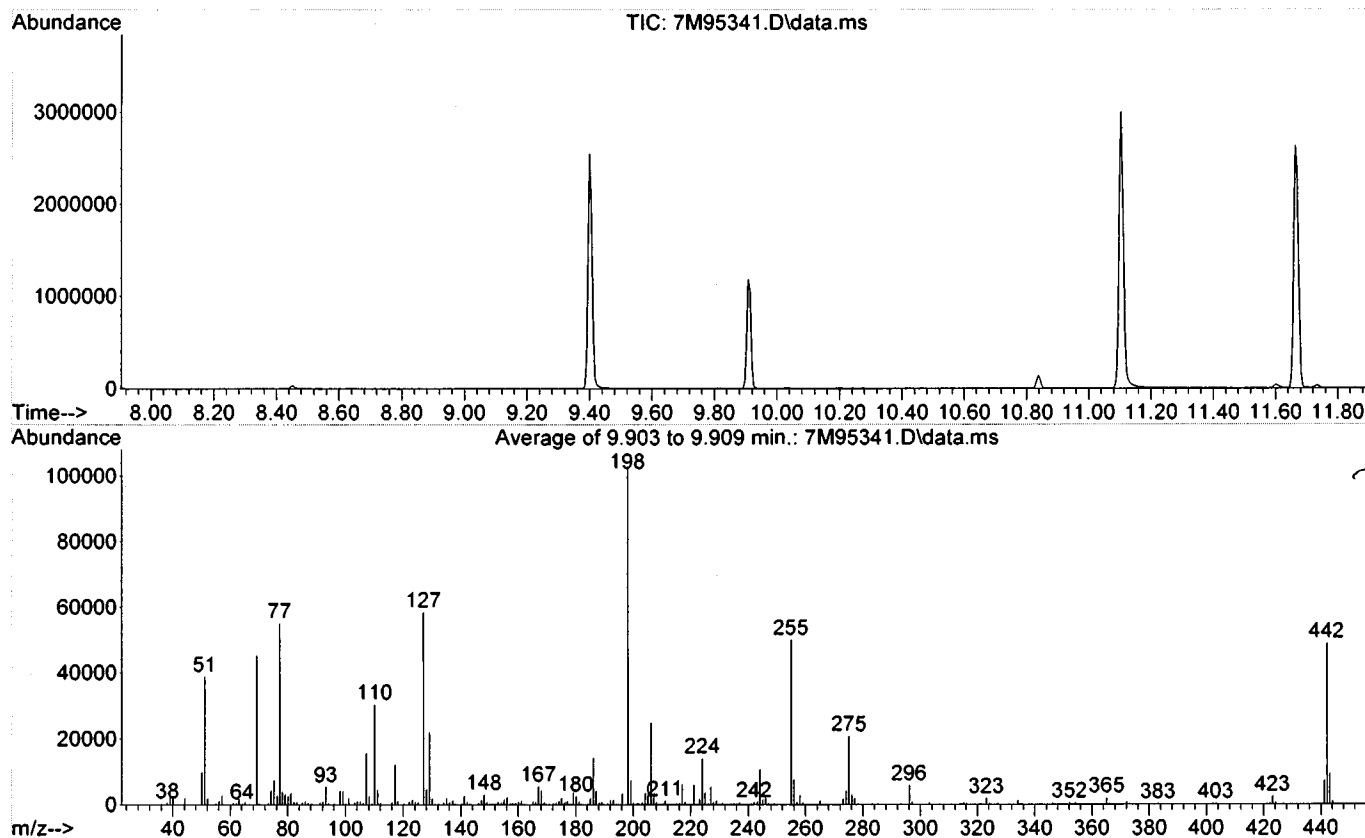
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	37.7	38844	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	45288	PASS
70	69	0.00	2	0.6	280	PASS
127	198	40	60	56.9	58568	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	102920	PASS
199	198	5	9	7.2	7400	PASS
275	198	10	30	20.2	20797	PASS
365	198	1	100	2.0	2053	PASS
441	443	0.01	100	75.9	7141	PASS
442	198	40	100	47.6	48960	PASS
443	442	17	23	19.2	9405	PASS

Data File	Sample Number	Analysis Date:
7M95342.D	CAL BNA@50PPM	10/26/18 08:36
7M95343.D	SMB71534(MS)	10/26/18 09:26
7M95344.D	SMB71534	10/26/18 09:48
7M95345.D	WMB71532	10/26/18 10:11
7M95346.D	AD07165-002(R)	10/26/18 10:35
7M95347.D	AD07165-003(R)	10/26/18 10:58
7M95348.D	AD07165-007(R)	10/26/18 11:20
7M95349.D	AD07165-008(R)	10/26/18 11:43
7M95350.D	AD07165-009(R)	10/26/18 12:06
7M95351.D	AD07165-010(R)	10/26/18 12:30
7M95352.D	AD07165-015(R)	10/26/18 12:53
7M95353.D	AD07161-003(R)	10/26/18 13:16
7M95354.D	AD07161-005(R)	10/26/18 13:38
7M95355.D	AD07161-007(R)	10/26/18 14:01
7M95356.D	AD07161-008(R)	10/26/18 14:25
7M95357.D	WMB71537	10/26/18 14:48
7M95358.D	AD07233-005	10/26/18 15:45
7M95359.D	AD07233-006	10/26/18 16:08
7M95360.D	AD07233-007	10/26/18 16:31

Data Path : G:\GcMsData\2018\GCMS_7\Data\10-26-18\
 Data File : 7M95341.D
 Acq On : 26 Oct 2018 8:11
 Operator : AH/JB
 Sample : CAL DFTPP
 Misc : A,BNA
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_1008.M
 Title : @GCMS_7,mg,625,8270
 Last Update : Mon Oct 08 16:32:32 2018



Spectrum Information: Average of 9.903 to 9.909 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.7	38844	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	45288	PASS
70	69	0.00	2	0.6	280	PASS
127	198	40	60	56.9	58568	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	102920	PASS
199	198	5	9	7.2	7400	PASS
275	198	10	30	20.2	20797	PASS
365	198	1	100	2.0	2053	PASS
441	443	0.01	100	75.9	7141	PASS
442	198	40	100	47.6	48960	PASS
443	442	17	23	19.2	9405	PASS

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB71471

Client Id:

Data File: 5M105872.D

Analysis Date: 10/19/18 10:48

Date Rec/Extracted: NA-10/18/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3,4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485137

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : WMB71471
 Data File: 5M105872.D
 Acq On : 10/19/18 10:48

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 5M_1000.M
 Qt On : 10/19/18 11:49
 Qt Upd On: 10/08/18 13:12

8101509 0552

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	62801	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	108305	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	387743	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	231707	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	381732	40.00	ng	0.00
91) Chrysene-d12	12.661	240	351287	40.00	ng	0.00
103) Perylene-d12	14.274	264	277716	40.00	ng	0.00

System Monitoring Compounds

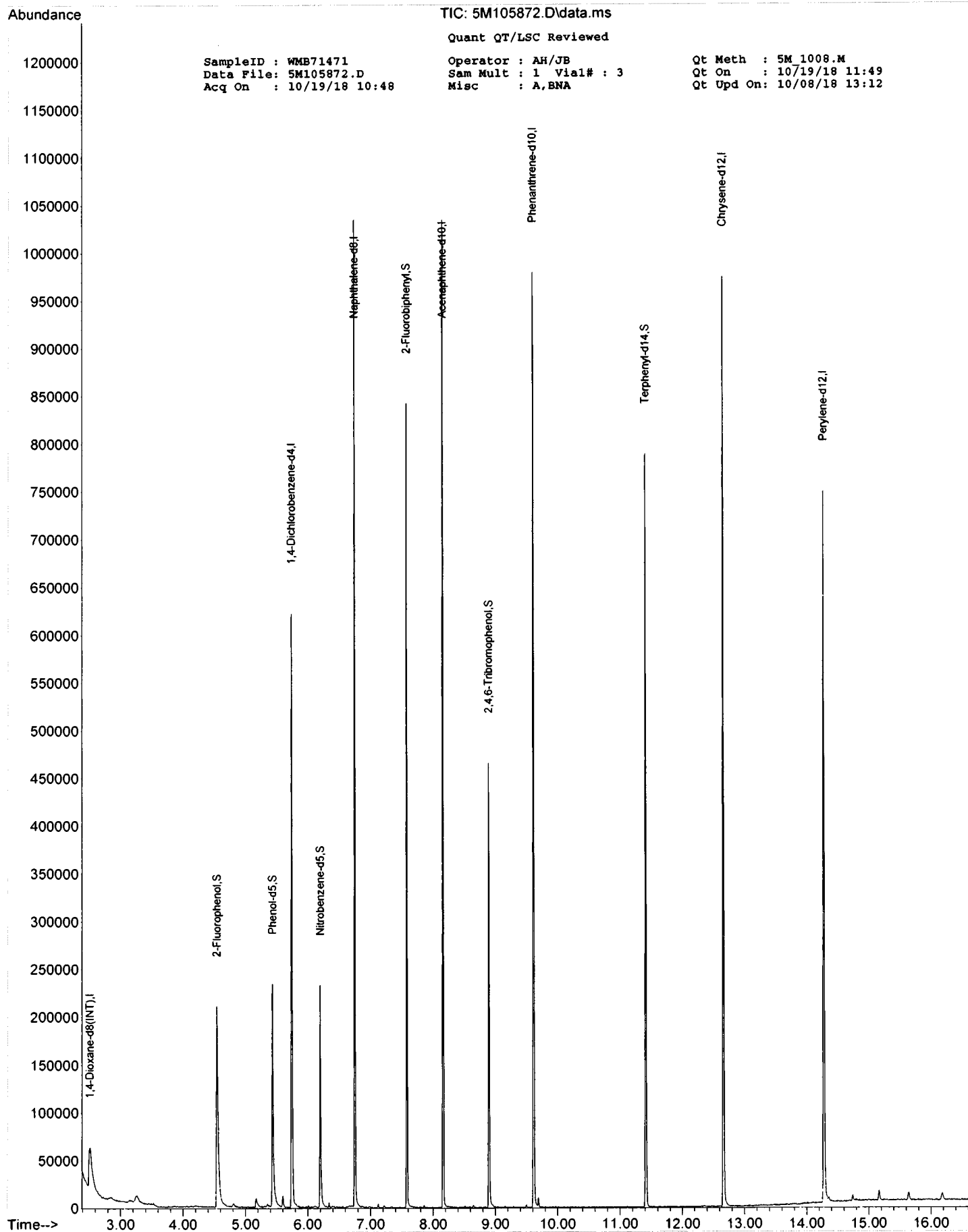
11) 2-Fluorophenol	4.540	112	115671	35.48	ng	0.00
Spiked Amount 100.000			Recovery	=	35.48%	
16) Phenol-d5	5.433	99	115291	22.93	ng	0.00
Spiked Amount 100.000			Recovery	=	22.93%	
32) Nitrobenzene-d5	6.196	128	34028	29.74	ng	0.00
Spiked Amount 50.000			Recovery	=	59.48%	
55) 2-Fluorobiphenyl	7.580	172	236401	31.90	ng	0.00
Spiked Amount 50.000			Recovery	=	63.80%	
80) 2,4,6-Tribromophenol	8.894	330	40800	57.44	ng	0.00
Spiked Amount 100.000			Recovery	=	57.44%	
94) Terphenyl-d14	11.411	244	231173	41.14	ng	0.00
Spiked Amount 50.000			Recovery	=	82.28%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB71479

Client Id:

Data File: 5M105881.D

Analysis Date: 10/19/18 14:23

Date Rec/Extracted: NA-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methan	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 485537

Total Target Concentration 0

ColumnID:(^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α-Chlordane and γ-Chlordane.

8101509 0555

SampleID : WMB71479

Operator : AH/JB

Qt Meth : 5M_1000.M

Data File: 5M105881.D

Sam Mult : 1 Vial# : 12

Qt On : 10/19/18 14:57

Acq On : 10/19/18 14:23

Misc : A,BNA

Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-19-18\

Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\

Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

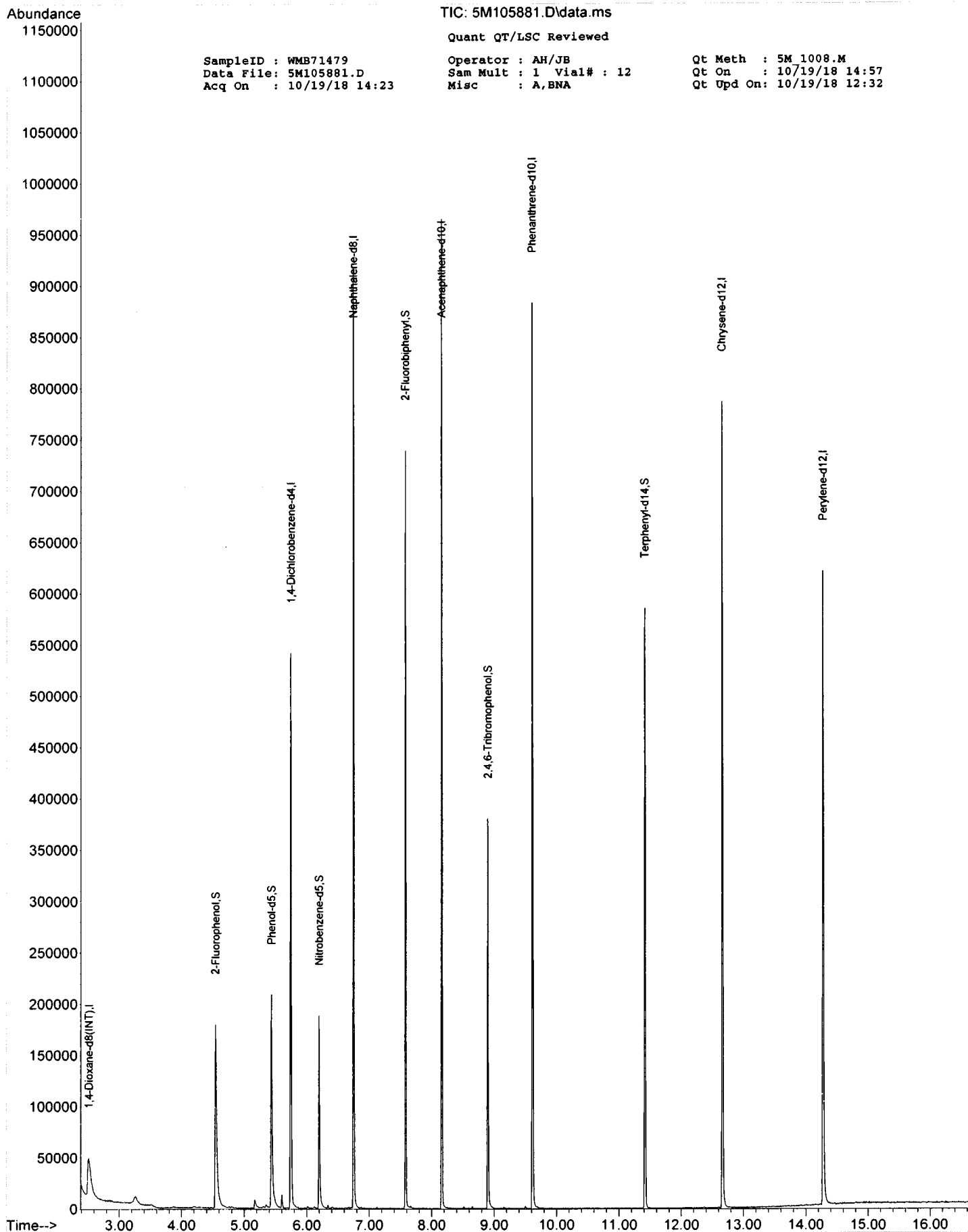
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.515	96	53375	40.00	ng	0.01
21) 1,4-Dichlorobenzene-d4	5.742	152	95199	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	348428	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	197359	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	329994	40.00	ng	0.00
91) Chrysene-d12	12.660	240	296073	40.00	ng	0.00
103) Perylene-d12	14.279	264	236328	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	96690	34.90	ng	0.00
Spiked Amount 100.000			Recovery	=	34.90%	
16) Phenol-d5	5.432	99	100098	23.42	ng	0.00
Spiked Amount 100.000			Recovery	=	23.42%	
32) Nitrobenzene-d5	6.196	128	28303	27.53	ng	0.00
Spiked Amount 50.000			Recovery	=	55.06%	
55) 2-Fluorobiphenyl	7.580	172	194499	30.81	ng	0.00
Spiked Amount 50.000			Recovery	=	61.62%	
80) 2,4,6-Tribromophenol	8.899	330	34571	56.38	ng	0.00
Spiked Amount 100.000			Recovery	=	56.38%	
94) Terphenyl-d14	11.416	244	183129	38.67	ng	0.00
Spiked Amount 50.000			Recovery	=	77.34%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB71518

Client Id:

Data File: 5M105969.D

Analysis Date: 10/25/18 10:28

Date Rec/Extracted: NA-10/24/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : WMB71518
Data File: 5M105969.D
Acq On : 10/25/18 10:28

Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/25/18 10:53
Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-25-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

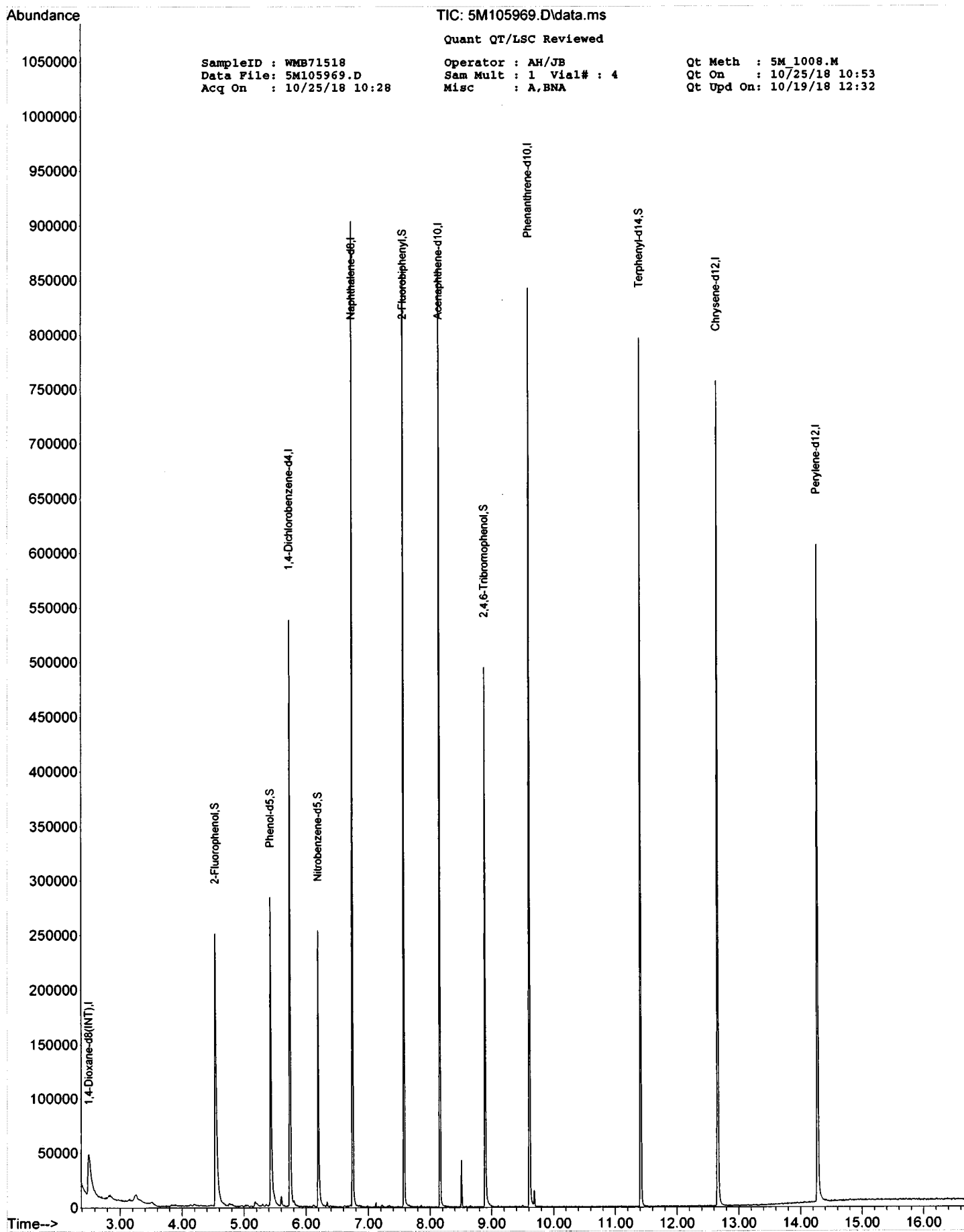
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	48114	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	87383	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	317573	40.00	ng	0.00
50) Acenaphthene-d10	8.157	164	184910	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	314659	40.00	ng	0.00
91) Chrysene-d12	12.661	240	282548	40.00	ng	0.00
103) Perylene-d12	14.274	264	228386	40.00	ng	0.00

System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	129153	51.71	ng	0.00
Spiked Amount	100.000		Recovery	=	51.71%	
16) Phenol-d5	5.427	99	123794	32.14	ng	0.00
Spiked Amount	100.000		Recovery	=	32.14%	
32) Nitrobenzene-d5	6.197	128	38678	41.27	ng	0.00
Spiked Amount	50.000		Recovery	=	82.54%	
55) 2-Fluorobiphenyl	7.580	172	257147	43.48	ng	0.00
Spiked Amount	50.000		Recovery	=	86.96%	
80) 2,4,6-Tribromophenol	8.894	330	41304	69.46	ng	0.00
Spiked Amount	100.000		Recovery	=	69.46%	
94) Terphenyl-d14	11.411	244	234790	51.95	ng	0.00
Spiked Amount	50.000		Recovery	=	103.90%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB71532

Client Id:

Data File: 5M105980.D

Analysis Date: 10/25/18 14:53

Date Rec/Extracted: NA-10/25/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 625.1

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 0.5ml

Dilution: 1

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	1.0	U	50-32-8	Benzo[a]pyrene	1.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1.0	U	205-99-2	Benzo[b]fluoranthene	1.0	U
123-91-1	1,4-Dioxane	0.25	U	191-24-2	Benzo[g,h,i]perylene	1.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	1.0	U	207-08-9	Benzo[k]fluoranthene	1.0	U
95-95-4	2,4,5-Trichlorophenol	1.0	U	111-91-1	bis(2-Chloroethoxy)methane	1.0	U
88-06-2	2,4,6-Trichlorophenol	1.0	U	111-44-4	bis(2-Chloroethyl)ether	0.25	U
120-83-2	2,4-Dichlorophenol	0.25	U	108-60-1	bis(2-chloroisopropyl)ether	1.0	U
105-67-9	2,4-Dimethylphenol	0.25	U	117-81-7	bis(2-Ethylhexyl)phthalate	1.0	U
51-28-5	2,4-Dinitrophenol	5.0	U	85-68-7	Butylbenzylphthalate	1.0	U
121-14-2	2,4-Dinitrotoluene	1.0	U	105-60-2	Caprolactam	1.0	U
606-20-2	2,6-Dinitrotoluene	1.0	U	86-74-8	Carbazole	1.0	U
91-58-7	2-Chloronaphthalene	1.0	U	218-01-9	Chrysene	1.0	U
95-57-8	2-Chlorophenol	1.0	U	53-70-3	Dibenzo[a,h]anthracene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U	132-64-9	Dibenzofuran	0.25	U
95-48-7	2-Methylphenol	0.25	U	84-66-2	Diethylphthalate	1.0	U
88-74-4	2-Nitroaniline	1.0	U	131-11-3	Dimethylphthalate	1.0	U
88-75-5	2-Nitrophenol	1.0	U	84-74-2	Di-n-butylphthalate	0.25	U
106-44-5	3&4-Methylphenol	0.25	U	117-84-0	Di-n-octylphthalate	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	U	206-44-0	Fluoranthene	1.0	U
99-09-2	3-Nitroaniline	1.0	U	86-73-7	Fluorene	1.0	U
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	118-74-1	Hexachlorobenzene	1.0	U
101-55-3	4-Bromophenyl-phenylether	1.0	U	87-68-3	Hexachlorobutadiene	1.0	U
59-50-7	4-Chloro-3-methylphenol	1.0	U	77-47-4	Hexachlorocyclopentadiene	1.0	U
106-47-8	4-Chloroaniline	0.25	U	67-72-1	Hexachloroethane	1.0	U
7005-72-3	4-Chlorophenyl-phenylether	1.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	1.0	U
100-01-6	4-Nitroaniline	1.0	U	78-59-1	Isophorone	1.0	U
100-02-7	4-Nitrophenol	1.0	U	91-20-3	Naphthalene	0.25	U
83-32-9	Acenaphthene	1.0	U	98-95-3	Nitrobenzene	1.0	U
208-96-8	Acenaphthylene	1.0	U	621-64-7	N-Nitroso-di-n-propylamine	0.25	U
98-86-2	Acetophenone	1.0	U	86-30-6	n-Nitrosodiphenylamine	1.0	U
120-12-7	Anthracene	1.0	U	87-86-5	Pentachlorophenol	5.0	U
1912-24-9	Atrazine	1.0	U	85-01-8	Phenanthrene	1.0	U
100-52-7	Benzaldehyde	1.0	U	108-95-2	Phenol	1.0	U
56-55-3	Benzo[a]anthracene	1.0	U	129-00-0	Pyrene	1.0	U

Worksheet #: 493028

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

SampleID : WMB71532
Data File: 5M105980.D
Acq On : 10/25/18 14:53

Operator : AH/JB
Sam Mult : 1 Vial# : 15
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/25/18 15:08
Qt Upd On: 10/25/18 12:46

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-25-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.510	96	50708	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	95469	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	352993	40.00	ng	0.00
50) Acenaphthene-d10	8.157	164	208074	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	352395	40.00	ng	0.00
91) Chrysene-d12	12.660	240	326489	40.00	ng	0.00
103) Perylene-d12	14.274	264	257269	40.00	ng	0.00

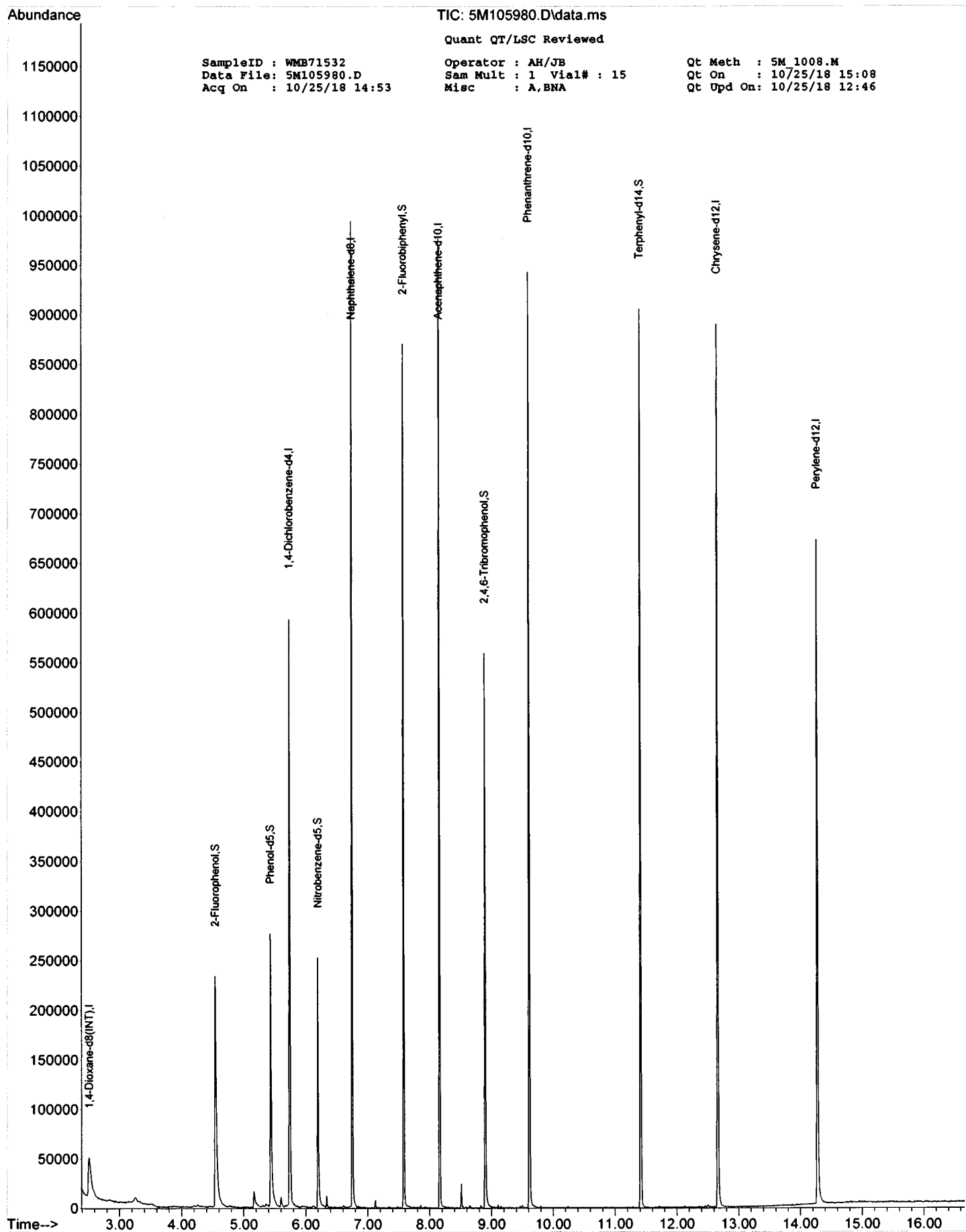
System Monitoring Compounds

11) 2-Fluorophenol	4.540	112	120737	45.87	ng	0.00
Spiked Amount	100.000		Recovery	=	45.87%	
16) Phenol-d5	5.427	99	126071	31.05	ng	0.00
Spiked Amount	100.000		Recovery	=	31.05%	
32) Nitrobenzene-d5	6.196	128	38844	37.29	ng	0.00
Spiked Amount	50.000		Recovery	=	74.58%	
55) 2-Fluorobiphenyl	7.580	172	251056	37.72	ng	0.00
Spiked Amount	50.000		Recovery	=	75.44%	
80) 2,4,6-Tribromophenol	8.894	330	45754	68.76	ng	0.00
Spiked Amount	100.000		Recovery	=	68.76%	
94) Terphenyl-d14	11.410	244	263652	50.49	ng	0.00
Spiked Amount	50.000		Recovery	=	100.98%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB71480

Client Id:

Data File: 9M88665.D

Analysis Date: 10/19/18 18:17

Date Rec/Extracted: NA-10/19/18

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	50-32-8	Benzo[a]pyrene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
123-91-1	1,4-Dioxane	0.0083	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U

Worksheet #: 489030

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

SampleID : SMB71480
Data File: 9M88665.D
Acq On : 10/19/18 18:17

Operator : AH/JB
Sam Mult : 1 Vial# : 20
Misc : S,BNA

Qt Meth : 9M_1008.M
Qt On : 10/22/18 07:33
Qt Upd On: 10/08/18 16:51

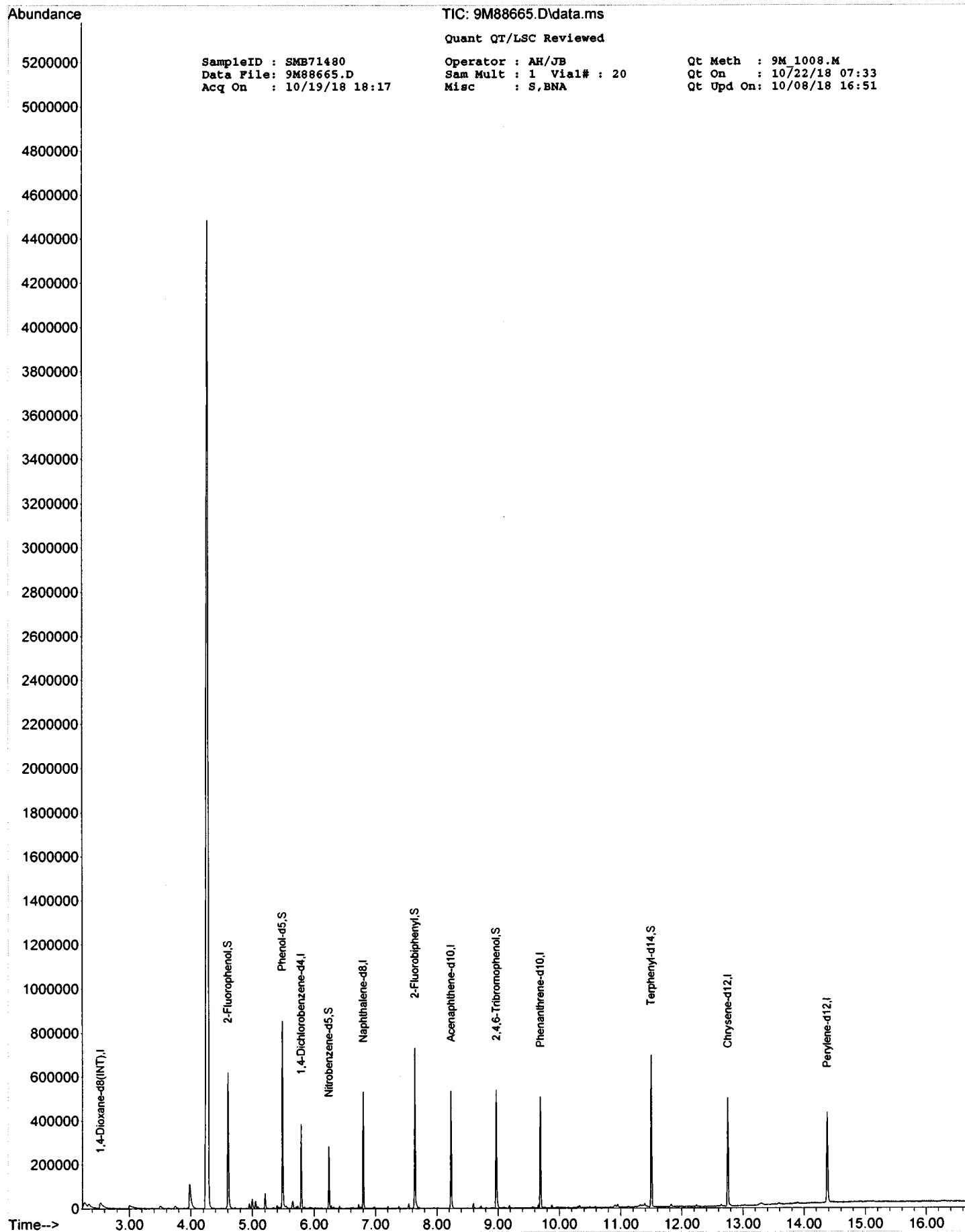
Data Path : G:\GCMSData\2018\GCMS_9\Data\10-1918\
Qt Path : G:\GCMSDATA\2018\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.532	96	25465	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.792	152	49794	40.00	ng	0.00
31) Naphthalene-d8	6.803	136	190279	40.00	ng	0.00
50) Acenaphthene-d10	8.232	164	112904	40.00	ng	0.00
77) Phenanthrene-d10	9.693	188	191080	40.00	ng	0.00
91) Chrysene-d12	12.753	240	202679	40.00	ng	0.00
103) Perylene-d12	14.378	264	175398	40.00	ng	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
11) 2-Fluorophenol		4.604	112	163420	109.40	ng	0.01
Spiked Amount	100.000			Recovery	=	109.40%	
16) Phenol-d5		5.487	99	240558	111.89	ng	0.00
Spiked Amount	100.000			Recovery	=	111.89%	
32) Nitrobenzene-d5		6.240	128	31469	51.93	ng	0.00
Spiked Amount	50.000			Recovery	=	103.86%	
55) 2-Fluorobiphenyl		7.644	172	202164	55.49	ng	0.00
Spiked Amount	50.000			Recovery	=	110.98%	
80) 2,4,6-Tribromophenol		8.974	330	57268	108.72	ng	0.00
Spiked Amount	100.000			Recovery	=	108.72%	
94) Terphenyl-d14		11.500	244	209308	60.98	ng	0.00
Spiked Amount	50.000			Recovery	=	121.96%	

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71471

8101509 0566

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71439.D		WMB71471(MS)		10/19/2018 10:35:00 A			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	58.7193	0	100	59	20	160
Pyridine	1	21.4565	0	100	21	1	150
N-Nitrosodimethylamine	1	54.1138	0	100	54	20	150
Benzaldehyde	1	133.308	0	100	133	20	234
Aniline	1	57.4314	0	100	57	20	150
Pentachloroethane	1	86.0463	0	100	86	5	140
bis(2-Chloroethyl)ether	1	78.9651	0	100	79	43	126
Phenol	1	41.2804	0	100	41	17	120
2-Chlorophenol	1	80.223	0	100	80	36	120
N-Decane	1	77.6748	0	100	78	40	130
1,3-Dichlorobenzene	1	75.4158	0	100	75	20	130
1,4-Dichlorobenzene	1	78.4649	0	100	78	25	130
1,2-Dichlorobenzene	1	77.3967	0	100	77	25	130
Benzyl alcohol	1	84.5033	0	100	85	35	130
bis(2-chloroisopropyl)ether	1	72.7897	0	100	73	63	139
2-Methylphenol	1	77.3698	0	100	77	35	130
Acetophenone	1	103.3882	0	100	103	50	130
Hexachloroethane	1	79.9235	0	100	80	55	120
N-Nitroso-di-n-propylamine	1	84.0365	0	100	84	14	198
3&4-Methylphenol	1	79.0404	0	100	79	30	130
Nitrobenzene	1	88.2765	0	100	88	54	158
Isophorone	1	87.8729	0	100	88	47	180
2-Nitrophenol	1	94.2597	0	100	94	45	167
2,4-Dimethylphenol	1	84.1755	0	100	84	42	120
Benzoic Acid	1	13.5158	0	100	14	1	130
bis(2-Chloroethoxy)methane	1	87.4569	0	100	87	49	165
2,4-Dichlorophenol	1	94.4443	0	100	94	53	122
1,2,4-Trichlorobenzene	1	86.4136	0	100	86	57	130
Naphthalene	1	90.456	0	100	90	36	120
4-Chloroaniline	1	112.8356	0	100	113	30	170
Hexachlorobutadiene	1	82.9372	0	100	83	38	120
Caprolactam	1	49.153	0	100	49	5	130
4-Chloro-3-methylphenol	1	101.289	0	100	101	41	128
2-Methylnaphthalene	1	93.7869	0	100	94	40	130
1-Methylnaphthalene	1	107.6412	0	100	108	50	130
1,1'-Biphenyl	1	90.2454	0	100	90	50	130
1,2,4,5-Tetrachlorobenzene	1	101.2096	0	100	101	60	140
Hexachlorocyclopentadiene	1	81.8697	0	100	82	20	130
2,4,6-Trichlorophenol	1	95.547	0	100	96	52	129
2,4,5-Trichlorophenol	1	96.6632	0	100	97	50	130
2-Chloronaphthalene	1	89.6118	0	100	90	65	120
1,4-Dimethylnaphthalene	1	88.6287	0	100	89	50	130
Diphenyl Ether	1	106.2983	0	100	106	50	140
2-Nitroaniline	1	97.7805	0	100	98	40	150
Coumarin	1	102.3881	0	100	102	1	180
Acenaphthylene	1	99.4373	0	100	99	54	126
Dimethylphthalate	1	91.0318	0	100	91	1	120
2,6-Dinitrotoluene	1	94.0558	0	100	94	68	137
Acenaphthene	1	88.9111	0	100	89	60	132
3-Nitroaniline	1	105.7086	0	100	106	40	150
2,4-Dinitrophenol	1	82.7426	0	100	83	1	173
Dibenzofuran	1	94.0314	0	100	94	50	130
2,4-Dinitrotoluene	1	85.0567	0	100	85	48	127
4-Nitrophenol	1	43.384	0	100	43	13	129
2,3,4,6-Tetrachlorophenol	1	87.684	0	100	88	50	130
Fluorene	1	88.324	0	100	88	70	120
4-Chlorophenyl-phenylether	1	88.7056	0	100	89	38	145
Diethylphthalate	1	87.6197	0	100	88	1	120
4-Nitroaniline	1	97.6938	0	100	98	40	150
Atrazine	1	88.4145	0	100	88	40	150
4,6-Dinitro-2-methylphenol	1	103.9226	0	100	104	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

8101509 0567

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.6501	0	100	78	30	130
1,2-Diphenylhydrazine	1	96.8691	0	100	97	40	130
4-Bromophenyl-phenylether	1	94.4694	0	100	94	65	120
Hexachlorobenzene	1	90.1156	0	100	90	8	142
N-Octadecane	1	94.1389	0	100	94	50	130
Pentachlorophenol	1	104.599	0	100	105	38	152
Phenanthrene	1	92.2224	0	100	92	65	120
Anthracene	1	89.6239	0	100	90	43	120
Carbazole	1	104.6686	0	100	105	40	130
Di-n-butylphthalate	1	91.0111	0	100	91	8	120
Fluoranthene	1	95.9092	0	100	96	43	121
Pyrene	1	95.8684	0	100	96	70	120
Benzidine	1	22.1051	0	100	22	1	134
Butylbenzylphthalate	1	94.1343	0	100	94	1	140
3,3'-Dichlorobenzidine	1	93.097	0	100	93	8	213
Benzo[a]anthracene	1	92.4141	0	100	92	42	133
Chrysene	1	86.1945	0	100	86	44	140
bis(2-Ethylhexyl)phthalate	1	98.0988	0	100	98	29	137
Di-n-octylphthalate	1	93.4639	0	100	93	19	132
Benzo[b]fluoranthene	1	93.5776	0	100	94	42	140
Benzo[k]fluoranthene	1	96.4853	0	100	96	25	146
Benzo[a]pyrene	1	89.348	0	100	89	32	148
Indeno[1,2,3-cd]pyrene	1	92.0281	0	100	92	1	151
Dibenzo[a,h]anthracene	1	95.4942	0	100	95	1	200
Benzo[g,h,i]perylene	1	91.2238	0	100	91	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

8101509 0568

SampleID : WMB71471(MS)
 Data File: 10M71439.D
 Acq On : 10/19/18 10:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

Qt Meth : 10M_100%
 Qt On : 10/19/18 11:57
 Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	43061	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.893	152	83409	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	302478	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	194312	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	335279	40.00	ng	0.00
91) Chrysene-d12	12.863	240	310192	40.00	ng	0.00
103) Perylene-d12	14.494	264	313310	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	102205	41.00	ng	0.00
Spiked Amount 100.000			Recovery	=	41.00%	
16) Phenol-d5	5.583	99	104408	30.95	ng	0.00
Spiked Amount 100.000			Recovery	=	30.95%	
32) Nitrobenzene-d5	6.343	128	34729	35.93	ng	0.00
Spiked Amount 50.000			Recovery	=	71.86%	
55) 2-Fluorobiphenyl	7.739	172	240099	38.59	ng	0.00
Spiked Amount 50.000			Recovery	=	77.18%	
80) 2,4,6-Tribromophenol	9.076	330	59750	75.59	ng	0.00
Spiked Amount 100.000			Recovery	=	75.59%	
94) Terphenyl-d14	11.600	244	239080	42.06	ng	0.00
Spiked Amount 50.000			Recovery	=	84.12%	
Target Compounds						
						Qvalue
8) 1,4-Dioxane	2.775	88	60936	58.7193	ng	98
9) Pyridine	3.267	79	49674	21.4565	ng	68
10) N-Nitrosodimethylamine	3.187	74	77654	54.1138	ng	82
12) Benzaldehyde	5.530	77	159949	133.3080	ng	75
13) Aniline	5.621	93	200956	57.4314	ng	60
14) Pentachloroethane	5.658	117	81155	86.0463	ng	72
15) bis(2-Chloroethyl) ether	5.674	93	196677	78.9651	ng	78
17) Phenol	5.594	94	137936	41.2804	ng	88
18) 2-Chlorophenol	5.717	128	223893	80.2230	ng	75
19) N-Decane	5.749	57	170136	77.6748	ng	76
20) 1,3-Dichlorobenzene	5.845	146	233386	75.4158	ng	94
22) 1,4-Dichlorobenzene	5.909	146	240830	78.4649	ng	97
23) 1,2-Dichlorobenzene	6.032	146	232127	77.3967	ng	96
24) Benzyl alcohol	6.011	108	143012	84.5033	ng	70
25) bis(2-chloroisopropyl)...	6.113	45	207251	72.7897	ng	81
26) 2-Methylphenol	6.097	108	187678	77.3698	ng	99
27) Acetophenone	6.225	105	355161	103.3882	ng	65
28) Hexachloroethane	6.305	117	94998	79.9235	ng	87
29) N-Nitroso-di-n-propyla...	6.220	70	134533	84.0365	ng	83
30) 3&4-Methylphenol	6.214	108	182106	79.0404	ng	92
33) Nitrobenzene	6.359	77	231993	88.2765	ng	77
34) Isophorone	6.541	82	397468	87.8729	ng	86
35) 2-Nitrophenol	6.605	139	135567	94.2597	ng	90
36) 2,4-Dimethylphenol	6.626	107	225984	84.1755	ng	94
37) Benzoic Acid	6.690	105	24993	13.5158	ng	83
38) bis(2-Chloroethoxy)met...	6.701	93	248148	87.4569	ng	97
39) 2,4-Dichlorophenol	6.787	162	221216	94.4443	ng	85
40) 1,2,4-Trichlorobenzene	6.851	180	219420	86.4136	ng	96
41) Naphthalene	6.915	128	717280	90.4560	ng	99
42) 4-Chloroaniline	6.952	127	293450m	112.8356	ng	
43) Hexachlorobutadiene	6.995	225	117892	82.9372	ng	96
44) Caprolactam	7.225	113	40213	49.1530	ng	65
45) 4-Chloro-3-methylphenol	7.311	107	217371	101.2890	ng	83
46) 2-Methylnaphthalene	7.450	142	497322	93.7869	ng	100
47) 1-Methylnaphthalene	7.530	142	561446	107.6412	ng	92
49) 1,1'-Biphenyl	7.824	154	594703	90.2454	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	269569	101.2096	ng	99
52) Hexachlorocyclopentadiene	7.568	237	86809	81.8697	ng	99
53) 2,4,6-Trichlorophenol	7.669	196	154612	95.5470	ng	96
54) 2,4,5-Trichlorophenol	7.707	196	166140	96.6632	ng	95
56) 2-Chloronaphthalene	7.851	162	459801	89.6118	ng	92
57) 1,4-Dimethylnaphthalene	8.129	156	375336	88.6287	ng	90
59) Diphenyl Ether	7.910	170	404103	106.2983	ng	79
60) 2-Nitroaniline	7.931	65	178294	97.7805	ng	42
61) Coumarin	8.118	146	193459	102.3881	ng	62
62) Acenaphthylene	8.209	152	752533	99.4373	ng	98
63) Dimethylphthalate	8.065	163	545530	91.0318	ng	99
64) 2,6-Dinitrotoluene	8.129	165	117300	94.0558	ng	79
65) Acenaphthene	8.364	153	474496	88.9111	ng	95
66) 3-Nitroaniline	8.284	138	150388	105.7086	ng	72
67) 2,4-Dinitrophenol	8.381	184	63202	82.7426	ng	39

SampleID : WMB71471(MS)
 Data File: 10M71439.D
 Acq On : 10/19/18 10:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 4
 Misc : A,BNA

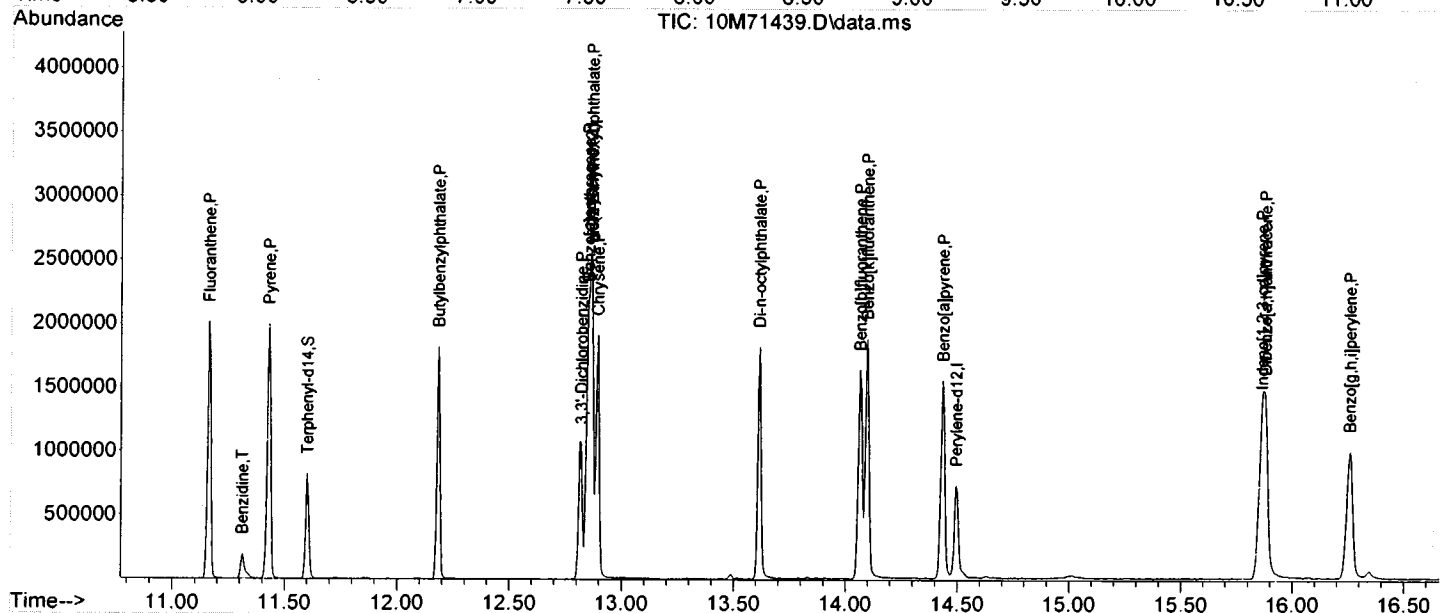
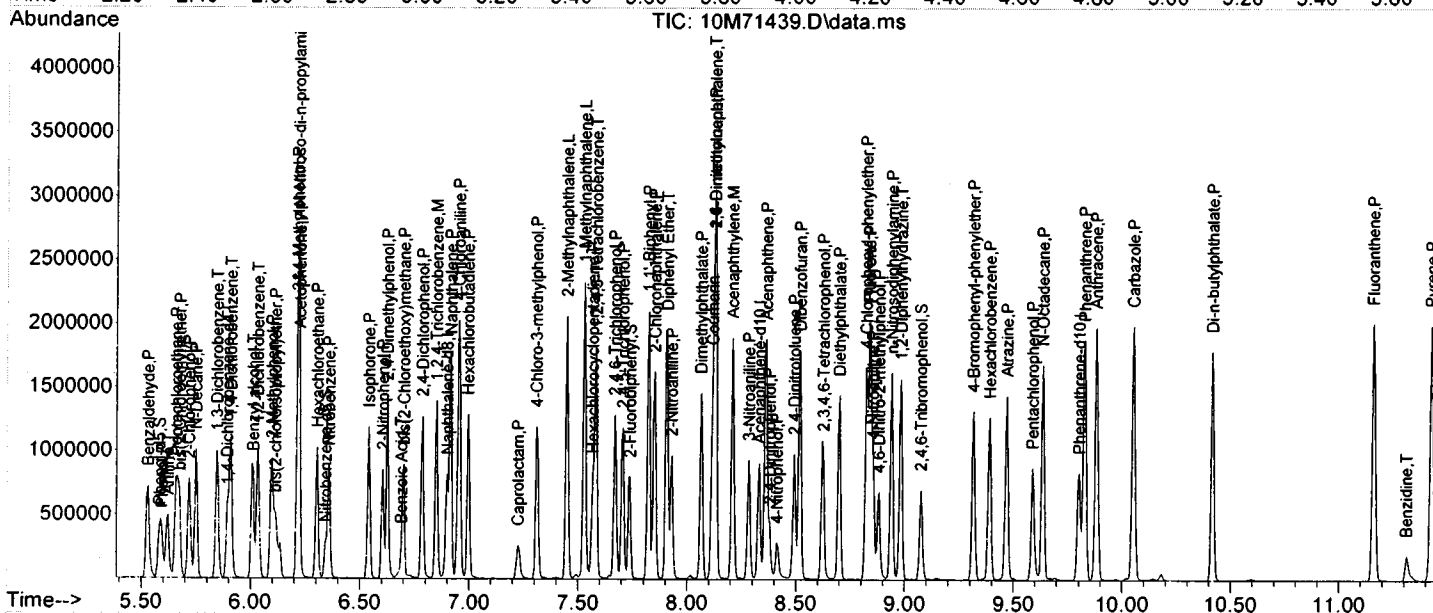
Qt Meth : 10M_1008.M
 Qt On : 10/19/18 11:57
 Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) Dibenzofuran	8.520	168	712288	94.0314	ng	86
69) 2,4-Dinitrotoluene	8.493	165	167046	85.0567	ng	68
70) 4-Nitrophenol	8.413	65	46405	43.3840	ng	66
71) 2,3,4,6-Tetrachlorophenol	8.627	232	131314	87.6840	ng	87
72) Fluorene	8.841	166	540425	88.3240	ng	98
73) 4-Chlorophenyl-phenyle...	8.824	204	258973	88.7056	ng	89
74) Diethylphthalate	8.701	149	518998	87.6197	ng	97
75) 4-Nitroaniline	8.857	138	166354	97.6938	ng	86
76) Atrazine	9.472	200	175745	88.4145	ng	96
78) 4,6-Dinitro-2-methylph...	8.883	198	107089	103.9226	ng	60
79) n-Nitrosodiphenylamine	8.942	169	392521	77.6501	ng	98
81) 1,2-Diphenylhydrazine	8.985	77	597425	96.8691	ng	84
82) 4-Bromophenyl-phenylether	9.317	248	146686	94.4694	ng	87
83) Hexachlorobenzene	9.391	284	150285	90.1156	ng	70
84) N-Octadecane	9.637	57	267056	94.1389	ng	72
85) Pentachlorophenol	9.589	266	92839	104.5990	ng	96
86) Phenanthrene	9.830	178	816940	92.2224	ng	99
87) Anthracene	9.883	178	805746	89.6239	ng	99
88) Carbazole	10.055	167	856119	104.6686	ng	98
89) Di-n-butylphthalate	10.418	149	921788	91.0111	ng	98
90) Fluoranthene	11.162	202	896049	95.9092	ng	89
92) Pyrene	11.429	202	916523	95.8684	ng	82
93) Benzidine	11.312	184	80624	22.1051	ng	84
97) Butylbenzylphthalate	12.183	149	417045	94.1343	ng	76
99) 3,3'-Dichlorobenzidine	12.820	252	264683	93.0970	ng	93
100) Benzo[a]anthracene	12.852	228	795359	92.4141	ng	98
101) Chrysene	12.895	228	728505	86.1945	ng	99
102) bis(2-Ethylhexyl)phtha...	12.868	149	582110	98.0988	ng	95
104) Di-n-octylphthalate	13.617	149	987002	93.4639	ng	100
105) Benzo[b]fluoranthene	14.066	252	795670	93.5776	ng	94
106) Benzo[k]fluoranthene	14.098	252	808235m	96.4853	ng	
107) Benzo[a]pyrene	14.435	252	737734	89.3480	ng	91
108) Indeno[1,2,3-cd]pyrene	15.863	276	799819	92.0281	ng	85
109) Dibenzo[a,h]anthracene	15.879	278	688471	95.4942	ng	90
110) Benzo[g,h,i]perylene	16.259	276	700171	91.2238	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Qt Meth : 10M 1008.M
Qt On : 10/19/18 11:57
Qt Upd On: 10/08/18 12:40
```



Form3
Recovery Data Laboratory Limits
QC Batch: WMB71479

8101509 0571

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M95306.D		WMB71479(MS)		10/19/2018 2:26:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	69.0027	0	100	69	20	160
Pyridine	1	36.267	0	100	36	1	150
N-Nitrosodimethylamine	1	58.1228	0	100	58	20	150
Benzaldehyde	1	136.4587	0	100	136	20	234
Aniline	1	78.1613	0	100	78	20	150
Pentachloroethane	1	88.4306	0	100	88	5	140
bis(2-Chloroethyl)ether	1	78.9094	0	100	79	43	126
Phenol	1	39.122	0	100	39	17	120
2-Chlorophenol	1	75.2627	0	100	75	36	120
N-Decane	1	75.1357	0	100	75	40	130
1,3-Dichlorobenzene	1	72.4267	0	100	72	20	130
1,4-Dichlorobenzene	1	81.4073	0	100	81	25	130
1,2-Dichlorobenzene	1	81.6788	0	100	82	25	130
Benzyl alcohol	1	82.4281	0	100	82	35	130
bis(2-chloroisopropyl)ether	1	73.6381	0	100	74	63	139
2-Methylphenol	1	77.8179	0	100	78	35	130
Acetophenone	1	106.7914	0	100	107	50	130
Hexachloroethane	1	79.8436	0	100	80	55	120
N-Nitroso-di-n-propylamine	1	78.982	0	100	79	14	198
3&4-Methylphenol	1	72.799	0	100	73	30	130
Nitrobenzene	1	92.0091	0	100	92	54	158
Isophorone	1	89.7629	0	100	90	47	180
2-Nitrophenol	1	92.9104	0	100	93	45	167
2,4-Dimethylphenol	1	87.4787	0	100	87	42	120
Benzoic Acid	1	21.532	0	100	22	1	130
bis(2-Chloroethoxy)methane	1	86.8441	0	100	87	49	165
2,4-Dichlorophenol	1	91.7642	0	100	92	53	122
1,2,4-Trichlorobenzene	1	87.4633	0	100	87	57	130
Naphthalene	1	83.3188	0	100	83	36	120
4-Chloroaniline	1	114.0252	0	100	114	30	170
Hexachlorobutadiene	1	86.7801	0	100	87	38	120
Caprolactam	1	52.5262	0	100	53	5	130
4-Chloro-3-methylphenol	1	93.2287	0	100	93	41	128
2-Methylnaphthalene	1	94.1586	0	100	94	40	130
1-Methylnaphthalene	1	114.3009	0	100	114	50	130
1,1'-Biphenyl	1	95.484	0	100	95	50	130
1,2,4,5-Tetrachlorobenzene	1	114.2755	0	100	114	60	140
Hexachlorocyclopentadiene	1	101.6695	0	100	102	20	130
2,4,6-Trichlorophenol	1	102.3739	0	100	102	52	129
2,4,5-Trichlorophenol	1	93.077	0	100	93	50	130
2-Chloronaphthalene	1	89.7704	0	100	90	65	120
1,4-Dimethylnaphthalene	1	96.6729	0	100	97	50	130
Diphenyl Ether	1	114.7718	0	100	115	50	140
2-Nitroaniline	1	106.9342	0	100	107	40	150
Coumarin	1	107.9373	0	100	108	1	180
Acenaphthylene	1	98.4582	0	100	98	54	126
Dimethylphthalate	1	92.738	0	100	93	1	120
2,6-Dinitrotoluene	1	95.9042	0	100	96	68	137
Acenaphthene	1	92.2175	0	100	92	60	132
3-Nitroaniline	1	115.917	0	100	116	40	150
2,4-Dinitrophenol	1	112.3621	0	100	112	1	173
Dibenzofuran	1	97.1048	0	100	97	50	130
2,4-Dinitrotoluene	1	92.2794	0	100	92	48	127
4-Nitrophenol	1	50.0916	0	100	50	13	129
2,3,4,6-Tetrachlorophenol	1	86.9346	0	100	87	50	130
Fluorene	1	90.6281	0	100	91	70	120
4-Chlorophenyl-phenylether	1	90.2356	0	100	90	38	145
Diethylphthalate	1	90.3525	0	100	90	1	120
4-Nitroaniline	1	97.5264	0	100	98	40	150
Atrazine	1	100.6168	0	100	101	40	150
4,6-Dinitro-2-methylphenol	1	118.5253	0	100	119	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

n-Nitrosodiphenylamine	1	76.0463	0	100	76	30	130
1,2-Diphenylhydrazine	1	92.6807	0	100	93	40	130
4-Bromophenyl-phenylether	1	90.3439	0	100	90	65	120
Hexachlorobenzene	1	90.3596	0	100	90	8	142
N-Octadecane	1	97.6617	0	100	98	50	130
Pentachlorophenol	1	95.0418	0	100	95	38	152
Phenanthrene	1	91.2947	0	100	91	65	120
Anthracene	1	91.7377	0	100	92	43	120
Carbazole	1	106.2112	0	100	106	40	130
Di-n-butylphthalate	1	94.5892	0	100	95	8	120
Fluoranthene	1	92.048	0	100	92	43	121
Pyrene	1	94.7814	0	100	95	70	120
Benzidine	1	16.9657	0	100	17	1	134
Butylbenzylphthalate	1	90.2116	0	100	90	1	140
3,3'-Dichlorobenzidine	1	90.5397	0	100	91	8	213
Benzo[a]anthracene	1	91.8853	0	100	92	42	133
Chrysene	1	87.2932	0	100	87	44	140
bis(2-Ethylhexyl)phthalate	1	89.4472	0	100	89	29	137
Di-n-octylphthalate	1	85.1444	0	100	85	19	132
Benzo[b]fluoranthene	1	88.9253	0	100	89	42	140
Benzo[k]fluoranthene	1	100.1275	0	100	100	25	146
Benzo[a]pyrene	1	90.9848	0	100	91	32	148
Indeno[1,2,3-cd]pyrene	1	93.6849	0	100	94	1	151
Dibenzo[a,h]anthracene	1	94.6008	0	100	95	1	200
Benzo[g,h,i]perylene	1	93.6662	0	100	94	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

SampleID : WMB71479(MS)
 Data File: 7M95306.D
 Acq On : 10/19/18 14:26

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 7M_1008.M
 Qt On : 10/19/18 14:52
 Qt Upd On: 10/17/18 08:02

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.504	96	85204	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.742	152	128861	40.00	ng	0.00
31) Naphthalene-d8	6.773	136	456023	40.00	ng	0.02
50) Acenaphthene-d10	8.205	164	252821	40.00	ng	0.03
77) Phenanthrene-d10	9.636	188	436408	40.00	ng	0.02
91) Chrysene-d12	12.649	240	418283	40.00	ng	0.00
103) Perylene-d12	14.273	264	364321	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.534	112	177476	38.83	ng	-0.01
Spiked Amount 100.000			Recovery	=	38.83%	
16) Phenol-d5	5.421	99	169288	26.15	ng	-0.01
Spiked Amount 100.000			Recovery	=	26.15%	
32) Nitrobenzene-d5	6.196	128	49461	34.55	ng	0.00
Spiked Amount 50.000			Recovery	=	69.10%	
55) 2-Fluorobiphenyl	7.622	172	288321	35.92	ng	0.03
Spiked Amount 50.000			Recovery	=	71.84%	
80) 2,4,6-Tribromophenol	8.931	330	76403	72.51	ng	0.03
Spiked Amount 100.000			Recovery	=	72.51%	
94) Terphenyl-d14	11.415	244	281927	39.28	ng	0.00
Spiked Amount 50.000			Recovery	=	78.56%	
Target Compounds						
8) 1,4-Dioxane	2.542	88	138108	69.0027	ng	91
9) Pyridine	2.969	79	191763	36.2670	ng	61
10) N-Nitrosodimethylamine	2.894	74	179514	58.1228	ng	65
12) Benzaldehyde	5.362	77	324202	136.4587	ng	73
13) Aniline	5.459	93	471620	78.1613	ng	65
14) Pentachloroethane	5.501	117	136518	88.4306	ng	83
15) bis(2-Chloroethyl)ether	5.517	93	365853	78.9094	ng	75
17) Phenol	5.437	94	251524	39.1220	ng	77
18) 2-Chlorophenol	5.560	128	359598	75.2627	ng	77
19) N-Decane	5.619	57	309733	75.1357	ng	84
20) 1,3-Dichlorobenzene	5.694	146	372302	72.4267	ng	98
22) 1,4-Dichlorobenzene	5.758	146	382827	81.4073	ng	97
23) 1,2-Dichlorobenzene	5.886	146	362877	81.6788	ng	98
24) Benzyl alcohol	5.854	108	234046	82.4281	ng	70
25) bis(2-chloroisopropyl)...	5.977	45	319364	73.6381	ng	95
26) 2-Methylphenol	5.950	108	302206	77.8179	ng	97
27) Acetophenone	6.073	105	592779	106.7914	ng	68
28) Hexachloroethane	6.164	117	137410	79.8436	ng	83
29) N-Nitroso-di-n-propyla...	6.078	70	213016	78.9820	ng	92
30) 3&4-Methylphenol	6.073	108	282175	72.7990	ng	85
33) Nitrobenzene	6.212	77	350648	92.0091	ng	73
34) Isophorone	6.404	82	631626	89.7629	ng	84
35) 2-Nitrophenol	6.468	139	194967	92.9104	ng	77
36) 2,4-Dimethylphenol	6.495	107	331482	87.4787	ng	89
37) Benzoic Acid	6.548	105	77088m	21.5320	ng	
38) bis(2-Chloroethoxy)met...	6.575	93	413738	86.8441	ng	96
39) 2,4-Dichlorophenol	6.655	162	292463	91.7642	ng	88
40) 1,2,4-Trichlorobenzene	6.725	180	310957	87.4633	ng	97
41) Naphthalene	6.789	128	1013169	83.3188	ng	99
42) 4-Chloroaniline	6.826	127	469887m	114.0252	ng	
43) Hexachlorobutadiene	6.890	225	156469	86.7801	ng	97
44) Caprolactam	7.093	113	69641	52.5262	ng	63
45) 4-Chloro-3-methylphenol	7.195	107	296035	93.2287	ng	79
46) 2-Methylnaphthalene	7.334	142	746798	94.1586	ng	99
47) 1-Methylnaphthalene	7.414	142	881608	114.3009	ng	92
49) 1,1'-Biphenyl	7.708	154	883035	95.4840	ng	95
51) 1,2,4,5-Tetrachloroben...	7.467	216	381611	114.2755	ng	98
52) Hexachlorocyclopentadiene	7.462	237	168754	101.6695	ng	98
53) 2,4,6-Trichlorophenol	7.553	196	222342	102.3739	ng	99
54) 2,4,5-Trichlorophenol	7.585	196	208243	93.0770	ng	98
56) 2-Chloronaphthalene	7.729	162	616722	89.7704	ng	92
57) 1,4-Dimethylnaphthalene	8.012	156	576552	96.6729	ng	86
59) Diphenyl Ether	7.799	170	586711	114.7718	ng	75
60) 2-Nitroaniline	7.804	65	219943	106.9342	ng	48
61) Coumarin	7.986	146	309205	107.9373	ng	86
62) Acenaphthylene	8.082	152	1010082	98.4582	ng	98
63) Dimethylphthalate	7.953	163	699328	92.7380	ng	99
64) 2,6-Dinitrotoluene	8.007	165	156262	95.9042	ng	62
65) Acenaphthene	8.237	153	647257	92.2175	ng	98
66) 3-Nitroaniline	8.151	138	209275	115.9170	ng	75
67) 2,4-Dinitrophenol	8.242	184	95398	112.3621	ng	42

Quantitation Report (QT Reviewed)

SampleID : WMB71479(MS) Operator : AH/JB Qt Meth : 7M.1008.M
 Data File: 7M95306.D Sam Mult : 1 Vial# : 3 Qt On : 10/19/18 14:52
 Acq On : 10/19/18 14:26 Misc : A,BNA Qt Upd On: 10/17/18 08:02

Data Path : G:\GCMSData\2018\GCMS_7\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) Dibenzofuran	8.386	168	960940	97.1048	ng	85
69) 2,4-Dinitrotoluene	8.360	165	217133	92.2794	ng	59
70) 4-Nitrophenol	8.274	65	63574	50.0916	ng	87
71) 2,3,4,6-Tetrachlorophenol	8.493	232	173863	86.9346	ng	85
72) Fluorene	8.707	166	702339	90.6281	ng	100
73) 4-Chlorophenyl-phenyle...	8.696	204	322190	90.2356	ng	87
74) Diethylphthalate	8.584	149	684525	90.3525	ng	96
75) 4-Nitroaniline	8.707	138	216711	97.5264	ng	68
76) Atrazine	9.326	200	229178	100.6168	ng	97
78) 4,6-Dinitro-2-methylph...	8.739	198	132462	118.5253	ng	68
79) n-Nitrosodiphenylamine	8.803	169	515222	76.0463	ng	99
81) 1,2-Diphenylhydrazine	8.851	77	715688	92.6807	ng	78
82) 4-Bromophenyl-phenylether	9.177	248	194043	90.3439	ng	79
83) Hexachlorobenzene	9.246	284	197130	90.3596	ng	65
84) N-Octadecane	9.519	57	405828	97.6617	ng	64
85) Pentachlorophenol	9.433	266	131750	95.0418	ng	98
86) Phenanthrene	9.663	178	1076577	91.2947	ng	99
87) Anthracene	9.716	178	1096904	91.7377	ng	99
88) Carbazole	9.882	167	1159950	106.2112	ng	97
89) Di-n-butylphthalate	10.267	149	1177812	94.5892	ng	97
90) Fluoranthene	10.972	202	1124423	92.0480	ng	93
92) Pyrene	11.228	202	1147838	94.7814	ng	94
93) Benzidine	11.116	184	70576	16.9657	ng	90
97) Butylbenzylphthalate	12.003	149	509783	90.2116	ng	75
99) 3,3'-Dichlorobenzidine	12.612	252	319556	90.5397	ng	96
100) Benzo[a]anthracene	12.639	228	1057241	91.8853	ng	99
101) Chrysene	12.681	228	924915	87.2932	ng	99
102) bis(2-Ethylhexyl)phtha...	12.703	149	686566	89.4472	ng	95
104) Di-n-octylphthalate	13.456	149	1103490	85.1444	ng	100
105) Benzo[b]fluoranthene	13.867	252	956081	88.9253	ng	95
106) Benzo[k]fluoranthene	13.899	252	1004064m	100.1275	ng	
107) Benzo[a]pyrene	14.220	252	899109	90.9848	ng	94
108) Indeno[1,2,3-cd]pyrene	15.539	276	989695	93.6849	ng	90
109) Dibenzo[a,h]anthracene	15.561	278	832182	94.6008	ng	94
110) Benzo[g,h,i]perylene	15.897	276	829397	93.6662	ng	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form3
Recovery Data Laboratory Limits
QC Batch: SMB71480

8101509 0576

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71458.D		SMB71480(MS)		10/19/2018 6:08:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	28.202	0	50	56	1	150
N-Nitrosodimethylamine	1	39.3025	0	50	79	50	130
Benzaldehyde	1	72.143	0	50	144	20	220
Aniline	1	23.9218	0	50	48	20	150
Pentachloroethane	1	44.8925	0	50	90	50	130
bis(2-Chloroethyl)ether	1	42.9403	0	50	86	50	130
Phenol	1	91.3638	0	100	91	20	150
2-Chlorophenol	1	90.7398	0	100	91	50	130
N-Decane	1	38.1105	0	50	76	20	130
1,3-Dichlorobenzene	1	40.6487	0	50	81	60	130
1,4-Dichlorobenzene	1	40.0966	0	50	80	60	130
1,2-Dichlorobenzene	1	40.3895	0	50	81	50	130
Benzyl alcohol	1	43.4013	0	50	87	20	130
bis(2-chloroisopropyl)ether	1	35.8778	0	50	72	40	130
2-Methylphenol	1	90.1464	0	100	90	50	130
Acetophenone	1	50.4493	0	50	101	50	130
Hexachloroethane	1	41.5687	0	50	83	50	130
N-Nitroso-di-n-propylamine	1	44.6399	0	50	89	40	130
3&4-Methylphenol	1	99.9003	0	100	100	70	130
Nitrobenzene	1	42.5702	0	50	85	70	130
Isophorone	1	42.2394	0	50	84	60	130
2-Nitrophenol	1	83.9975	0	100	84	70	130
2,4-Dimethylphenol	1	87.1553	0	100	87	50	130
Benzoic Acid	1	46.3262	0	100	46	20	130
bis(2-Chloroethoxy)methane	1	43.5543	0	50	87	60	130
2,4-Dichlorophenol	1	89.009	0	100	89	70	130
1,2,4-Trichlorobenzene	1	42.1855	0	50	84	50	130
Naphthalene	1	42.4433	0	50	85	50	130
4-Chloroaniline	1	29.9013	0	50	60	10	150
Hexachlorobutadiene	1	40.0143	0	50	80	60	130
Caprolactam	1	51.6812	0	50	103	50	130
4-Chloro-3-methylphenol	1	92.0829	0	100	92	50	130
2-Methylnaphthalene	1	42.5668	0	50	85	70	130
1-Methylnaphthalene	1	49.1462	0	50	98	70	130
1,1'-Biphenyl	1	41.6084	0	50	83	60	130
1,2,4,5-Tetrachlorobenzene	1	46.9705	0	50	94	70	130
Hexachlorocyclopentadiene	1	36.9806	0	50	74	20	160
2,4,6-Trichlorophenol	1	95.1549	0	100	95	70	130
2,4,5-Trichlorophenol	1	91.3435	0	100	91	70	130
2-Chloronaphthalene	1	43.1069	0	50	86	70	130
1,4-Dimethylnaphthalene	1	42.1061	0	50	84	70	130
Diphenyl Ether	1	49.3646	0	50	99	70	130
2-Nitroaniline	1	44.2043	0	50	88	50	130
Coumarin	1	45.5689	0	50	91	70	130
Acenaphthylene	1	45.9629	0	50	92	70	130
Dimethylphthalate	1	43.8624	0	50	88	70	130
2,6-Dinitrotoluene	1	45.4201	0	50	91	70	130
Acenaphthene	1	44.2505	0	50	89	50	130
3-Nitroaniline	1	30.3417	0	50	61	10	130
2,4-Dinitrophenol	1	68.1514	0	100	68	20	150
Dibenzofuran	1	42.0026	0	50	84	70	130
2,4-Dinitrotoluene	1	40.1025	0	50	80	40	130
4-Nitrophenol	1	80.0494	0	100	80	20	150
2,3,4,6-Tetrachlorophenol	1	82.5607	0	100	83	70	130
Fluorene	1	43.9972	0	50	88	50	130
4-Chlorophenyl-phenylether	1	43.4783	0	50	87	70	130
Diethylphthalate	1	44.1763	0	50	88	70	130
4-Nitroaniline	1	41.0915	0	50	82	50	130
Atrazine	1	50.3632	0	50	101	50	130
4,6-Dinitro-2-methylphenol	1	83.5957	0	100	84	70	130
n-Nitrosodiphenylamine	1	36.3496	0	50	73	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	47.5244	0	50	95	70	130
4-Bromophenyl-phenylether	1	45.8316	0	50	92	70	130
Hexachlorobenzene	1	43.1999	0	50	86	70	130
N-Octadecane	1	41.2285	0	50	82	70	130
Pentachlorophenol	1	92.4051	0	100	92	40	130
Phenanthrene	1	45.534	0	50	91	70	130
Anthracene	1	45.1579	0	50	90	70	130
Carbazole	1	43.0496	0	50	86	70	130
Di-n-butylphthalate	1	43.224	0	50	86	70	130
Fluoranthene	1	46.8452	0	50	94	70	130
Pyrene	1	45.1072	0	50	90	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	46.2318	0	50	92	50	130
3,3'-Dichlorobenzidine	1	21.664	0	50	43	10	130
Benzo[a]anthracene	1	43.0244	0	50	86	70	130
Chrysene	1	40.6083	0	50	81	60	130
bis(2-Ethylhexyl)phthalate	1	45.6641	0	50	91	70	130
Di-n-octylphthalate	1	45.7069	0	50	91	70	130
Benzo[b]fluoranthene	1	45.6545	0	50	91	70	130
Benzo[k]fluoranthene	1	51.6746	0	50	103	70	130
Benzo[a]pyrene	1	42.5649	0	50	85	70	130
Indeno[1,2,3-cd]pyrene	1	46.1916	0	50	92	70	130
Dibenzo[a,h]anthracene	1	47.0664	0	50	94	60	130
Benzo[g,h,i]perylene	1	43.7819	0	50	88	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

SampleID : SMB71480(MS)
Data File: 10M71458.D
Acq On : 10/19/18 18:08

Operator : AH/JB
Sam Mult : 1 Vial# : 21
Misc : S,BNA

Qt Meth : 10M_1008.M
Qt On : 10/22/18 10:37
Qt Upd On: 10/19/18 15:07

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
Qt Path : G:\GCMSData\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.706	96	36044	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.894	152	75473	40.00	ng	0.00
31) Naphthalene-d8	6.894	136	276810	40.00	ng	0.00
50) Acenaphthene-d10	8.333	164	175960	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	311419	40.00	ng	0.00
91) Chrysene-d12	12.863	240	309669	40.00	ng	0.00
103) Perylene-d12	14.494	264	286195	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	249137	119.40	ng	0.00
Spiked Amount 100.000			Recovery =	119.40%		
16) Phenol-d5	5.583	99	348826	123.52	ng	0.00
Spiked Amount 100.000			Recovery =	123.52%		
32) Nitrobenzene-d5	6.343	128	45218	50.84	ng	0.00
Spiked Amount 50.000			Recovery =	101.68%		
55) 2-Fluorobiphenyl	7.733	172	309573	54.95	ng	0.00
Spiked Amount 50.000			Recovery =	109.90%		
80) 2,4,6-Tribromophenol	9.076	330	83895	115.37	ng	0.00
Spiked Amount 100.000			Recovery =	115.37%		
94) Terphenyl-d14	11.601	244	330387	58.23	ng	0.00
Spiked Amount 50.000			Recovery =	116.46%		
Target Compounds						
8) 1,4-Dioxane	2.754	88	20651	23.7738	ng	92
9) Pyridine	3.246	79	55112	28.2020	ng	70
10) N-Nitrosodimethylamine	3.176	74	47209	39.3025	ng	87
12) Benzaldehyde	5.524	77	72455	72.1430	ng	72
13) Aniline	5.615	93	69637	23.9218	ng	10
14) Pentachloroethane	5.658	117	35441	44.8925	ng	74
15) bis(2-Chloroethyl)ether	5.674	93	89575	42.9403	ng	76
17) Phenol	5.599	94	255539m	91.3638	ng	
18) 2-Chlorophenol	5.717	128	211977	90.7398	ng	77
19) N-Decane	5.749	57	69873m	38.1105	ng	
20) 1,3-Dichlorobenzene	5.845	146	105295	40.6487	ng	97
22) 1,4-Dichlorobenzene	5.910	146	111358	40.0966	ng	97
23) 1,2-Dichlorobenzene	6.033	146	109610	40.3895	ng	93
24) Benzyl alcohol	6.006	108	66463	43.4013	ng	79
25) bis(2-chloroisopropyl)...	6.113	45	92434	35.8778	ng	79
26) 2-Methylphenol	6.097	108	197865	90.1464	ng	95
27) Acetophenone	6.220	105	156815	50.4493	ng	90
28) Hexachloroethane	6.305	117	44708	41.5687	ng	87
29) N-Nitroso-di-n-propyla...	6.214	70	64664	44.6399	ng	80
30) 3&4-Methylphenol	6.214	108	208267	99.9003	ng	89
33) Nitrobenzene	6.359	77	102382	42.5702	ng	77
34) Isophorone	6.541	82	174845	42.2394	ng	82
35) 2-Nitrophenol	6.605	139	110556	83.9975	ng	88
36) 2,4-Dimethylphenol	6.626	107	214128	87.1553	ng	97
37) Benzoic Acid	6.707	105	88484	46.3262	ng	89
38) bis(2-Chloroethoxy)met...	6.696	93	113093	43.5543	ng	96
39) 2,4-Dichlorophenol	6.787	162	190793	89.0090	ng	82
40) 1,2,4-Trichlorobenzene	6.851	180	98027	42.1855	ng	95
41) Naphthalene	6.915	128	312516	42.4433	ng	100
42) 4-Chloroaniline	6.953	127	71165	29.9013	ng	92
43) Hexachlorobutadiene	6.995	225	52052	40.0143	ng	92
44) Caprolactam	7.231	113	38888	51.6812	ng	52
45) 4-Chloro-3-methylphenol	7.311	107	180845	92.0829	ng	79
46) 2-Methylnaphthalene	7.450	142	206564	42.5668	ng	97
47) 1-Methylnaphthalene	7.530	142	234589	49.1462	ng	93
48) Methylnaphthalenes (To...	7.530	142	438560m	91.2848	ng	
49) 1,1'-Biphenyl	7.824	154	250925	41.6084	ng	92
51) 1,2,4,5-Tetrachloroben...	7.584	216	113289	46.9705	ng	100
52) Hexachlorocyclopentadiene	7.568	237	32266	36.9806	ng	98
53) 2,4,6-Trichlorophenol	7.669	196	139435	95.1549	ng	99
54) 2,4,5-Trichlorophenol	7.707	196	142169	91.3435	ng	96
56) 2-Chloronaphthalene	7.851	162	200293	43.1069	ng	92
57) 1,4-Dimethylnaphthalene	8.129	156	161475	42.1061	ng	82
58) Dimethylnaphthalenes (...)	8.129	156	161475	42.1061	ng	82
59) Diphenyl Ether	7.905	170	169940	49.3646	ng	83
60) 2-Nitroaniline	7.926	65	72990	44.2043	ng	45
61) Coumarin	8.113	146	77969	45.5689	ng	65
62) Acenaphthylene	8.210	152	314991	45.9629	ng	98
63) Dimethylphthalate	8.065	163	238030	43.8624	ng	98
64) 2,6-Dinitrotoluene	8.129	165	51295	45.4201	ng	74
65) Acenaphthene	8.359	153	213850	44.2505	ng	97

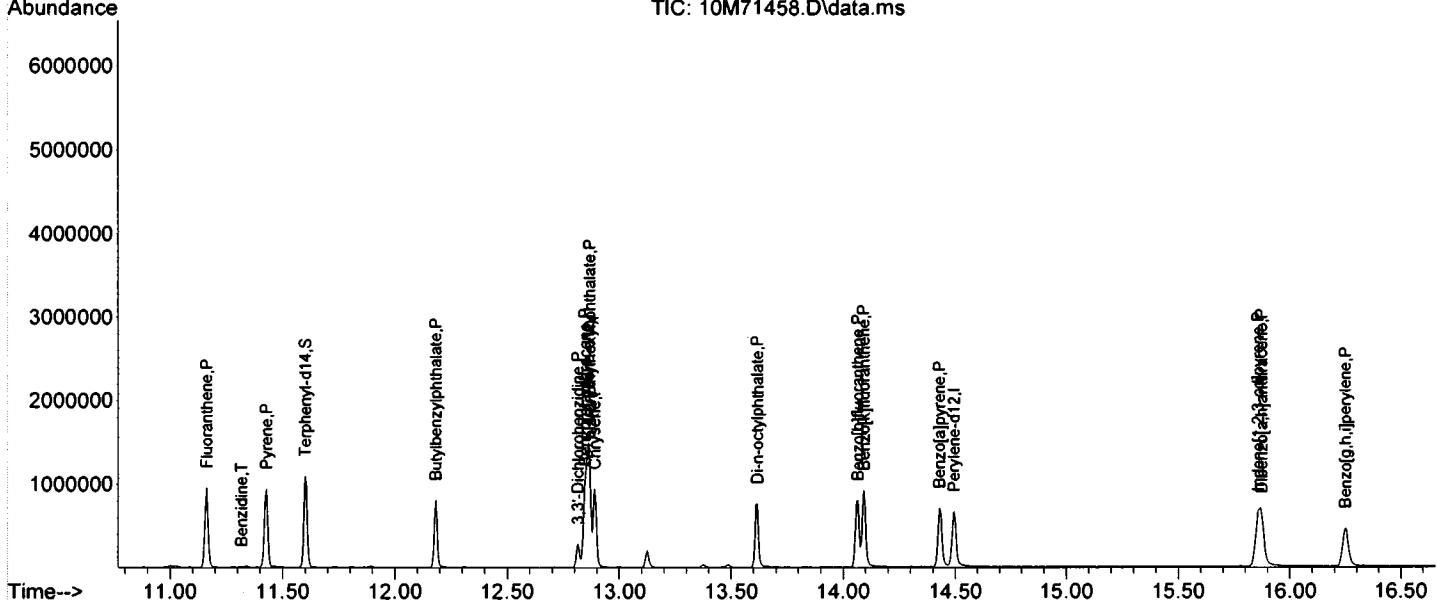
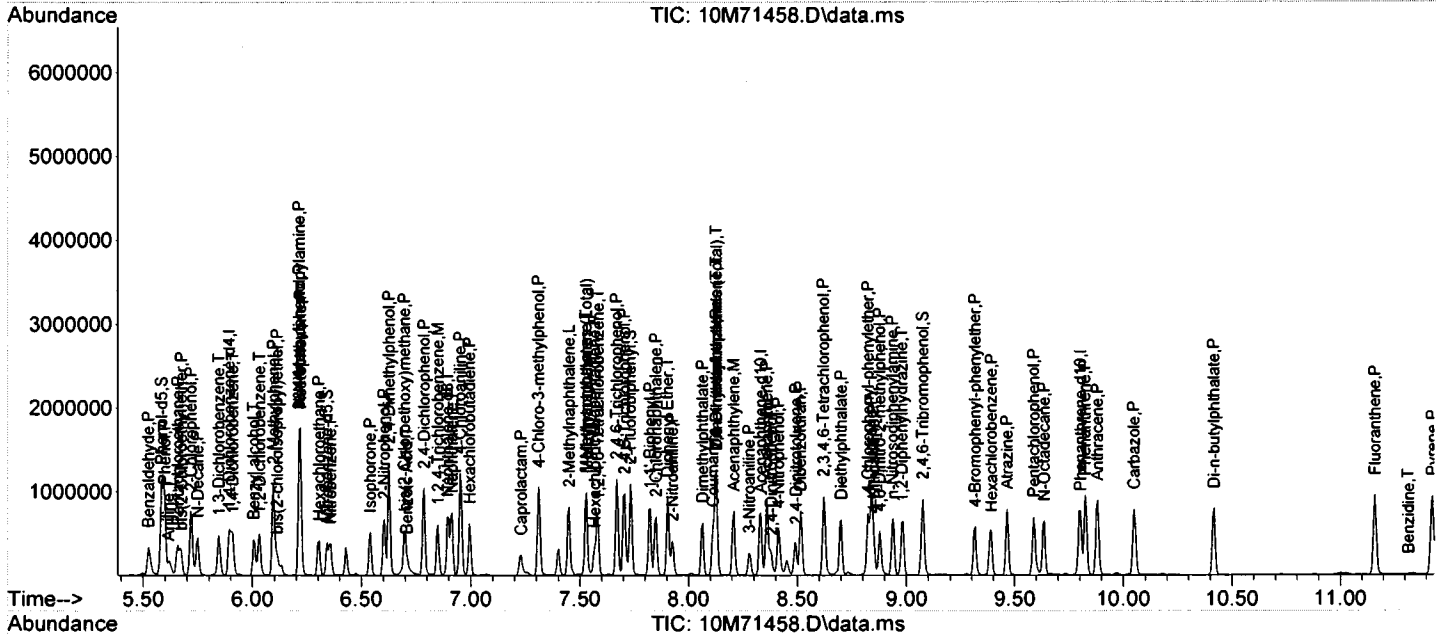
Quantitation Report (QT Reviewed)

SampleID : SMB71480(MS) Operator : AH/JB Qt Meth : 10M_1008.M
 Data File: 10M71458.D Sam Mult : 1 Vial# : 21 Qt On : 10/22/18 10:37
 Acq On : 10/19/18 18:08 Misc : S,BNA Qt Upd On: 10/19/18 15:07

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.279	138	42156	30.3417	ng	78
67) 2,4-Dinitrophenol	8.381	184	44875	68.1514	ng	29
68) Dibenzofuran	8.514	168	294056	42.0026	ng	91
69) 2,4-Dinitrotoluene	8.493	165	71172	40.1025	ng	63
70) 4-Nitrophenol	8.413	65	79547	80.0494	ng	45
71) 2,3,4,6-Tetrachlorophenol	8.621	232	111964	82.5607	ng	87
72) Fluorene	8.841	166	243779	43.9972	ng	100
73) 4-Chlorophenyl-phenyle...	8.825	204	114945	43.4783	ng	83
74) Diethylphthalate	8.702	149	236956	44.1763	ng	95
75) 4-Nitroaniline	8.851	138	61627	41.0915	ng	93
76) Atrazine	9.466	200	90654	50.3632	ng	97
78) 4,6-Dinitro-2-methylph...	8.878	198	77940	83.5957	ng	58
79) n-Nitrosodiphenylamine	8.937	169	170671	36.3496	ng	98
81) 1,2-Diphenylhydrazine	8.980	77	272241	47.5244	ng	91
82) 4-Bromophenyl-phenylether	9.317	248	66100	45.8316	ng	84
83) Hexachlorobenzene	9.392	284	66917	43.1999	ng	67
84) N-Octadecane	9.638	57	108635	41.2285	ng	76
85) Pentachlorophenol	9.589	266	74466	92.4051	ng	96
86) Phenanthrene	9.825	178	374652	45.5340	ng	99
87) Anthracene	9.884	178	377091	45.1579	ng	98
88) Carbazole	10.049	167	327059	43.0496	ng	97
89) Di-n-butylphthalate	10.418	149	417066	43.2240	ng	97
90) Fluoranthene	11.162	202	406514	46.8452	ng	85
92) Pyrene	11.429	202	430508	45.1072	ng	81
93) Benzidine	11.317	184	5559	1.5553	ng	84
97) Butylbenzylphthalate	12.184	149	184950	46.2318	ng	77
99) 3,3'-Dichlorobenzidine	12.815	252	62615	21.6640	ng	92
100) Benzo[a]anthracene	12.847	228	369664	43.0244	ng	99
101) Chrysene	12.890	228	342637	40.6083	ng	100
102) bis(2-Ethylhexyl)phtha...	12.868	149	270510	45.6641	ng	97
104) Di-n-octylphthalate	13.617	149	440181	45.7069	ng	99
105) Benzo[b]fluoranthene	14.066	252	354595m	45.6545	ng	
106) Benzo[k]fluoranthene	14.093	252	395404	51.6746	ng	93
107) Benzo[a]pyrene	14.430	252	321036	42.5649	ng	93
108) Indeno[1,2,3-cd]pyrene	15.858	276	366709	46.1916	ng	89
109) Dibenzo[a,h]anthracene	15.874	278	309961	47.0664	ng	89
110) Benzo[g,h,i]perylene	16.249	276	306958	43.7819	ng	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
QC Batch: WMB71496

8101509 0581

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105911.D		WMB71496(MS)		10/22/2018 2:01:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	64.7632	0	100	65	20	160
Pyridine	1	60.6331	0	100	61	1	150
N-Nitrosodimethylamine	1	65.3107	0	100	65	20	150
Benzaldehyde	1	148.3097	0	100	148	20	234
Aniline	1	91.8636	0	100	92	20	150
Pentachloroethane	1	94.2442	0	100	94	5	140
bis(2-Chloroethyl)ether	1	90.3106	0	100	90	43	126
Phenol	1	49.6041	0	100	50	17	120
2-Chlorophenol	1	94.364	0	100	94	36	120
N-Decane	1	84.68	0	100	85	40	130
1,3-Dichlorobenzene	1	88.6504	0	100	89	20	130
1,4-Dichlorobenzene	1	92.9726	0	100	93	25	130
1,2-Dichlorobenzene	1	93.1074	0	100	93	25	130
Benzyl alcohol	1	91.4135	0	100	91	35	130
bis(2-chloroisopropyl)ether	1	84.4418	0	100	84	63	139
2-Methylphenol	1	93.8456	0	100	94	35	130
Acetophenone	1	104.0474	0	100	104	50	130
Hexachloroethane	1	92.1418	0	100	92	55	120
N-Nitroso-di-n-propylamine	1	91.4586	0	100	91	14	198
3&4-Methylphenol	1	82.3905	0	100	82	30	130
Nitrobenzene	1	97.577	0	100	98	54	158
Isophorone	1	99.5552	0	100	100	47	180
2-Nitrophenol	1	105.8593	0	100	106	45	167
2,4-Dimethylphenol	1	93.6033	0	100	94	42	120
Benzoic Acid	1	17.7912	0	100	18	1	130
bis(2-Chloroethoxy)methane	1	95.5852	0	100	96	49	165
2,4-Dichlorophenol	1	104.6322	0	100	105	53	122
1,2,4-Trichlorobenzene	1	96.3014	0	100	96	57	130
Naphthalene	1	90.9299	0	100	91	36	120
4-Chloroaniline	1	114.3614	0	100	114	30	170
Hexachlorobutadiene	1	95.0275	0	100	95	38	120
Caprolactam	1	43.5698	0	100	44	5	130
4-Chloro-3-methylphenol	1	105.7048	0	100	106	41	128
2-Methylnaphthalene	1	98.4589	0	100	98	40	130
1-Methylnaphthalene	1	106.368	0	100	106	50	130
1,1'-Biphenyl	1	89.388	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	104.9541	0	100	105	60	140
Hexachlorocyclopentadiene	1	93.8181	0	100	94	20	130
2,4,6-Trichlorophenol	1	109.5392	0	100	110	52	129
2,4,5-Trichlorophenol	1	108.5806	0	100	109	50	130
2-Chloronaphthalene	1	97.068	0	100	97	65	120
1,4-Dimethylnaphthalene	1	85.7191	0	100	86	50	130
Diphenyl Ether	1	108.542	0	100	109	50	140
2-Nitroaniline	1	97.4064	0	100	97	40	150
Coumarin	1	100.0713	0	100	100	1	180
Acenaphthylene	1	109.3586	0	100	109	54	126
Dimethylphthalate	1	101.1701	0	100	101	1	120
2,6-Dinitrotoluene	1	94.7275	0	100	95	68	137
Acenaphthene	1	98.8273	0	100	99	60	132
3-Nitroaniline	1	107.7116	0	100	108	40	150
2,4-Dinitrophenol	1	96.7183	0	100	97	1	173
Dibenzofuran	1	98.2799	0	100	98	50	130
2,4-Dinitrotoluene	1	98.2775	0	100	98	48	127
4-Nitrophenol	1	49.3032	0	100	49	13	129
2,3,4,6-Tetrachlorophenol	1	99.8679	0	100	100	50	130
Fluorene	1	101.3255	0	100	101	70	120
4-Chlorophenyl-phenylether	1	99.928	0	100	100	38	145
Diethylphthalate	1	102.1885	0	100	102	1	120
4-Nitroaniline	1	96.7903	0	100	97	40	150
Atrazine	1	104.3752	0	100	104	40	150
4,6-Dinitro-2-methylphenol	1	116.3409	0	100	116	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71496

n-Nitrosodiphenylamine	1	85.2018	0	100	85	30	130
1,2-Diphenylhydrazine	1	99.0804	0	100	99	40	130
4-Bromophenyl-phenylether	1	107.5056	0	100	108	65	120
Hexachlorobenzene	1	103.2218	0	100	103	8	142
N-Octadecane	1	83.1169	0	100	83	50	130
Pentachlorophenol	1	113.9555	0	100	114	38	152
Phenanthrene	1	103.0639	0	100	103	65	120
Anthracene	1	103.0442	0	100	103	43	120
Carbazole	1	98.3681	0	100	98	40	130
Di-n-butylphthalate	1	99.5785	0	100	100	8	120
Fluoranthene	1	100.4953	0	100	100	43	121
Pyrene	1	110.017	0	100	110	70	120
Benzidine	1	17.1392	0	100	17	1	134
Butylbenzylphthalate	1	102.5386	0	100	103	1	140
3,3'-Dichlorobenzidine	1	109.6232	0	100	110	8	213
Benzo[a]anthracene	1	105.313	0	100	105	42	133
Chrysene	1	95.9479	0	100	96	44	140
bis(2-Ethylhexyl)phthalate	1	101.3916	0	100	101	29	137
Di-n-octylphthalate	1	101.7064	0	100	102	19	132
Benzo[b]fluoranthene	1	111.5369	0	100	112	42	140
Benzo[k]fluoranthene	1	113.9547	0	100	114	25	146
Benzo[a]pyrene	1	100.5125	0	100	101	32	148
Indeno[1,2,3-cd]pyrene	1	101.877	0	100	102	1	151
Dibenzo[a,h]anthracene	1	101.875	0	100	102	1	200
Benzo[g,h,i]perylene	1	101.299	0	100	101	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

8101509 0583

SampleID : WMB71496(MS)
 Data File: 5M105911.D
 Acq On : 10/22/18 14:01

Operator : AH/JB
 Sam Mult : 1 Vial# : 17
 Misc : A,BNA

Qt Meth : 5M 1000.1
 Qt On : 10/22/18 14:46
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS 5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS 5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	53644	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	95073	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	357106	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	205040	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	339251	40.00	ng	0.00
91) Chrysene-d12	12.666	240	340979	40.00	ng	0.00
103) Perylene-d12	14.279	264	275093	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	252306	90.60	ng	0.00
Spiked Amount 100.000			Recovery	=	90.60%	
16) Phenol-d5	5.432	99	258986	60.30	ng	0.00
Spiked Amount 100.000			Recovery	=	60.30%	
32) Nitrobenzene-d5	6.196	128	78446	74.44	ng	0.00
Spiked Amount 50.000			Recovery	=	148.88%	
55) 2-Fluorobiphenyl	7.580	172	464390	70.81	ng	0.00
Spiked Amount 50.000			Recovery	=	141.62%	
80) 2,4,6-Tribromophenol	8.899	330	101156	143.98	ng	0.00
Spiked Amount 100.000			Recovery	=	143.98%	
94) Terphenyl-d14	11.410	244	462322	84.77	ng	0.00
Spiked Amount 50.000			Recovery	=	169.54%	
Target Compounds						
8) 1,4-Dioxane	2.564	88	88735	64.7632	ng	84
9) Pyridine	3.028	79	205758	60.6331	ng	77
10) N-Nitrosodimethylamine	2.959	74	126188	65.3107	ng	83
12) Benzaldehyde	5.374	77	240811	148.3097	ng	79
13) Aniline	5.464	93	425321	91.8636	ng	56
14) Pentachloroethane	5.502	117	100911	94.2442	ng	80
15) bis(2-Chloroethyl)ether	5.523	93	303785	90.3106	ng	82
17) Phenol	5.443	94	221092m	49.6041	ng	
18) 2-Chlorophenol	5.561	128	302436	94.3640	ng	83
19) N-Decane	5.598	57	311593	84.6800	ng	89
20) 1,3-Dichlorobenzene	5.689	146	318956m	88.6504	ng	
22) 1,4-Dichlorobenzene	5.753	146	330259	92.9726	ng	96
23) 1,2-Dichlorobenzene	5.881	146	307493	93.1074	ng	98
24) Benzyl alcohol	5.860	108	177881	91.4135	ng	76
25) bis(2-chloroisopropyl)...	5.967	45	378568	84.4418	ng	99
26) 2-Methylphenol	5.951	108	267918	93.8456	ng	98
27) Acetophenone	6.073	105	432962	104.0474	ng	81
28) Hexachloroethane	6.148	117	121614	92.1418	ng	82
29) N-Nitroso-di-n-propyla...	6.073	70	200390	91.4586	ng	75
30) 3&4-Methylphenol	6.073	108	248821	82.3905	ng	84
33) Nitrobenzene	6.212	77	321376	97.5770	ng	80
34) Isophorone	6.394	82	567594	99.5552	ng	92
35) 2-Nitrophenol	6.458	139	179736	105.8593	ng	90
36) 2,4-Dimethylphenol	6.485	107	309125	93.6033	ng	95
37) Benzoic Acid	6.570	105	29379m	17.7912	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	354642	95.5852	ng	97
39) 2,4-Dichlorophenol	6.640	162	275978	104.6322	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	267604	96.3014	ng	97
41) Naphthalene	6.768	128	868322	90.9299	ng	99
42) 4-Chloroaniline	6.805	127	356533	114.3614	ng	91
43) Hexachlorobutadiene	6.848	225	141420	95.0275	ng	96
44) Caprolactam	7.088	113	42077	43.5698	ng	70
45) 4-Chloro-3-methylphenol	7.169	107	283673	105.7048	ng	79
46) 2-Methylnaphthalene	7.297	142	604302	98.4589	ng	99
47) 1-Methylnaphthalene	7.377	142	642168	106.3680	ng	93
48) Methylnaphthalenes (To...	7.297	142	1241299m	205.1821	ng	
49) 1,1'-Biphenyl	7.665	154	643670	89.3880	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	298241	104.9541	ng	99
52) Hexachlorocyclopentadiene	7.414	237	107422	93.8181	ng	98
53) 2,4,6-Trichlorophenol	7.516	196	191046	109.5392	ng	100
54) 2,4,5-Trichlorophenol	7.548	196	202244	108.5806	ng	99
56) 2-Chloronaphthalene	7.687	162	535338	97.0680	ng	93
57) 1,4-Dimethylnaphthalene	7.965	156	396501	85.7191	ng	92
58) Dimethylnaphthalenes (...)	7.965	156	396501	85.7191	ng	92
59) Diphenyl Ether	7.746	170	444139	108.5420	ng	84
60) 2-Nitroaniline	7.772	65	221068	97.4064	ng	57
61) Coumarin	7.954	146	212367	100.0713	ng	71
62) Acenaphthylene	8.045	152	906768	109.3586	ng	99
63) Dimethylphthalate	7.911	163	625015	101.1701	ng	99
64) 2,6-Dinitrotoluene	7.970	165	136325	94.7275	ng	70
65) Acenaphthene	8.194	153	564094	98.8273	ng	95

SampleID : WMB71496(MS)
 Data File: 5M105911.D
 Acq On : 10/22/18 14:01

Operator : AH/JB
 Sam Mult : 1 Vial# : 17
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/22/18 14:46
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.125	138	164652	107.7116	ng	73
67)	2,4-Dinitrophenol	8.216	184	67213	96.7183	ng	46
68)	Dibenzofuran	8.344	168	811955	98.2799	ng	88
69)	2,4-Dinitrotoluene	8.328	165	193332	98.2775	ng	71
70)	4-Nitrophenol	8.253	65	55425	49.3032	ng	93
71)	2,3,4,6-Tetrachlorophenol	8.451	232	158088	99.8679	ng	86
72)	Fluorene	8.664	166	638472	101.3255	ng	98
73)	4-Chlorophenyl-phenyle...	8.654	204	285549	99.9280	ng	86
74)	Diethylphthalate	8.536	149	624794	102.1885	ng	99
75)	4-Nitroaniline	8.691	138	178298	96.7903	ng	79
76)	Atrazine	9.300	200	195515	104.3752	ng	97
78)	4,6-Dinitro-2-methylph...	8.713	198	114028	116.3409	ng	54
79)	n-Nitrosodiphenylamine	8.771	169	451457	85.2018	ng	99
81)	1,2-Diphenylhydrazine	8.809	77	748701	99.0804	ng	88
82)	4-Bromophenyl-phenylether	9.140	248	171525	107.5056	ng	82
83)	Hexachlorobenzene	9.209	284	158185	103.2218	ng	71
84)	N-Octadecane	9.460	57	377777	83.1169	ng	86
85)	Pentachlorophenol	9.407	266	95393	113.9555	ng	96
86)	Phenanthrene	9.642	178	948319	103.0639	ng	99
87)	Anthracene	9.695	178	951293	103.0442	ng	99
88)	Carbazole	9.866	167	842413	98.3681	ng	98
89)	Di-n-butylphthalate	10.240	149	1093688	99.5785	ng	97
90)	Fluoranthene	10.967	202	1000222	100.4953	ng	96
92)	Pyrene	11.234	202	1069612	110.0170	ng	89
93)	Benzidine	11.127	184	59200	17.1392	ng	88
97)	Butylbenzylphthalate	11.998	149	470433	102.5386	ng	78
99)	3,3'-Dichlorobenzidine	12.628	252	291796	109.6232	ng	97
100)	Benzo[a]anthracene	12.655	228	971008	105.3130	ng	99
101)	Chrysene	12.698	228	847224	95.9479	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.687	149	679200	101.3916	ng	96
104)	Di-n-octylphthalate	13.435	149	1078804	101.7064	ng	100
105)	Benzo[b]fluoranthene	13.873	252	863741	111.5369	ng	94
106)	Benzo[k]fluoranthene	13.900	252	887943m	113.9547	ng	
107)	Benzo[a]pyrene	14.220	252	808760	100.5125	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.567	276	895334	101.8770	ng	97
109)	Dibenzo[a,h]anthracene	15.577	278	770396	101.8750	ng	94
110)	Benzo[g,h,i]perylene	15.930	276	753842	101.2990	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71497

8101509 0586

Data File		Sample ID:			Analysis Date		
Spike or Dup: 5M105925.D		WMB71497(MS)			10/23/2018 9:35:00 AM		
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	53.0069	0	100	53	20	160
Pyridine	1	21.1511	0	100	21	1	150
N-Nitrosodimethylamine	1	52.7103	0	100	53	20	150
Benzaldehyde	1	125.5905	0	100	126	20	234
Aniline	1	55.2225	0	100	55	20	150
Pentachloroethane	1	75.9432	0	100	76	5	140
bis(2-Chloroethyl)ether	1	68.0886	0	100	68	43	126
Phenol	1	32.1749	0	100	32	17	120
2-Chlorophenol	1	66.2886	0	100	66	36	120
N-Decane	1	63.4835	0	100	63	40	130
1,3-Dichlorobenzene	1	66.6863	0	100	67	20	130
1,4-Dichlorobenzene	1	71.2104	0	100	71	25	130
1,2-Dichlorobenzene	1	72.686	0	100	73	25	130
Benzyl alcohol	1	89.5934	0	100	90	35	130
bis(2-chloroisopropyl)ether	1	65.1174	0	100	65	63	139
2-Methylphenol	1	68.1506	0	100	68	35	130
Acetophenone	1	95.0871	0	100	95	50	130
Hexachloroethane	1	67.4131	0	100	67	55	120
N-Nitroso-di-n-propylamine	1	74.3506	0	100	74	14	198
3&4-Methylphenol	1	60.4851	0	100	60	30	130
Nitrobenzene	1	81.5761	0	100	82	54	158
Isophorone	1	87.6215	0	100	88	47	180
2-Nitrophenol	1	83.5626	0	100	84	45	167
2,4-Dimethylphenol	1	69.639	0	100	70	42	120
Benzoic Acid	1	15.9754	0	100	16	1	130
bis(2-Chloroethoxy)methane	1	81.5234	0	100	82	49	165
2,4-Dichlorophenol	1	80.6862	0	100	81	53	122
1,2,4-Trichlorobenzene	1	79.4017	0	100	79	57	130
Naphthalene	1	77.6791	0	100	78	36	120
4-Chloroaniline	1	117.0319	0	100	117	30	170
Hexachlorobutadiene	1	78.1038	0	100	78	38	120
Caprolactam	1	51.1066	0	100	51	5	130
4-Chloro-3-methylphenol	1	82.6556	0	100	83	41	128
2-Methylnaphthalene	1	99.8825	0	100	100	40	130
1-Methylnaphthalene	1	101.9348	0	100	102	50	130
1,1'-Biphenyl	1	88.7145	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	97.1347	0	100	97	60	140
Hexachlorocyclopentadiene	1	76.1999	0	100	76	20	130
2,4,6-Trichlorophenol	1	85.0894	0	100	85	52	129
2,4,5-Trichlorophenol	1	84.5973	0	100	85	50	130
2-Chloronaphthalene	1	85.9859	0	100	86	65	120
1,4-Dimethylnaphthalene	1	83.1301	0	100	83	50	130
Diphenyl Ether	1	101.9591	0	100	102	50	140
2-Nitroaniline	1	95.7188	0	100	96	40	150
Coumarin	1	99.6953	0	100	100	1	180
Acenaphthylene	1	94.4285	0	100	94	54	126
Dimethylphthalate	1	90.0501	0	100	90	1	120
2,6-Dinitrotoluene	1	85.2405	0	100	85	68	137
Acenaphthene	1	86.2264	0	100	86	60	132
3-Nitroaniline	1	113.42	0	100	113	40	150
2,4-Dinitrophenol	1	83.3186	0	100	83	1	173
Dibenzofuran	1	102.7905	0	100	103	50	130
2,4-Dinitrotoluene	1	88.1408	0	100	88	48	127
4-Nitrophenol	1	29.9052	0	100	30	13	129
2,3,4,6-Tetrachlorophenol	1	78.0003	0	100	78	50	130
Fluorene	1	90.6357	0	100	91	70	120
4-Chlorophenyl-phenylether	1	89.6735	0	100	90	38	145
Diethylphthalate	1	86.1218	0	100	86	1	120
4-Nitroaniline	1	102.9223	0	100	103	40	150
Atrazine	1	100.394	0	100	100	40	150
4,6-Dinitro-2-methylphenol	1	98.1741	0	100	98	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	72.891	0	100	73	30	130
1,2-Diphenylhydrazine	1	87.3321	0	100	87	40	130
4-Bromophenyl-phenylether	1	93.2631	0	100	93	65	120
Hexachlorobenzene	1	90.2638	0	100	90	8	142
N-Octadecane	1	79.5228	0	100	80	50	130
Pentachlorophenol	1	88.6987	0	100	89	38	152
Phenanthrene	1	88.9204	0	100	89	65	120
Anthracene	1	90.9866	0	100	91	43	120
Carbazole	1	100.7168	0	100	101	40	130
Di-n-butylphthalate	1	86.2762	0	100	86	8	120
Fluoranthene	1	90.3642	0	100	90	43	121
Pyrene	1	93.5296	0	100	94	70	120
Benzidine	1	21.1067	0	100	21	1	134
Butylbenzylphthalate	1	81.9251	0	100	82	1	140
3,3'-Dichlorobenzidine	1	87.7538	0	100	88	8	213
Benzo[a]anthracene	1	90.3826	0	100	90	42	133
Chrysene	1	84.5684	0	100	85	44	140
bis(2-Ethylhexyl)phthalate	1	78.343	0	100	78	29	137
Di-n-octylphthalate	1	78.1737	0	100	78	19	132
Benzo[b]fluoranthene	1	100.5186	0	100	101	42	140
Benzo[k]fluoranthene	1	96.159	0	100	96	25	146
Benzo[a]pyrene	1	88.7339	0	100	89	32	148
Indeno[1,2,3-cd]pyrene	1	91.9515	0	100	92	1	151
Dibenzo[a,h]anthracene	1	92.2738	0	100	92	1	200
Benzo[g,h,i]perylene	1	91.0223	0	100	91	1	195

SampleID : WMB71497(MS)
 Data File: 5M105925.D
 Acq On : 10/23/18 09:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/23/18 10:12
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.505	96	55324	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	96626	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	343299	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	201648	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	334137	40.00	ng	0.00
91) Chrysene-d12	12.666	240	338141	40.00	ng	0.00
103) Perylene-d12	14.279	264	265110	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	98545	34.31	ng	0.00
Spiked Amount 100.000			Recovery =	34.31%		
16) Phenol-d5	5.427	99	103621	23.39	ng	0.00
Spiked Amount 100.000			Recovery =	23.39%		
32) Nitrobenzene-d5	6.196	128	35045	34.59	ng	0.00
Spiked Amount 50.000			Recovery =	69.18%		
55) 2-Fluorobiphenyl	7.580	172	212402	32.93	ng	0.00
Spiked Amount 50.000			Recovery =	65.86%		
80) 2,4,6-Tribromophenol	8.900	330	47580	74.83	ng	0.00
Spiked Amount 100.000			Recovery =	74.83%		
94) Terphenyl-d14	11.410	244	208155	38.49	ng	0.00
Spiked Amount 50.000			Recovery =	76.98%		
Target Compounds						
8) 1,4-Dioxane	2.537	88	74601	53.0069	ng	84
9) Pyridine	3.034	79	74024	21.1511	ng	68
10) N-Nitrosodimethylamine	2.938	74	105032	52.7103	ng	80
12) Benzaldehyde	5.368	77	210308	125.5905	ng	76
13) Aniline	5.459	93	259755	55.2225	ng	55
14) Pentachloroethane	5.497	117	83862	75.9432	ng	77
15) bis(2-Chloroethyl) ether	5.518	93	236208	68.0886	ng	82
17) Phenol	5.438	94	145900	32.1749	ng	87
18) 2-Chlorophenol	5.555	128	219108	66.2886	ng	84
19) N-Decane	5.593	57	240913	63.4835	ng	88
20) 1,3-Dichlorobenzene	5.689	146	247445	66.6863	ng	96
22) 1,4-Dichlorobenzene	5.753	146	257087	71.2104	ng	97
23) 1,2-Dichlorobenzene	5.876	146	243971	72.6860	ng	97
24) Benzyl alcohol	5.860	108	177187	89.5934	ng	69
25) bis(2-chloroisopropyl)...	5.961	45	296702	65.1174	ng	99
26) 2-Methylphenol	5.945	108	197740	68.1506	ng	98
27) Acetophenone	6.074	105	402140	95.0871	ng	74
28) Hexachloroethane	6.148	117	90429	67.4131	ng	84
29) N-Nitroso-di-n-propyla...	6.068	70	168079	74.3506	ng	77
30) 3&4-Methylphenol	6.074	108	190263	60.4851	ng	88
33) Nitrobenzene	6.207	77	258288	81.5761	ng	83
34) Isophorone	6.394	82	480242	87.6215	ng	91
35) 2-Nitrophenol	6.458	139	132605	83.5626	ng	86
36) 2,4-Dimethylphenol	6.485	107	218611	69.6390	ng	95
37) Benzoic Acid	6.560	105	25044m	15.9754	ng	
38) bis(2-Chloroethoxy)met...	6.554	93	290775	81.5234	ng	97
39) 2,4-Dichlorophenol	6.640	162	201120	80.6862	ng	86
40) 1,2,4-Trichlorobenzene	6.704	180	212112	79.4017	ng	98
41) Naphthalene	6.763	128	713105	77.6791	ng	99
42) 4-Chloroaniline	6.805	127	349410	117.0319	ng	92
43) Hexachlorobutadiene	6.848	225	111740	78.1038	ng	96
44) Caprolactam	7.083	113	47895	51.1066	ng	69
45) 4-Chloro-3-methylphenol	7.169	107	208585	82.6556	ng	75
46) 2-Methylnaphthalene	7.297	142	589337	99.8825	ng	99
47) 1-Methylnaphthalene	7.372	142	591610	101.9348	ng	94
48) Methylnaphthalenes (To...	7.372	142	1174630m	201.9709	ng	
49) 1,1'-Biphenyl	7.666	154	614121	88.7145	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	271455	97.1347	ng	98
52) Hexachlorocyclopentadiene	7.414	237	81624	76.1999	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	143338	85.0894	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	150646	84.5973	ng	95
56) 2-Chloronaphthalene	7.687	162	466374	85.9859	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	378164	83.1301	ng	93
58) Dimethylnaphthalenes (...)	7.965	156	378164	83.1301	ng	93
59) Diphenyl Ether	7.746	170	410301	101.9591	ng	83
60) 2-Nitroaniline	7.772	65	213483	95.7188	ng	54
61) Coumarin	7.954	146	208069	99.6953	ng	75
62) Acenaphthylene	8.040	152	770020	94.4285	ng	99
63) Dimethylphthalate	7.911	163	547114	90.0501	ng	99
64) 2,6-Dinitrotoluene	7.970	165	120379	85.2405	ng	69
65) Acenaphthene	8.189	153	484028	86.2264	ng	97

Quantitation Report (QT Reviewed)

SampleID : WMB71497(MS)
 Data File: 5M105925.D
 Acq On : 10/23/18 09:35

Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/23/18 10:12
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.125	138	169972	113.4200	ng	72
67) 2,4-Dinitrophenol	8.216	184	54418	83.3186	ng	16
68) Dibenzofuran	8.349	168	835240	102.7905	ng	83
69) 2,4-Dinitrotoluene	8.328	165	169247	88.1408	ng	68
70) 4-Nitrophenol	8.259	65	31650	29.9052	ng	86
71) 2,3,4,6-Tetrachlorophenol	8.451	232	119817	78.0003	ng	86
72) Fluorene	8.665	166	561666	90.6357	ng	99
73) 4-Chlorophenyl-phenyle...	8.654	204	252007	89.6735	ng	84
74) Diethylphthalate	8.536	149	517849	86.1218	ng	98
75) 4-Nitroaniline	8.686	138	187437	102.9223	ng	79
76) Atrazine	9.300	200	184022	100.3940	ng	97
78) 4,6-Dinitro-2-methylph...	8.713	198	90062	98.1741	ng	58
79) n-Nitrosodiphenylamine	8.766	169	380404	72.8910	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	649977	87.3321	ng	88
82) 4-Bromophenyl-phenylether	9.140	248	146558	93.2631	ng	82
83) Hexachlorobenzene	9.209	284	136242	90.2638	ng	70
84) N-Octadecane	9.461	57	355839	79.5228	ng	83
85) Pentachlorophenol	9.407	266	67678	88.6987	ng	98
86) Phenanthrene	9.642	178	805847	88.9204	ng	99
87) Anthracene	9.696	178	827316	90.9866	ng	99
88) Carbazole	9.867	167	849525	100.7168	ng	98
89) Di-n-butylphthalate	10.235	149	926065	86.2762	ng	98
90) Fluoranthene	10.967	202	878349	90.3642	ng	95
92) Pyrene	11.234	202	901749	93.5296	ng	88
93) Benzidine	11.127	184	72387	21.1067	ng	88
97) Butylbenzylphthalate	11.998	149	361453	81.9251	ng	73
99) 3,3'-Dichlorobenzidine	12.629	252	233749	87.7538	ng	94
100) Benzo[a]anthracene	12.655	228	826410	90.3826	ng	99
101) Chrysene	12.698	228	740527	84.5684	ng	98
102) bis(2-Ethylhexyl)phtha...	12.687	149	516594	78.3430	ng	96
104) Di-n-octylphthalate	13.435	149	762019	78.1737	ng	100
105) Benzo[b]fluoranthene	13.868	252	750167	100.5186	ng	96
106) Benzo[k]fluoranthene	13.900	252	722087m	96.1590	ng	
107) Benzo[a]pyrene	14.220	252	675188	88.7339	ng	94
108) Indeno[1,2,3-cd]pyrene	15.561	276	766156	91.9515	ng	93
109) Dibenzo[a,h]anthracene	15.577	278	663731	92.2738	ng	94
110) Benzo[g,h,i]perylene	15.930	276	642158	91.0223	ng	80

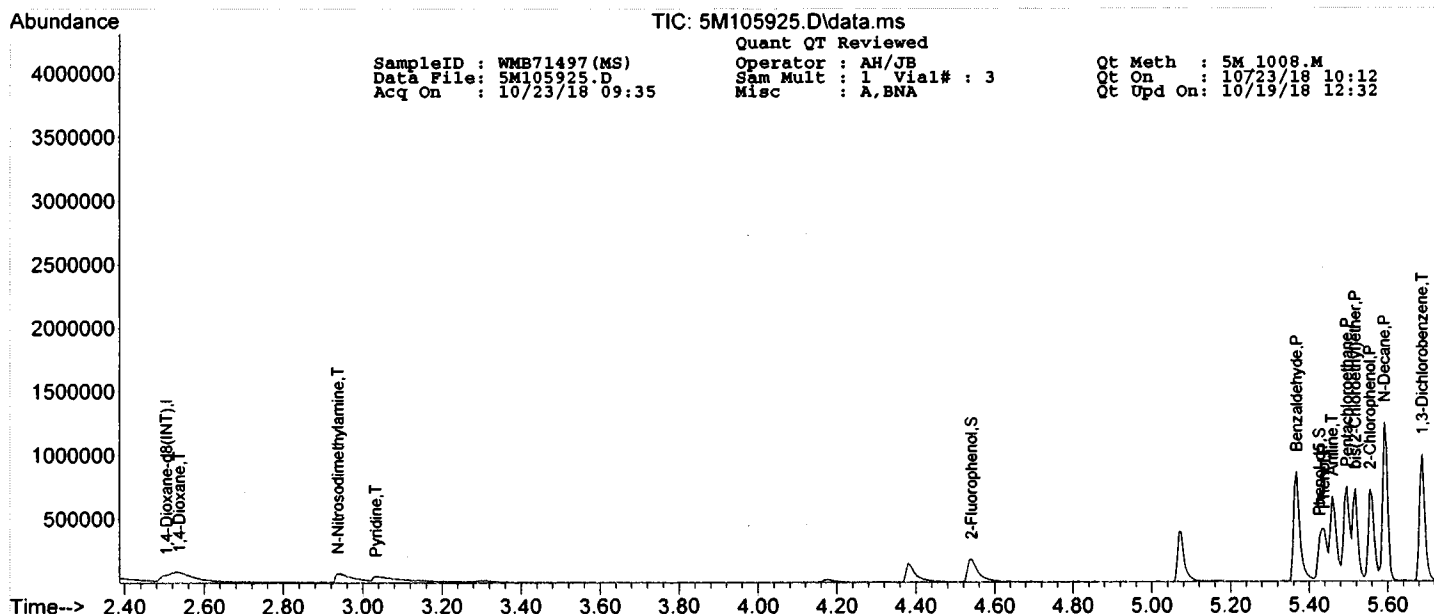
(#) = qualifier out of range (m) = manual integration (+) = signals summed

TIC: 5M105925.D\data.ms

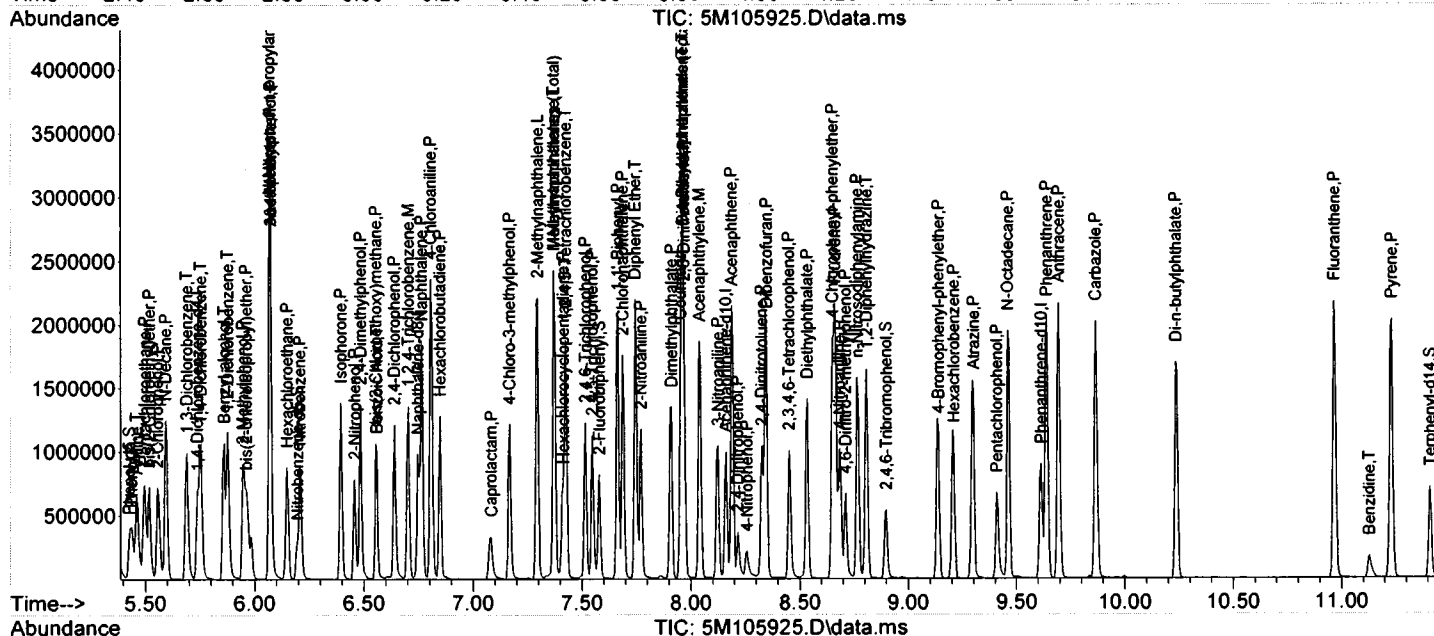
SampleID : WMB71497 (MS)
 Data File : 5M105925.D
 Acq On : 10/23/18 09:35

Quant QT Reviewed
 Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

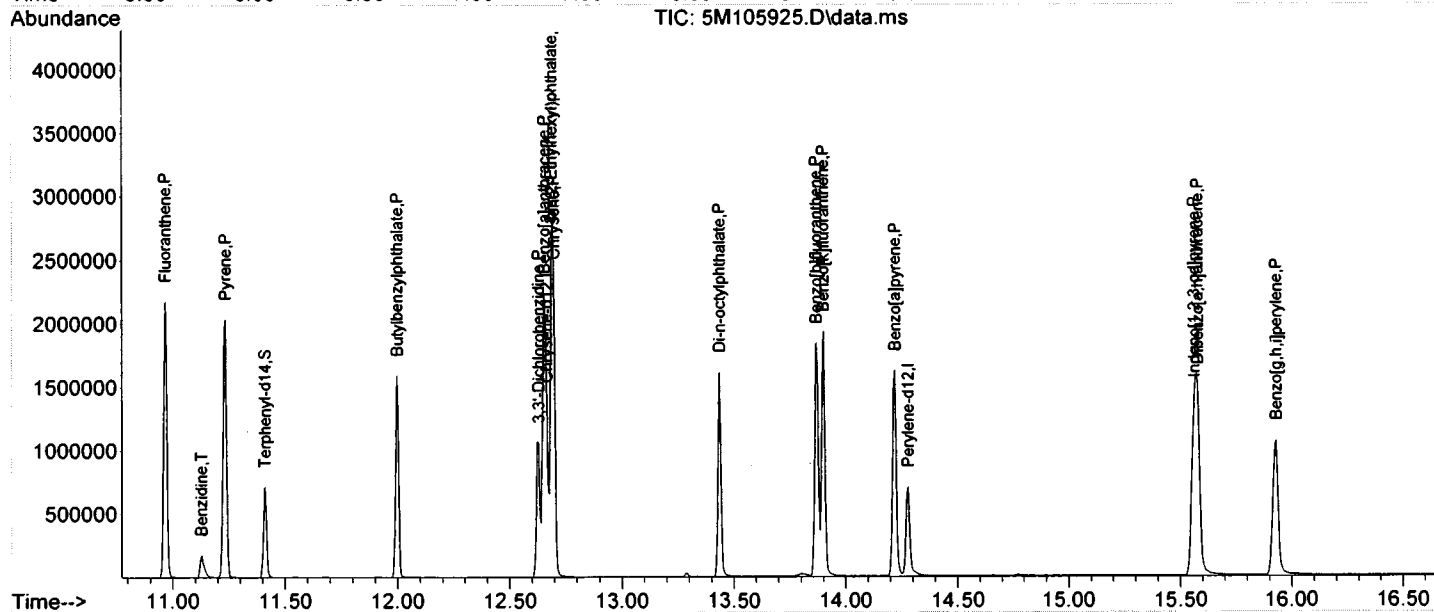
Of Meth : 5M 1008.M
 On : 10/23/18 10:12
 Upd On : 10/19/18 12:32



TIC: 5M105925.D\data.ms



TIC: 5M105925.D\data.ms



Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71518

8101509 0591

Data File		Sample ID:			Analysis Date		
Spike or Dup: 5M105968.D		WMB71518(MS)			10/25/2018 10:04:00 A		
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	63.3712	0	100	63	20	160
Pyridine	1	26.351	0	100	26	1	150
N-Nitrosodimethylamine	1	61.7632	0	100	62	20	150
Benzaldehyde	1	133.1941	0	100	133	20	234
Aniline	1	54.8464	0	100	55	20	150
Pentachloroethane	1	87.0938	0	100	87	5	140
bis(2-Chloroethyl)ether	1	79.2769	0	100	79	43	126
Phenol	1	37.7516	0	100	38	17	120
2-Chlorophenol	1	80.7457	0	100	81	36	120
N-Decane	1	73.843	0	100	74	40	130
1,3-Dichlorobenzene	1	79.3421	0	100	79	20	130
1,4-Dichlorobenzene	1	87.8714	0	100	88	25	130
1,2-Dichlorobenzene	1	87.3298	0	100	87	25	130
Benzyl alcohol	1	83.3455	0	100	83	35	130
bis(2-chloroisopropyl)ether	1	77.2426	0	100	77	63	139
2-Methylphenol	1	82.5655	0	100	83	35	130
Acetophenone	1	100.5671	0	100	101	50	130
Hexachloroethane	1	84.5375	0	100	85	55	120
N-Nitroso-di-n-propylamine	1	84.5867	0	100	85	14	198
3&4-Methylphenol	1	70.7191	0	100	71	30	130
Nitrobenzene	1	92.0601	0	100	92	54	158
Isophorone	1	94.3482	0	100	94	47	180
2-Nitrophenol	1	95.186	0	100	95	45	167
2,4-Dimethylphenol	1	78.4316	0	100	78	42	120
Benzoic Acid	1	14.5515	0	100	15	1	130
bis(2-Chloroethoxy)methane	1	89.0505	0	100	89	49	165
2,4-Dichlorophenol	1	90.8829	0	100	91	53	122
1,2,4-Trichlorobenzene	1	90.78	0	100	91	57	130
Naphthalene	1	86.5	0	100	86	36	120
4-Chloroaniline	1	107.6197	0	100	108	30	170
Hexachlorobutadiene	1	91.4818	0	100	91	38	120
Caprolactam	1	41.967	0	100	42	5	130
4-Chloro-3-methylphenol	1	90.3375	0	100	90	41	128
2-Methylnaphthalene	1	92.0404	0	100	92	40	130
1-Methylnaphthalene	1	102.8469	0	100	103	50	130
1,1'-Biphenyl	1	87.0596	0	100	87	50	130
1,2,4,5-Tetrachlorobenzene	1	100.5878	0	100	101	60	140
Hexachlorocyclopentadiene	1	94.9378	0	100	95	20	130
2,4,6-Trichlorophenol	1	94.7731	0	100	95	52	129
2,4,5-Trichlorophenol	1	92.9766	0	100	93	50	130
2-Chloronaphthalene	1	93.1269	0	100	93	65	120
1,4-Dimethylnaphthalene	1	84.1938	0	100	84	50	130
Diphenyl Ether	1	103.2512	0	100	103	50	140
2-Nitroaniline	1	89.568	0	100	90	40	150
Coumarin	1	96.3666	0	100	96	1	180
Acenaphthylene	1	100.2359	0	100	100	54	126
Dimethylphthalate	1	94.044	0	100	94	1	120
2,6-Dinitrotoluene	1	89.6968	0	100	90	68	137
Acenaphthene	1	92.023	0	100	92	60	132
3-Nitroaniline	1	101.6772	0	100	102	40	150
2,4-Dinitrophenol	1	87.3667	0	100	87	1	173
Dibenzofuran	1	89.42	0	100	89	50	130
2,4-Dinitrotoluene	1	92.0757	0	100	92	48	127
4-Nitrophenol	1	31.517	0	100	32	13	129
2,3,4,6-Tetrachlorophenol	1	86.2798	0	100	86	50	130
Fluorene	1	91.9172	0	100	92	70	120
4-Chlorophenyl-phenylether	1	93.0513	0	100	93	38	145
Diethylphthalate	1	92.3725	0	100	92	1	120
4-Nitroaniline	1	92.4458	0	100	92	40	150
Atrazine	1	90.4564	0	100	90	40	150
4,6-Dinitro-2-methylphenol	1	105.9085	0	100	106	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71518

n-Nitrosodiphenylamine	1	80.1879	0	100	80	30	130
1,2-Diphenylhydrazine	1	93.4133	0	100	93	40	130
4-Bromophenyl-phenylether	1	97.8922	0	100	98	65	120
Hexachlorobenzene	1	98.3314	0	100	98	8	142
N-Octadecane	1	79.8691	0	100	80	50	130
Pentachlorophenol	1	91.3806	0	100	91	38	152
Phenanthrene	1	94.4508	0	100	94	65	120
Anthracene	1	95.8335	0	100	96	43	120
Carbazole	1	98.2781	0	100	98	40	130
Di-n-butylphthalate	1	86.7878	0	100	87	8	120
Fluoranthene	1	93.6341	0	100	94	43	121
Pyrene	1	98.3413	0	100	98	70	120
Benzidine	1	25.6015	0	100	26	1	134
Butylbenzylphthalate	1	75.2506	0	100	75	1	140
3,3'-Dichlorobenzidine	1	97.0344	0	100	97	8	213
Benzo[a]anthracene	1	94.7499	0	100	95	42	133
Chrysene	1	96.6785	0	100	97	44	140
bis(2-Ethylhexyl)phthalate	1	71.3845	0	100	71	29	137
Di-n-octylphthalate	1	72.6209	0	100	73	19	132
Benzo[b]fluoranthene	1	99.4596	0	100	99	42	140
Benzo[k]fluoranthene	1	101.2751	0	100	101	25	146
Benzo[a]pyrene	1	92.0881	0	100	92	32	148
Indeno[1,2,3-cd]pyrene	1	91.412	0	100	91	1	151
Dibenzo[a,h]anthracene	1	91.006	0	100	91	1	200
Benzo[g,h,i]perylene	1	90.503	0	100	91	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

SampleID : WMB71518(MS)
Data File: 5M105968.D
Acq On : 10/25/18 10:04

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/25/18 10:53
Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-25-18\
Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QION	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	56793	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	95693	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	350645	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	203886	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	333126	40.00	ng	0.00
91) Chrysene-d12	12.666	240	339276	40.00	ng	0.00
103) Perylene-d12	14.279	264	269813	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.535	112	172546	58.52	ng	0.00
Spiked Amount 100.000			Recovery =	58.52%		
16) Phenol-d5	5.427	99	165521	36.40	ng	0.00
Spiked Amount 100.000			Recovery =	36.40%		
32) Nitrobenzene-d5	6.196	128	52566	50.80	ng	0.00
Spiked Amount 50.000			Recovery =	101.60%		
55) 2-Fluorobiphenyl	7.580	172	322622	49.47	ng	0.00
Spiked Amount 50.000			Recovery =	98.94%		
80) 2,4,6-Tribromophenol	8.899	330	65464	100.05	ng	0.00
Spiked Amount 100.000			Recovery =	100.05%		
94) Terphenyl-d14	11.410	244	291070	53.64	ng	0.00
Spiked Amount 50.000			Recovery =	107.28%		
Target Compounds						
8) 1,4-Dioxane	2.542	88	91881	63.3712	ng	84
9) Pyridine	3.034	79	94671	26.3510	ng	70
10) N-Nitrosodimethylamine	2.938	74	126339	61.7632	ng	81
12) Benzaldehyde	5.368	77	228963	133.1941	ng	78
13) Aniline	5.459	93	264795	54.8464	ng	53
14) Pentachloroethane	5.496	117	98729	87.0938	ng	79
15) bis(2-Chloroethyl) ether	5.518	93	282324	79.2769	ng	82
17) Phenol	5.438	94	176504	37.7516	ng	86
18) 2-Chlorophenol	5.561	128	273981	80.7457	ng	82
19) N-Decane	5.593	57	287667	73.8430	ng	89
20) 1,3-Dichlorobenzene	5.689	146	302223	79.3421	ng	98
22) 1,4-Dichlorobenzene	5.753	146	314174	87.8714	ng	98
23) 1,2-Dichlorobenzene	5.876	146	290293	87.3298	ng	97
24) Benzyl alcohol	5.860	108	163239	83.3455	ng	73
25) bis(2-chloroisopropyl)...	5.961	45	348551	77.2426	ng	99
26) 2-Methylphenol	5.951	108	237252	82.5655	ng	97
27) Acetophenone	6.073	105	421209	100.5671	ng	77
28) Hexachloroethane	6.148	117	112305	84.5375	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	187679	84.5867	ng	75
30) 3&4-Methylphenol	6.073	108	217812	70.7191	ng	82
33) Nitrobenzene	6.212	77	297720	92.0601	ng	79
34) Isophorone	6.394	82	528175	94.3482	ng	89
35) 2-Nitrophenol	6.458	139	156580	95.1860	ng	87
36) 2,4-Dimethylphenol	6.485	107	252528	78.4316	ng	93
37) Benzoic Acid	6.560	105	23069m	14.5515	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	324419	89.0505	ng	97
39) 2,4-Dichlorophenol	6.640	162	233084	90.8829	ng	87
40) 1,2,4-Trichlorobenzene	6.704	180	247697	90.7800	ng	98
41) Naphthalene	6.763	128	811074	86.5000	ng	99
42) 4-Chloroaniline	6.805	127	332626	107.6197	ng	92
43) Hexachlorobutadiene	6.848	225	133680	91.4818	ng	95
44) Caprolactam	7.083	113	39716	41.9670	ng	67
45) 4-Chloro-3-methylphenol	7.169	107	234581	90.3375	ng	78
46) 2-Methylnaphthalene	7.297	142	554687	92.0404	ng	97
47) 1-Methylnaphthalene	7.372	142	609676	102.8469	ng	94
48) Methylnaphthalenes (To...	7.372	142	1163544m	195.8733	ng	
49) 1,1'-Biphenyl	7.665	154	615561	87.0596	ng	96
51) 1,2,4,5-Tetrachloroben...	7.425	216	284225	100.5878	ng	98
52) Hexachlorocyclopentadiene	7.414	237	108427	94.9378	ng	98
53) 2,4,6-Trichlorophenol	7.516	196	162587	94.7731	ng	98
54) 2,4,5-Trichlorophenol	7.548	196	169082	92.9766	ng	98
56) 2-Chloronaphthalene	7.687	162	510712	93.1269	ng	93
57) 1,4-Dimethylnaphthalene	7.965	156	387254	84.1938	ng	91
58) Dimethylnaphthalenes (...)	7.965	156	387254	84.1938	ng	91
59) Diphenyl Ether	7.746	170	420112	103.2512	ng	83
60) 2-Nitroaniline	7.772	65	201426	89.5680	ng	53
61) Coumarin	7.954	146	203354	96.3666	ng	71
62) Acenaphthylene	8.039	152	826448	100.2359	ng	100
63) Dimethylphthalate	7.911	163	577721	94.0440	ng	99
64) 2,6-Dinitrotoluene	7.970	165	128210	89.6968	ng	71
65) Acenaphthene	8.189	153	522300	92.0230	ng	98

Quantitation Report (QT Reviewed)

SampleID : WMB71518(MS)
 Data File: SM105968.D
 Acq On : 10/25/18 10:04

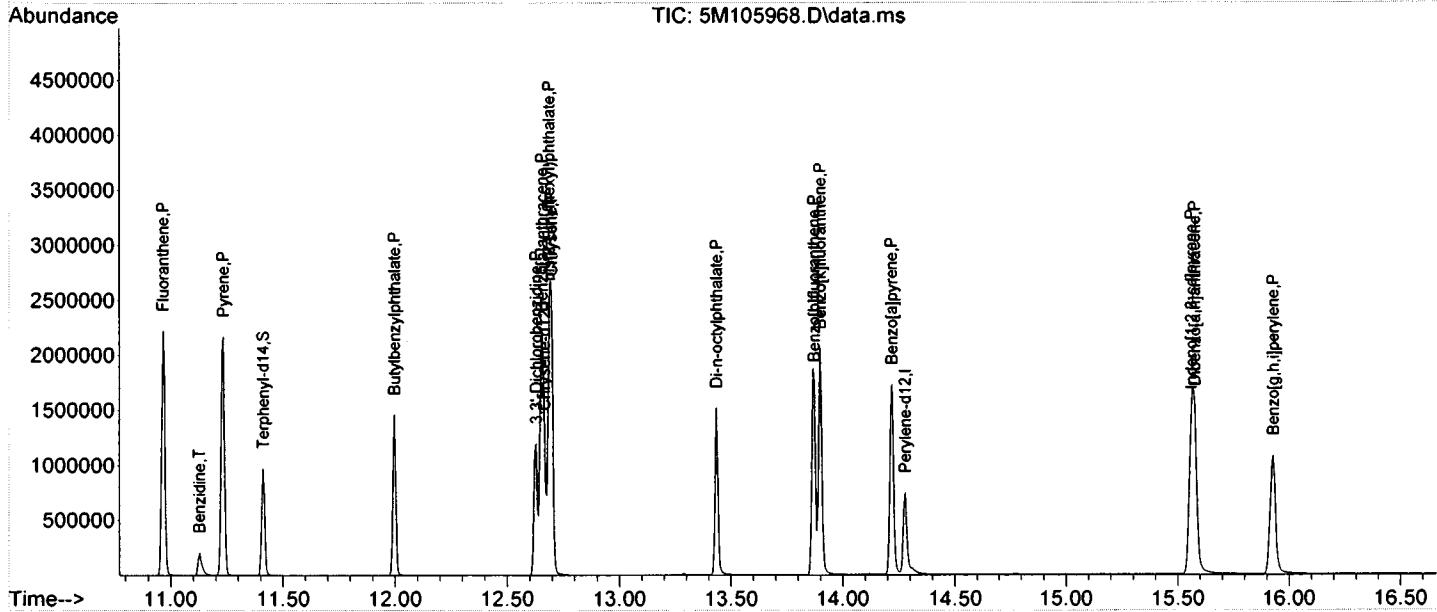
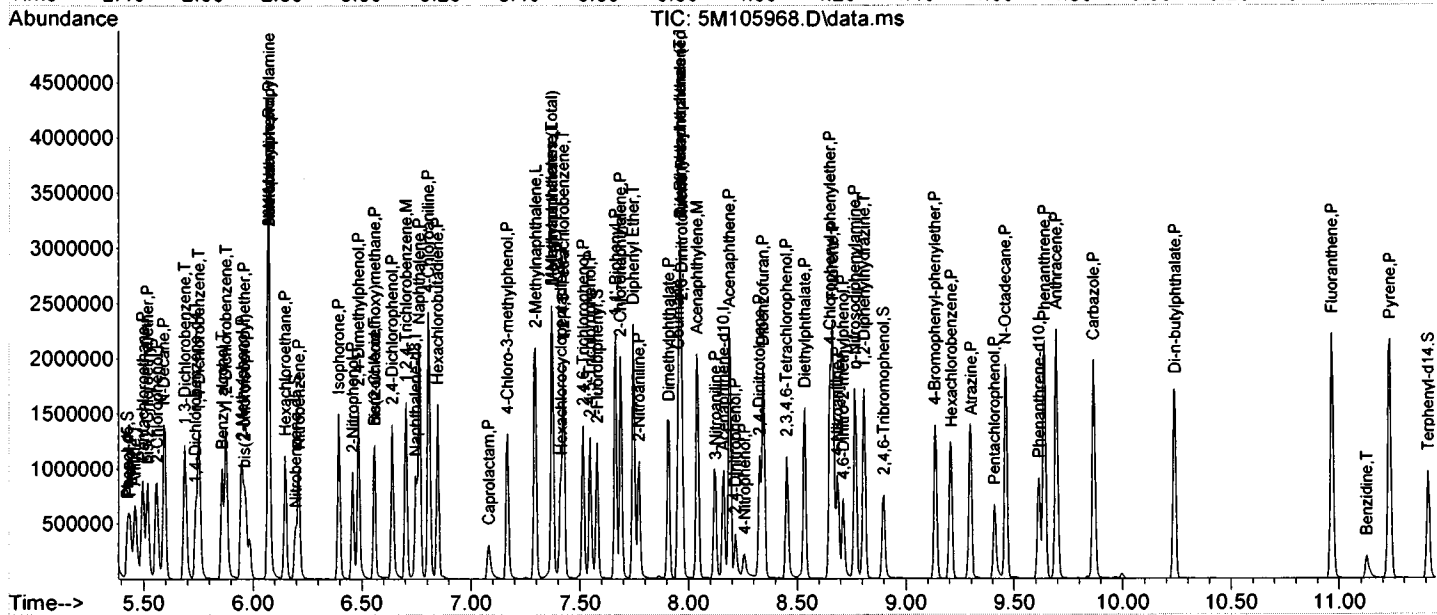
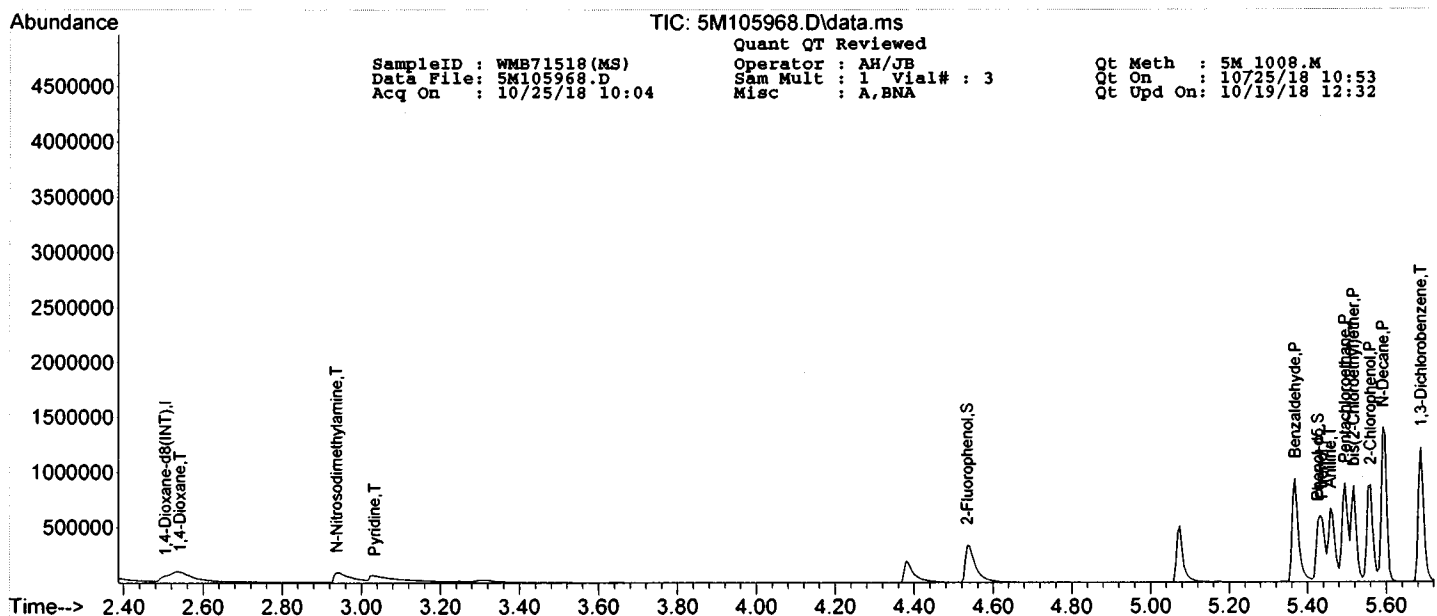
Operator : AH/JB
 Sam Mult : 1 Vial# : 3
 Misc : A,BNA

Qt Meth : SM_1008.M
 Qt On : 10/25/18 10:53
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-25-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.125	138	155068	101.6772	ng	72
67) 2,4-Dinitrophenol	8.216	184	58504	87.3667	ng	16
68) Dibenzofuran	8.344	168	734481	89.4200	ng	88
69) 2,4-Dinitrotoluene	8.328	165	179288	92.0757	ng	67
70) 4-Nitrophenol	8.258	65	33851	31.5170	ng	90
71) 2,3,4,6-Tetrachlorophenol	8.451	232	134689	86.2798	ng	85
72) Fluorene	8.664	166	575929	91.9172	ng	100
73) 4-Chlorophenyl-phenyle...	8.654	204	264402	93.0513	ng	85
74) Diethylphthalate	8.536	149	561599	92.3725	ng	98
75) 4-Nitroaniline	8.686	138	168706	92.4458	ng	81
76) Atrazine	9.300	200	165545	90.4564	ng	93
78) 4,6-Dinitro-2-methylph...	8.713	198	99020	105.9085	ng	60
79) n-Nitrosodiphenylamine	8.766	169	417219	80.1879	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	693133	93.4133	ng	88
82) 4-Bromophenyl-phenylether	9.135	248	153367	97.8922	ng	87
83) Hexachlorobenzene	9.209	284	147970	98.3314	ng	70
84) N-Octadecane	9.460	57	356322	79.8691	ng	86
85) Pentachlorophenol	9.407	266	70108	91.3806	ng	98
86) Phenanthrene	9.642	178	853377	94.4508	ng	100
87) Anthracene	9.695	178	868751	95.8335	ng	99
88) Carbazole	9.866	167	826447	98.2781	ng	98
89) Di-n-butylphthalate	10.240	149	929017	86.7878	ng	97
90) Fluoranthene	10.967	202	909874	93.6341	ng	95
92) Pyrene	11.234	202	951323	98.3413	ng	88
93) Benzidine	11.127	184	88221	25.6015	ng	89
97) Butylbenzylphthalate	11.998	149	329753	75.2506	ng	76
99) 3,3'-Dichlorobenzidine	12.628	252	258344	97.0344	ng	96
100) Benzo[a]anthracene	12.655	228	869251	94.7499	ng	99
101) Chrysene	12.698	228	849412	96.6785	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	471230	71.3845	ng	97
104) Di-n-octylphthalate	13.435	149	712177	72.6209	ng	100
105) Benzo[b]fluoranthene	13.873	252	755431	99.4596	ng	94
106) Benzo[k]fluoranthene	13.900	252	773996m	101.2751	ng	
107) Benzo[a]pyrene	14.220	252	717017	92.0881	ng	95
108) Indeno[1,2,3-cd]pyrene	15.561	276	774478	91.4120	ng	96
109) Dibenzo[a,h]anthracene	15.577	278	665067	91.0060	ng	92
110) Benzo[g,h,i]perylene	15.930	276	649277	90.5030	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
QC Batch: WMB71532

8101509 0596

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105990.D		WMB71532(MS)		10/26/2018 9:22:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	63.6211	0	100	64	20	160
Pyridine	1	20.5269	0	100	21	1	150
N-Nitrosodimethylamine	1	61.8601	0	100	62	20	150
Benzaldehyde	1	136.0759	0	100	136	20	234
Aniline	1	51.7296	0	100	52	20	150
Pentachloroethane	1	84.6698	0	100	85	5	140
bis(2-Chloroethyl)ether	1	80.5579	0	100	81	43	126
Phenol	1	36.4041	0	100	36	17	120
2-Chlorophenol	1	78.8295	0	100	79	36	120
N-Decane	1	72.7133	0	100	73	40	130
1,3-Dichlorobenzene	1	78.4067	0	100	78	20	130
1,4-Dichlorobenzene	1	88.0187	0	100	88	25	130
1,2-Dichlorobenzene	1	89.3419	0	100	89	25	130
Benzyl alcohol	1	84.9118	0	100	85	35	130
bis(2-chloroisopropyl)ether	1	78.3665	0	100	78	63	139
2-Methylphenol	1	81.4584	0	100	81	35	130
Acetophenone	1	101.3579	0	100	101	50	130
Hexachloroethane	1	86.8006	0	100	87	55	120
N-Nitroso-di-n-propylamine	1	87.0509	0	100	87	14	198
3&4-Methylphenol	1	69.5412	0	100	70	30	130
Nitrobenzene	1	94.5265	0	100	95	54	158
Isophorone	1	98.334	0	100	98	47	180
2-Nitrophenol	1	95.0391	0	100	95	45	167
2,4-Dimethylphenol	1	79.1413	0	100	79	42	120
Benzoic Acid	1	0	0	100	0*	1	130
bis(2-Chloroethoxy)methane	1	89.9466	0	100	90	49	165
2,4-Dichlorophenol	1	91.2236	0	100	91	53	122
1,2,4-Trichlorobenzene	1	92.0306	0	100	92	57	130
Naphthalene	1	88.4357	0	100	88	36	120
4-Chloroaniline	1	113.2639	0	100	113	30	170
Hexachlorobutadiene	1	91.7795	0	100	92	38	120
Caprolactam	1	45.0804	0	100	45	5	130
4-Chloro-3-methylphenol	1	93.2584	0	100	93	41	128
2-Methylnaphthalene	1	92.9019	0	100	93	40	130
1-Methylnaphthalene	1	107.5698	0	100	108	50	130
1,1'-Biphenyl	1	90.9607	0	100	91	50	130
1,2,4,5-Tetrachlorobenzene	1	104.6292	0	100	105	60	140
Hexachlorocyclopentadiene	1	94.9895	0	100	95	20	130
2,4,6-Trichlorophenol	1	95.5905	0	100	96	52	129
2,4,5-Trichlorophenol	1	95.373	0	100	95	50	130
2-Chloronaphthalene	1	95.7092	0	100	96	65	120
1,4-Dimethylnaphthalene	1	86.1181	0	100	86	50	130
Diphenyl Ether	1	106.3425	0	100	106	50	140
2-Nitroaniline	1	94.333	0	100	94	40	150
Coumarin	1	101.4235	0	100	101	1	180
Acenaphthylene	1	107.4991	0	100	107	54	126
Dimethylphthalate	1	101.649	0	100	102	1	120
2,6-Dinitrotoluene	1	94.2676	0	100	94	68	137
Acenaphthene	1	98.127	0	100	98	60	132
3-Nitroaniline	1	111.8016	0	100	112	40	150
2,4-Dinitrophenol	1	72.421	0	100	72	1	173
Dibenzofuran	1	95.0938	0	100	95	50	130
2,4-Dinitrotoluene	1	97.43	0	100	97	48	127
4-Nitrophenol	1	35.7197	0	100	36	13	129
2,3,4,6-Tetrachlorophenol	1	88.6974	0	100	89	50	130
Fluorene	1	100.1094	0	100	100	70	120
4-Chlorophenyl-phenylether	1	99.08	0	100	99	38	145
Diethylphthalate	1	99.133	0	100	99	1	120
4-Nitroaniline	1	97.6676	0	100	98	40	150
Atrazine	1	92.6557	0	100	93	40	150
4,6-Dinitro-2-methylphenol	1	100.5688	0	100	101	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71532

n-Nitrosodiphenylamine	1	80.9124	0	100	81	30	130
1,2-Diphenylhydrazine	1	96.2705	0	100	96	40	130
4-Bromophenyl-phenylether	1	102.7711	0	100	103	65	120
Hexachlorobenzene	1	102.1146	0	100	102	8	142
N-Octadecane	1	81.2652	0	100	81	50	130
Pentachlorophenol	1	90.4718	0	100	90	38	152
Phenanthrene	1	98.7322	0	100	99	65	120
Anthracene	1	99.1306	0	100	99	43	120
Carbazole	1	101.2382	0	100	101	40	130
Di-n-butylphthalate	1	94.7186	0	100	95	8	120
Fluoranthene	1	98.4808	0	100	98	43	121
Pyrene	1	103.7808	0	100	104	70	120
Benzidine	1	12.1422	0	100	12	1	134
Butylbenzylphthalate	1	84.5102	0	100	85	1	140
3,3'-Dichlorobenzidine	1	104.2028	0	100	104	8	213
Benzo[a]anthracene	1	103.348	0	100	103	42	133
Chrysene	1	103.0892	0	100	103	44	140
bis(2-Ethylhexyl)phthalate	1	84.1485	0	100	84	29	137
Di-n-octylphthalate	1	83.674	0	100	84	19	132
Benzo[b]fluoranthene	1	108.9401	0	100	109	42	140
Benzo[k]fluoranthene	1	105.7867	0	100	106	25	146
Benzo[a]pyrene	1	98.6343	0	100	99	32	148
Indeno[1,2,3-cd]pyrene	1	99.4451	0	100	99	1	151
Dibenzo[a,h]anthracene	1	99.0807	0	100	99	1	200
Benzo[g,h,i]perylene	1	99.4292	0	100	99	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

SampleID : WMB71532(MS)
Data File: 5M105990.D
Acq On : 10/26/18 09:22

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/26/18 10:34
Qt Upd On: 10/25/18 12:46

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-26-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.521	96	52087	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.737	152	87428	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	323718	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	186229	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	312919	40.00	ng	0.00
91) Chrysene-d12	12.666	240	312665	40.00	ng	0.00
103) Perylene-d12	14.279	264	251671	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	157001	58.06	ng	0.00
Spiked Amount 100.000			Recovery =	58.06%		
16) Phenol-d5	5.427	99	152569	36.59	ng	0.00
Spiked Amount 100.000			Recovery =	36.59%		
32) Nitrobenzene-d5	6.197	128	51886	54.31	ng	0.00
Spiked Amount 50.000			Recovery =	108.62%		
55) 2-Fluorobiphenyl	7.580	172	312025	52.38	ng	0.00
Spiked Amount 50.000			Recovery =	104.76%		
80) 2,4,6-Tribromophenol	8.900	330	65586	105.94	ng	0.00
Spiked Amount 100.000			Recovery =	105.94%		
94) Terphenyl-d14	11.411	244	302042	60.39	ng	0.00
Spiked Amount 50.000			Recovery =	120.78%		
Target Compounds						
8) 1,4-Dioxane	2.553	88	84607m	63.6211	ng	Qvalue
9) Pyridine	3.066	79	67636m	20.5269	ng	
10) N-Nitrosodimethylamine	2.954	74	116052	61.8601	ng	82
12) Benzaldehyde	5.369	77	214534	136.0759	ng	78
13) Aniline	5.465	93	228758	51.7296	ng	61
14) Pentachloroethane	5.497	117	88028	84.6698	ng	78
15) bis(2-Chloroethyl) ether	5.518	93	263114	80.5579	ng	83
17) Phenol	5.438	94	155936m	36.4041	ng	
18) 2-Chlorophenol	5.561	128	245315	78.8295	ng	81
19) N-Decane	5.593	57	259794	72.7133	ng	88
20) 1,3-Dichlorobenzene	5.689	146	273912m	78.4067	ng	
22) 1,4-Dichlorobenzene	5.753	146	287520	88.0187	ng	98
23) 1,2-Dichlorobenzene	5.876	146	271331	89.3419	ng	98
24) Benzyl alcohol	5.860	108	151943	84.9118	ng	75
25) bis(2-chloroisopropyl)...	5.967	45	323080	78.3665	ng	98
26) 2-Methylphenol	5.945	108	213854	81.4584	ng	99
27) Acetophenone	6.074	105	387855	101.3579	ng	76
28) Hexachloroethane	6.148	117	105352	86.8006	ng	84
29) N-Nitroso-di-n-propyla...	6.074	70	176081	87.0509	ng	75
30) 3&4-Methylphenol	6.074	108	195943	69.5412	ng	85
33) Nitrobenzene	6.207	77	282221	94.5265	ng	83
34) Isophorone	6.394	82	508215	98.3340	ng	89
35) 2-Nitrophenol	6.458	139	144306	95.0391	ng	86
36) 2,4-Dimethylphenol	6.485	107	235324	79.1413	ng	94
37) Benzoic Acid	6.619	105	6223m	4.5726	ng	
38) bis(2-Chloroethoxy)met...	6.554	93	302520	89.9466	ng	98
39) 2,4-Dichlorophenol	6.640	162	216044	91.2236	ng	87
40) 1,2,4-Trichlorobenzene	6.704	180	231826	92.0306	ng	98
41) Naphthalene	6.763	128	765546	88.4357	ng	99
42) 4-Chloroaniline	6.806	127	320600	113.2639	ng	93
43) Hexachlorobutadiene	6.848	225	123816	91.7795	ng	97
44) Caprolactam	7.083	113	39540	45.0804	ng	69
45) 4-Chloro-3-methylphenol	7.163	107	224197	93.2584	ng	83
46) 2-Methylnaphthalene	7.292	142	516884	92.9019	ng	96
47) 1-Methylnaphthalene	7.372	142	588705	107.5698	ng	94
48) Methylnaphthalenes (To...	7.372	142	1101680m	200.8856	ng	
49) 1,1'-Biphenyl	7.666	154	593755	90.9607	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	270041	104.6292	ng	96
52) Hexachlorocyclopentadiene	7.409	237	99105	94.9895	ng	97
53) 2,4,6-Trichlorophenol	7.516	196	149878	95.5905	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	158869	95.3730	ng	99
56) 2-Chloronaphthalene	7.687	162	479418	95.7092	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	361801	86.1181	ng	89
58) Dimethylnaphthalenes (...)	7.965	156	361801	86.1181	ng	89
59) Diphenyl Ether	7.746	170	395218	106.3425	ng	80
60) 2-Nitroaniline	7.767	65	194184	94.3330	ng	68
61) Coumarin	7.954	146	195490	101.4235	ng	72
62) Acenaphthylene	8.040	152	809575	107.4991	ng	100
63) Dimethylphthalate	7.906	163	570361	101.6490	ng	99
64) 2,6-Dinitrotoluene	7.970	165	123204	94.2676	ng	65
65) Acenaphthene	8.189	153	508712	98.1270	ng	97

Quantitation Report (QT Reviewed)

SampleID : WMB71532(MS) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105990.D Sam Mult : 1 Vial# : 3 Qt On : 10/26/18 10:34
 Acq On : 10/26/18 09:22 Misc : A,BNA Qt Upd On: 10/25/18 12:46

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-26-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.120	138	154874	111.8016	ng	78
67) 2,4-Dinitrophenol	8.216	184	42035	72.4210	ng	5
68) Dibenzofuran	8.344	168	713515	95.0938	ng	87
69) 2,4-Dinitrotoluene	8.328	165	173972	97.4300	ng	67
70) 4-Nitrophenol	8.253	65	35380	35.7197	ng	89
71) 2,3,4,6-Tetrachlorophenol	8.451	232	126659	88.6974	ng	86
72) Fluorene	8.665	166	572937	100.1094	ng	100
73) 4-Chlorophenyl-phenyle...	8.654	204	257151	99.0800	ng	84
74) Diethylphthalate	8.536	149	550506	99.1330	ng	97
75) 4-Nitroaniline	8.686	138	163531	97.6676	ng	80
76) Atrazine	9.295	200	155320	92.6557	ng	97
78) 4,6-Dinitro-2-methylph...	8.713	198	86996	100.5688	ng	60
79) n-Nitrosodiphenylamine	8.766	169	395452	80.9124	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	671003	96.2705	ng	88
82) 4-Bromophenyl-phenylether	9.135	248	151244	102.7711	ng	87
83) Hexachlorobenzene	9.210	284	144342	102.1146	ng	70
84) N-Octadecane	9.461	57	340616	81.2652	ng	87
85) Pentachlorophenol	9.407	266	65013	90.4718	ng	95
86) Phenanthrene	9.642	178	837949	98.7322	ng	98
87) Anthracene	9.696	178	844130	99.1306	ng	98
88) Carbazole	9.867	167	799698	101.2382	ng	98
89) Di-n-butylphthalate	10.235	149	956845	94.7186	ng	98
90) Fluoranthene	10.967	202	902574	98.4808	ng	95
92) Pyrene	11.229	202	925199	103.7808	ng	93
93) Benzidine	11.127	184	38397	12.1422	ng	88
97) Butylbenzylphthalate	11.998	149	346116	84.5102	ng	75
99) 3,3'-Dichlorobenzidine	12.623	252	254910	104.2028	ng	98
100) Benzo[a]anthracene	12.655	228	873765	103.3480	ng	99
101) Chrysene	12.698	228	834695	103.0892	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	514031	84.1485	ng	97
104) Di-n-octylphthalate	13.435	149	783095	83.6740	ng	100
105) Benzo[b]fluoranthene	13.868	252	771803	108.9401	ng	96
106) Benzo[k]fluoranthene	13.900	252	754115m	105.7867	ng	
107) Benzo[a]pyrene	14.221	252	723906	98.6343	ng	93
108) Indeno[1,2,3-cd]pyrene	15.562	276	796375	99.4451	ng	96
109) Dibenzo[a,h]anthracene	15.578	278	682879	99.0807	ng	91
110) Benzo[g,h,i]perylene	15.930	276	674923	99.4292	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71471

8101509 0601

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71442.D		AD07093-001(T)(MS)		10/19/2018 11:42:00 A			
Non Spike(If applicable): 10M71441.D		AD07093-001(T)		10/19/2018 11:20:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	55.2785	0	100	55	20	160
Pyridine	1	32.6502	0	100	33	1	150
N-Nitrosodimethylamine	1	62.0201	0	100	62	20	150
Benzaldehyde	1	129.9332	0	100	130	20	234
Aniline	1	50.9197	0	100	51	20	150
Pentachloroethane	1	69.6055	0	100	70	5	140
bis(2-Chloroethyl)ether	1	74.7132	0	100	75	12	158
Phenol	1	14.9508	0	100	15	5	120
2-Chlorophenol	1	12.2624	0	100	12*	23	134
N-Decane	1	64.4722	0	100	64	40	130
1,3-Dichlorobenzene	1	64.3333	0	100	64	20	130
1,4-Dichlorobenzene	1	70.3069	0	100	70	25	130
1,2-Dichlorobenzene	1	69.5202	0	100	70	25	130
Benzyl alcohol	1	82.3174	0	100	82	35	130
bis(2-chloroisopropyl)ether	1	66.7257	0	100	67	36	166
2-Methylphenol	1	34.987	0	100	35	35	130
Acetophenone	1	96.3639	0	100	96	50	130
Hexachloroethane	1	72.6457	0	100	73	40	120
N-Nitroso-di-n-propylamine	1	83.1737	0	100	83	1	230
3&4-Methylphenol	1	32.4659	0	100	32	30	130
Nitrobenzene	1	86.3474	0	100	86	35	180
Isophorone	1	87.0064	0	100	87	21	196
2-Nitrophenol	1	12.7144	0	100	13*	29	182
2,4-Dimethylphenol	1	61.2862	0	100	61	32	120
Benzoic Acid	1	0	0	100	0*	1	130
bis(2-Chloroethoxy)methane	1	85.3877	0	100	85	33	184
2,4-Dichlorophenol	1	15.9488	0	100	16*	39	135
1,2,4-Trichlorobenzene	1	81.0444	0	100	81	44	142
Naphthalene	1	83.7282	0	100	84	21	133
4-Chloroaniline	1	65.1713	0	100	65	30	170
Hexachlorobutadiene	1	80.553	0	100	81	24	120
Caprolactam	1	86.7465	0	100	87	5	130
4-Chloro-3-methylphenol	1	31.7955	0	100	32	22	147
2-Methylnaphthalene	1	85.0747	0	100	85	40	130
1-Methylnaphthalene	1	101.3638	0	100	101	50	130
1,1'-Biphenyl	1	80.5449	0	100	81	50	130
1,2,4,5-Tetrachlorobenzene	1	96.8	0	100	97	60	140
Hexachlorocyclopentadiene	1	78.1443	0	100	78	20	130
2,4,6-Trichlorophenol	1	17.9304	0	100	18*	37	144
2,4,5-Trichlorophenol	1	18.0698	0	100	18*	50	130
2-Chloronaphthalene	1	87.9111	0	100	88	60	120
1,4-Dimethylnaphthalene	1	89.044	0	100	89	50	130
Diphenyl Ether	1	106.0297	0	100	106	50	140
2-Nitroaniline	1	86.5766	0	100	87	40	150
Coumarin	1	100.9706	0	100	101	1	180
Acenaphthylene	1	100.5225	0	100	101	33	145
Dimethylphthalate	1	94.2715	0	100	94	1	120
2,6-Dinitrotoluene	1	97.9195	0	100	98	50	158
Acenaphthene	1	90.4985	0	100	90	47	145
3-Nitroaniline	1	65.9536	0	100	66	40	150
2,4-Dinitrophenol	1	0	0	100	0*	1	191
Dibenzofuran	1	94.397	0	100	94	50	130
2,4-Dinitrotoluene	1	90.3419	0	100	90	39	139
4-Nitrophenol	1	7.4489	0	100	7.4	1	132
2,3,4,6-Tetrachlorophenol	1	18.9132	0	100	19*	50	130
Fluorene	1	95.0732	0	100	95	59	121
4-Chlorophenyl-phenylether	1	95.0356	0	100	95	1	132
Diethylphthalate	1	94.4871	0	100	94	1	120
4-Nitroaniline	1	47.2109	0	100	47	40	150
Atrazine	1	91.6642	0	100	92	40	150
4,6-Dinitro-2-methylphenol	1	16.3941	0	100	16	1	181

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

8101509 0602

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.1501	0	100	77	30	130
1,2-Diphenylhydrazine	1	99.3004	0	100	99	40	130
4-Bromophenyl-phenylether	1	98.0859	0	100	98	53	127
Hexachlorobenzene	1	92.5694	0	100	93	1	152
N-Octadecane	1	90.6702	0	100	91	50	130
Pentachlorophenol	1	17.6426	0	100	18	14	176
Phenanthrene	1	96.0675	0	100	96	54	120
Anthracene	1	97.2628	0	100	97	27	133
Carbazole	1	99.6684	0	100	100	40	130
Di-n-butylphthalate	1	94.9101	0	100	95	1	120
Fluoranthene	1	98.6962	0	100	99	26	137
Pyrene	1	97.5634	0	100	98	52	120
Benzidine	1	17.6601	0	100	18	1	130
Butylbenzylphthalate	1	95.6995	0	100	96	1	152
3,3'-Dichlorobenzidine	1	14.2338	0	100	14	1	262
Benzo[a]anthracene	1	94.5712	0	100	95	33	143
Chrysene	1	85.3424	0	100	85	17	168
bis(2-Ethylhexyl)phthalate	1	98.8794	0	100	99	8	158
Di-n-octylphthalate	1	96.1084	0	100	96	4	146
Benzo[b]fluoranthene	1	96.9413	0	100	97	42	159
Benzo[k]fluoranthene	1	97.7971	0	100	98	11	162
Benzo[a]pyrene	1	92.9984	0	100	93	17	163
Indeno[1,2,3-cd]pyrene	1	94.603	0	100	95	1	171
Dibenzo[a,h]anthracene	1	99.0239	0	100	99	1	227
Benzo[g,h,i]perylene	1	92.8413	0	100	93	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71471

8101509 0603

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71443.D		AD07093-001(T)(MSD)		10/19/2018 12:04:00 P			
Non Spike(If applicable): 10M71441.D		AD07093-001(T)		10/19/2018 11:20:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	88.3305	0	100	88	20	160
Pyridine	1	45.0047	0	100	45	1	150
N-Nitrosodimethylamine	1	84.1121	0	100	84	20	150
Benzaldehyde	1	5.2704	0	100	5.3 *	20	234
Aniline	1	53.4628	0	100	53	20	150
Pentachloroethane	1	98.3648	0	100	98	5	140
bis(2-Chloroethyl)ether	1	90.1403	0	100	90	43	126
Phenol	1	7.1413	0	100	7.1 *	17	120
2-Chlorophenol	1	88.9105	0	100	89	36	120
N-Decane	1	91.7086	0	100	92	40	130
1,3-Dichlorobenzene	1	84.6408	0	100	85	20	130
1,4-Dichlorobenzene	1	84.5044	0	100	85	25	130
1,2-Dichlorobenzene	1	81.216	0	100	81	25	130
Benzyl alcohol	1	93.475	0	100	93	35	130
bis(2-chloroisopropyl)ether	1	76.3363	0	100	76	63	139
2-Methylphenol	1	87.5182	0	100	88	35	130
Acetophenone	1	109.4396	0	100	109	50	130
Hexachloroethane	1	88.7666	0	100	89	55	120
N-Nitroso-di-n-propylamine	1	90.1977	0	100	90	14	198
3&4-Methylphenol	1	96.6319	0	100	97	30	130
Nitrobenzene	1	94.429	0	100	94	54	158
Isophorone	1	91.0974	0	100	91	47	180
2-Nitrophenol	1	92.7584	0	100	93	45	167
2,4-Dimethylphenol	1	81.6805	0	100	82	42	120
Benzoic Acid	1	66.3912	0	100	66	1	130
bis(2-Chloroethoxy)methane	1	89.0525	0	100	89	49	165
2,4-Dichlorophenol	1	95.1159	0	100	95	53	122
1,2,4-Trichlorobenzene	1	93.4757	0	100	93	57	130
Naphthalene	1	95.1742	0	100	95	36	120
4-Chloroaniline	1	66.2253	0	100	66	30	170
Hexachlorobutadiene	1	91.406	0	100	91	38	120
Caprolactam	1	92.9287	0	100	93	5	130
4-Chloro-3-methylphenol	1	99.8015	0	100	100	41	128
2-Methylnaphthalene	1	94.5012	0	100	95	40	130
1-Methylnaphthalene	1	110.9245	0	100	111	50	130
1,1'-Biphenyl	1	95.0403	0	100	95	50	130
1,2,4,5-Tetrachlorobenzene	1	111.4509	0	100	111	60	140
Hexachlorocyclopentadiene	1	95.3923	0	100	95	20	130
2,4,6-Trichlorophenol	1	106.4675	0	100	106	52	129
2,4,5-Trichlorophenol	1	95.0322	0	100	95	50	130
2-Chloronaphthalene	1	96.4045	0	100	96	65	120
1,4-Dimethylnaphthalene	1	95.8254	0	100	96	50	130
Diphenyl Ether	1	114.1075	0	100	114	50	140
2-Nitroaniline	1	87.6347	0	100	88	40	150
Coumarin	1	106.6203	0	100	107	1	180
Acenaphthylene	1	104.7829	0	100	105	54	126
Dimethylphthalate	1	96.0941	0	100	96	1	120
2,6-Dinitrotoluene	1	101.8529	0	100	102	68	137
Acenaphthene	1	94.8585	0	100	95	60	132
3-Nitroaniline	1	67.8766	0	100	68	40	150
2,4-Dinitrophenol	1	82.5761	0	100	83	1	173
Dibenzofuran	1	96.4206	0	100	96	50	130
2,4-Dinitrotoluene	1	89.6786	0	100	90	48	127
4-Nitrophenol	1	79.7018	0	100	80	13	129
2,3,4,6-Tetrachlorophenol	1	90.4734	0	100	90	50	130
Fluorene	1	95.1927	0	100	95	70	120
4-Chlorophenyl-phenylether	1	94.174	0	100	94	38	145
Diethylphthalate	1	95.4744	0	100	95	1	120
4-Nitroaniline	1	51.3524	0	100	51	40	150
Atrazine	1	90.1065	0	100	90	40	150
4,6-Dinitro-2-methylphenol	1	99.9576	0	100	100	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

8101509 0604

QC Batch: WMB71471

n-Nitrosodiphenylamine	1	77.5825	0	100	78	30	130
1,2-Diphenylhydrazine	1	101.9052	0	100	102	40	130
4-Bromophenyl-phenylether	1	101.1868	0	100	101	65	120
Hexachlorobenzene	1	91.5121	0	100	92	8	142
N-Octadecane	1	98.3309	0	100	98	50	130
Pentachlorophenol	1	105.5476	0	100	106	38	152
Phenanthrene	1	95.0333	0	100	95	65	120
Anthracene	1	96.5921	0	100	97	43	120
Carbazole	1	107.655	0	100	108	40	130
Di-n-butylphthalate	1	95.4054	0	100	95	8	120
Fluoranthene	1	99.4451	0	100	99	43	121
Pyrene	1	97.3258	0	100	97	70	120
Benzidine	1	2.5529	0	100	2.6	1	134
Butylbenzylphthalate	1	92.8719	0	100	93	1	140
3,3'-Dichlorobenzidine	1	13.9974	0	100	14	8	213
Benzo[a]anthracene	1	93.9256	0	100	94	42	133
Chrysene	1	86.1337	0	100	86	44	140
bis(2-Ethylhexyl)phthalate	1	99.4964	0	100	99	29	137
Di-n-octylphthalate	1	96.5511	0	100	97	19	132
Benzo[b]fluoranthene	1	95.6713	0	100	96	42	140
Benzo[k]fluoranthene	1	99.6312	0	100	100	25	146
Benzo[a]pyrene	1	91.8774	0	100	92	32	148
Indeno[1,2,3-cd]pyrene	1	93.0319	0	100	93	1	151
Dibenzo[a,h]anthracene	1	98.3406	0	100	98	1	200
Benzo[g,h,i]perylene	1	92.7831	0	100	93	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits

8101509 0605

QC Batch: WMB71471

Data File	Sample ID:	Analysis Date
Spike or Dup: 10M71443.D	AD07093-001(T)(MSD)	10/19/2018 12:04:00 P
Duplicate(If applicable): 10M71442.D	AD07093-001(T)(MS)	10/19/2018 11:42:00 A
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	88.3305	55.2785	46 *	20
Pyridine	1	45.0047	32.6502	32	40
N-Nitrosodimethylamine	1	84.1121	62.0201	30 *	20
Benzaldehyde	1	5.2704	129.9332	184 *	20
Aniline	1	53.4628	50.9197	4.9	20
Pentachloroethane	1	98.3648	69.6055	34 *	20
bis(2-Chloroethyl)ether	1	90.1403	74.7132	19	108
Phenol	1	7.1413	14.9508	71 *	64
2-Chlorophenol	1	88.9105	12.2624	152 *	61
N-Decane	1	91.7086	64.4722	35 *	20
1,3-Dichlorobenzene	1	84.6408	64.3333	27 *	20
1,4-Dichlorobenzene	1	84.5044	70.3069	18	40
1,2-Dichlorobenzene	1	81.216	69.5202	16	20
Benzyl alcohol	1	93.475	82.3174	13	20
bis(2-chloroisopropyl)ether	1	76.3363	66.7257	13	76
2-Methylphenol	1	87.5182	34.987	86 *	40
Acetophenone	1	109.4396	96.3639	13	20
Hexachloroethane	1	88.7666	72.6457	20	52
N-Nitroso-di-n-propylamine	1	90.1977	83.1737	8.1	87
3&4-Methylphenol	1	96.6319	32.4659	99 *	40
Nitrobenzene	1	94.429	86.3474	8.9	62
Isophorone	1	91.0974	87.0064	4.6	93
2-Nitrophenol	1	92.7584	12.7144	152 *	55
2,4-Dimethylphenol	1	81.6805	61.2862	29	58
Benzoic Acid	1	66.3912	0	200 *	20
bis(2-Chloroethoxy)methane	1	89.0525	85.3877	4.2	54
2,4-Dichlorophenol	1	95.1159	15.9488	143 *	50
1,2,4-Trichlorobenzene	1	93.4757	81.0444	14	50
Naphthalene	1	95.1742	83.7282	13	65
4-Chloroaniline	1	66.2253	65.1713	1.6	20
Hexachlorobutadiene	1	91.406	80.553	13	62
Caprolactam	1	92.9287	86.7465	6.9	20
4-Chloro-3-methylphenol	1	99.8015	31.7955	103 *	73
2-Methylnaphthalene	1	94.5012	85.0747	10	20
1-Methylnaphthalene	1	110.9245	101.3638	9	20
1,1'-Biphenyl	1	95.0403	80.5449	17	20
1,2,4,5-Tetrachlorobenzene	1	111.4509	96.8	14	20
Hexachlorocyclopentadiene	1	95.3923	78.1443	20	20
2,4,6-Trichlorophenol	1	106.4675	17.9304	142 *	58
2,4,5-Trichlorophenol	1	95.0322	18.0698	136 *	40
2-Chloronaphthalene	1	96.4045	87.9111	9.2	24
1,4-Dimethylnaphthalene	1	95.8254	89.044	7.3	20
Diphenyl Ether	1	114.1075	106.0297	7.3	20
2-Nitroaniline	1	87.6347	86.5766	1.2	20
Coumarin	1	106.6203	100.9706	5.4	20
Acenaphthylene	1	104.7829	100.5225	4.2	74
Dimethylphthalate	1	96.0941	94.2715	1.9	183
2,6-Dinitrotoluene	1	101.8529	97.9195	3.9	48
Acenaphthene	1	94.8585	90.4985	4.7	48
3-Nitroaniline	1	67.8766	65.9536	2.9	20
2,4-Dinitrophenol	1	82.5761	0	200 *	132
Dibenzofuran	1	96.4206	94.397	2.1	20
2,4-Dinitrotoluene	1	89.6786	90.3419	0.74	42
4-Nitrophenol	1	79.7018	7.4489	166 *	131
2,3,4,6-Tetrachlorophenol	1	90.4734	18.9132	131 *	20
Fluorene	1	95.1927	95.0732	0.13	38
4-Chlorophenyl-phenylether	1	94.174	95.0356	0.91	61
Diethylphthalate	1	95.4744	94.4871	1	100
4-Nitroaniline	1	51.3524	47.2109	8.4	20
Atrazine	1	90.1065	91.6642	1.7	20
4,6-Dinitro-2-methylphenol	1	99.9576	16.3941	144	203
n-Nitrosodiphenylamine	1	77.5825	77.1501	0.56	20
1,2-Diphenylhydrazine	1	101.9052	99.3004	2.6	20

Form3
RPD Data Laboratory Limits

8101509 0606

QC Batch: WMB71471

4-Bromophenyl-phenylether	1	101.1868	98.0859	3.1	43
Hexachlorobenzene	1	91.5121	92.5694	1.1	55
N-Octadecane	1	98.3309	90.6702	8.1	20
Pentachlorophenol	1	105.5476	17.6426	143 *	86
Phenanthrene	1	95.0333	96.0675	1.1	39
Anthracene	1	96.5921	97.2628	0.69	66
Carbazole	1	107.655	99.6684	7.7	20
Di-n-butylphthalate	1	95.4054	94.9101	0.52	47
Fluoranthene	1	99.4451	98.6962	0.76	66
Pyrene	1	97.3258	97.5634	0.24	49
Benzidine	1	2.5529	17.6601	149 *	20
Butylbenzylphthalate	1	92.8719	95.6995	3	60
3,3'-Dichlorobenzidine	1	13.9974	14.2338	1.7	108
Benzo[a]anthracene	1	93.9256	94.5712	0.68	53
Chrysene	1	86.1337	85.3424	0.92	87
bis(2-Ethylhexyl)phthalate	1	99.4964	98.8794	0.62	82
Di-n-octylphthalate	1	96.5511	96.1084	0.46	69
Benzo[b]fluoranthene	1	95.6713	96.9413	1.3	71
Benzo[k]fluoranthene	1	99.6312	97.7971	1.9	63
Benzo[a]pyrene	1	91.8774	92.9984	1.2	72
Indeno[1,2,3-cd]pyrene	1	93.0319	94.603	1.7	99
Dibenzo[a,h]anthracene	1	98.3406	99.0239	0.69	126
Benzo[g,h,i]perylene	1	92.7831	92.8413	0.06	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

8101509 0607

SampleID : AD07093-001(T)
 Data File: 10M71441.D
 Acq On : 10/19/18 11:20

Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 10M_1000.M
 Qt On : 10/19/18 11:59
 Qt Upd On: 10/08/18 12:40

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

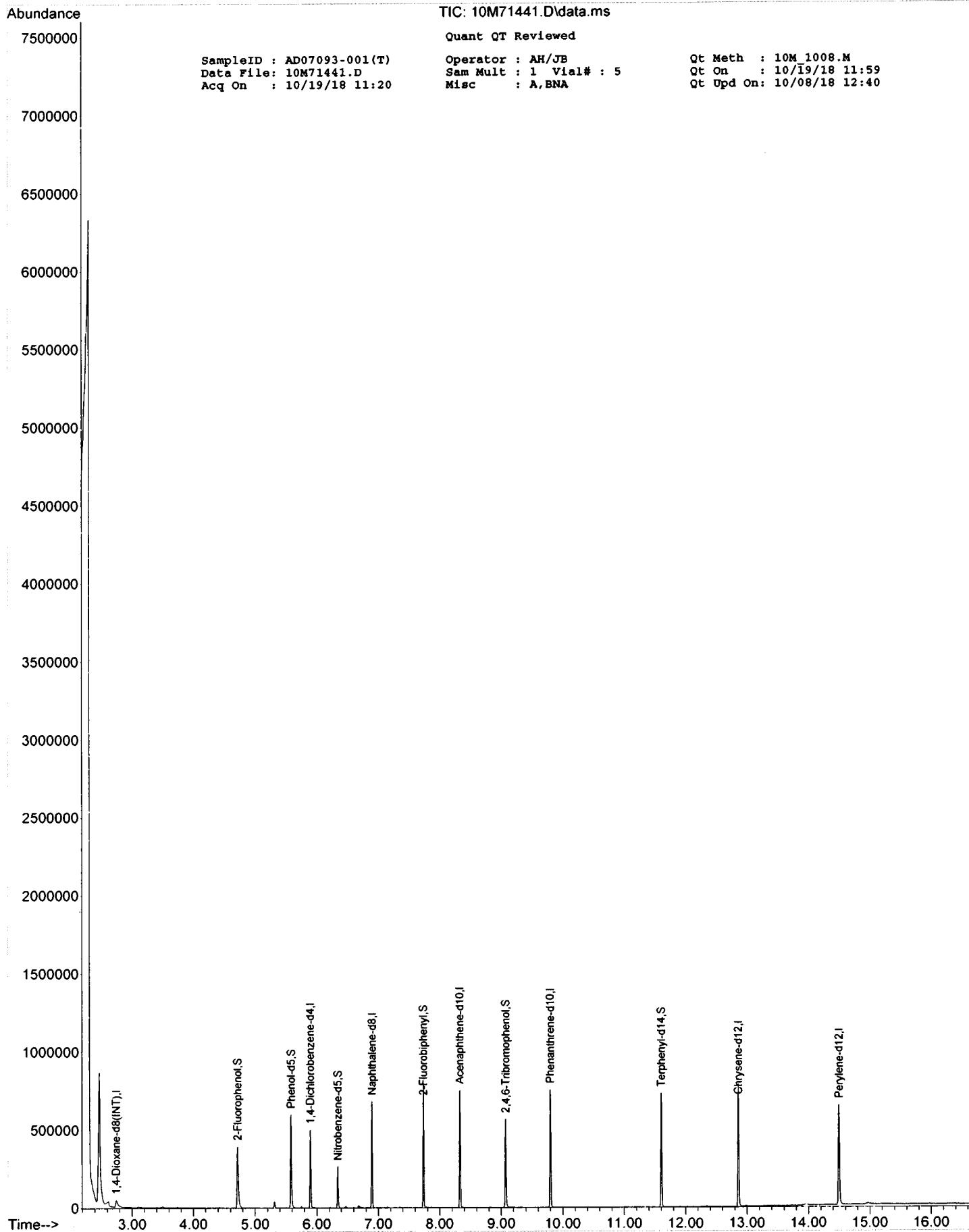
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.743	96	40966	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.893	152	77883	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	279912	40.00	ng	0.00
50) Acenaphthene-d10	8.327	164	174163	40.00	ng	0.00
77) Phenanthrene-d10	9.798	188	298144	40.00	ng	0.00
91) Chrysene-d12	12.857	240	306620	40.00	ng	0.00
103) Perylene-d12	14.494	264	288590	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	171947	72.51	ng	0.00
Spiked Amount 100.000			Recovery	=	72.51%	
16) Phenol-d5	5.583	99	220376	68.66	ng	0.00
Spiked Amount 100.000			Recovery	=	68.66%	
32) Nitrobenzene-d5	6.343	128	33184	37.05	ng	0.00
Spiked Amount 50.000			Recovery	=	74.10%	
55) 2-Fluorobiphenyl	7.733	172	221248	39.68	ng	0.00
Spiked Amount 50.000			Recovery	=	79.36%	
80) 2,4,6-Tribromophenol	9.076	330	56984	81.18	ng	0.00
Spiked Amount 100.000			Recovery	=	81.18%	
94) Terphenyl-d14	11.600	244	225759	40.18	ng	0.00
Spiked Amount 50.000			Recovery	=	80.36%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





8101509 0609

SampleID : AD07093-001(T) (MS)
 Data File : 10M71442.D
 Acq On : 10/19/18 11:42

Operator : AH/JB
 Sam Mult : 1 Vial# : 6
 Misc : A,BNA

Qt Meth : 10M_1000.M
 Qt On : 10/19/18 15:11
 Qt Upd On: 10/19/18 15:09

Data Path : G:\GcMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

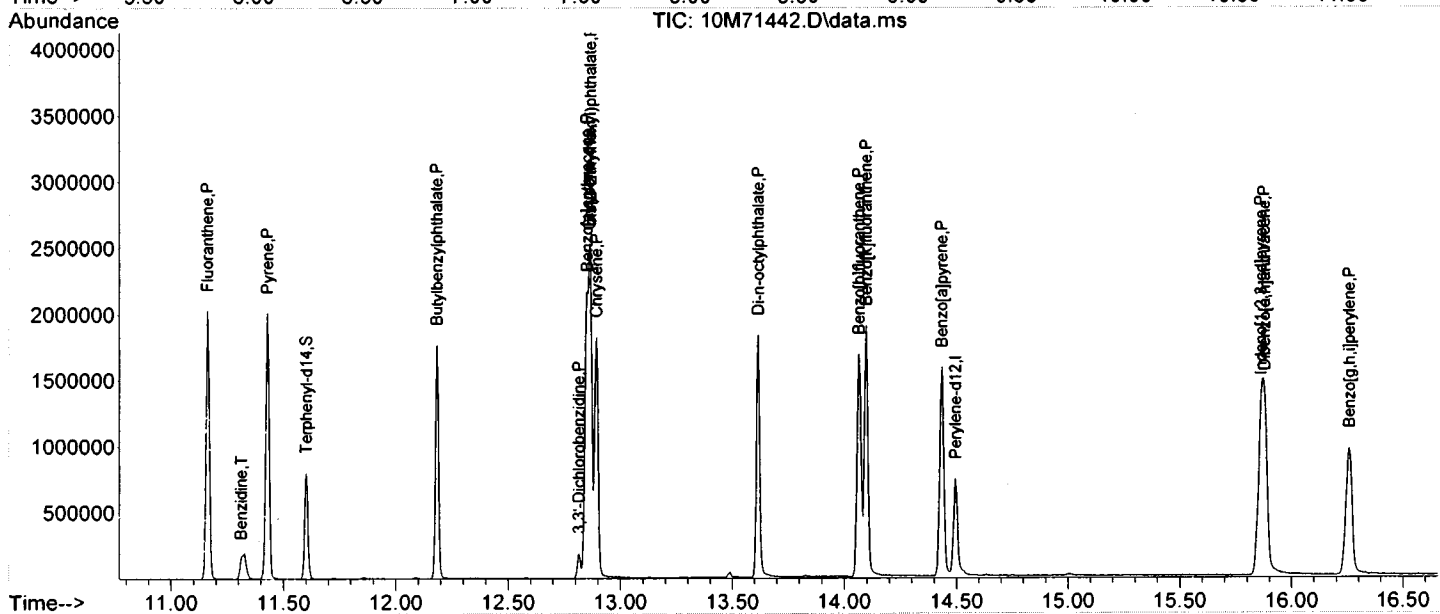
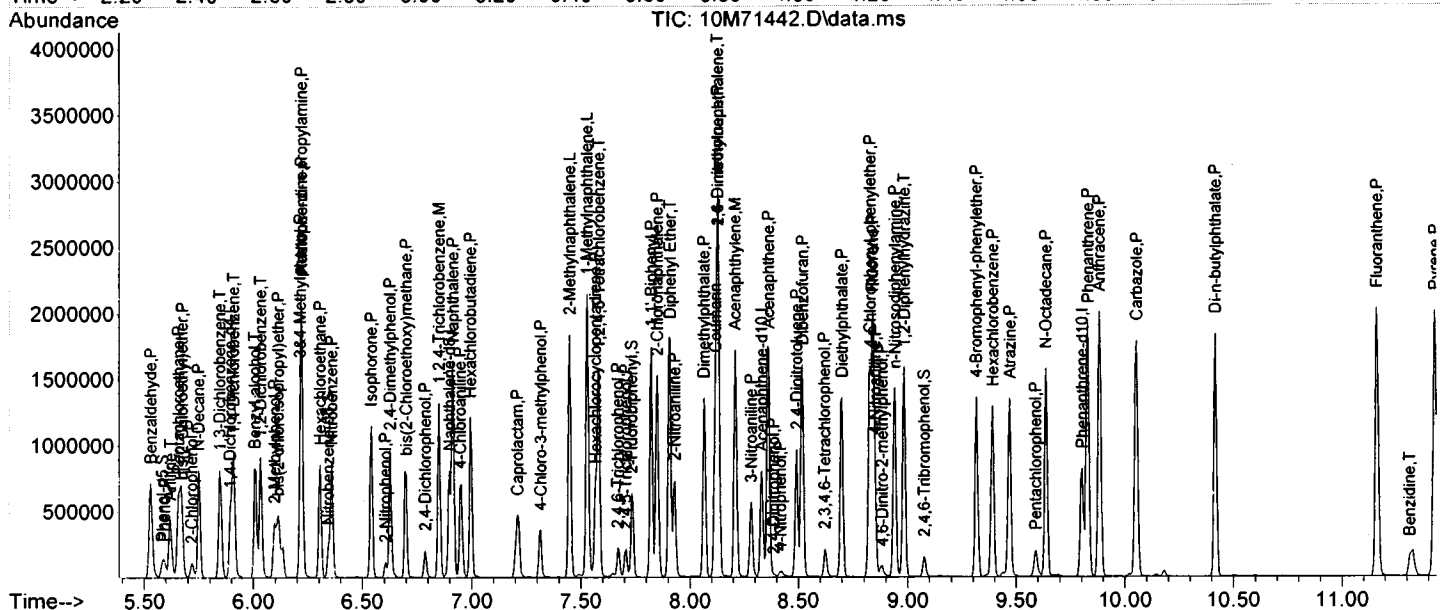
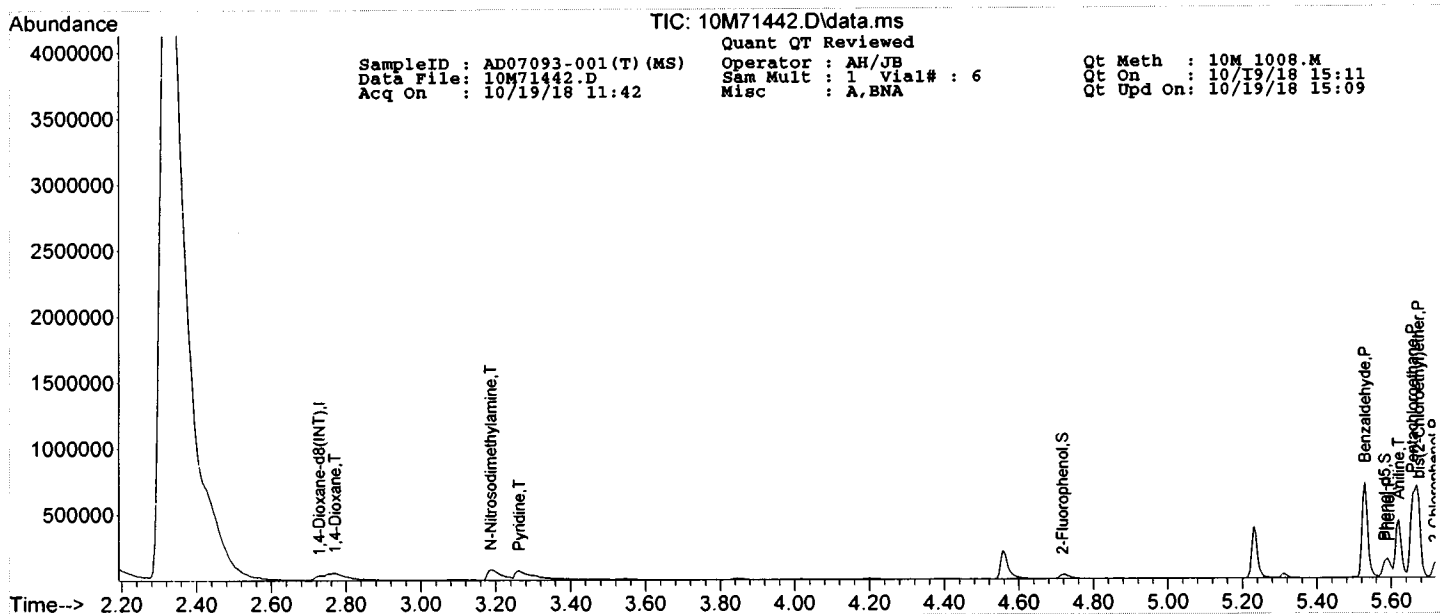
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.727	96	42154	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.894	152	80272	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	293840	40.00	ng	0.00
50) Acenaphthene-d10	8.333	164	181195	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	325017	40.00	ng	0.00
91) Chrysene-d12	12.863	240	309448	40.00	ng	0.00
103) Perylene-d12	14.494	264	306589	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	16321m	6.69	ng	0.00
Spiked Amount 100.000			Recovery	=	6.69%	
16) Phenol-d5	5.583	99	33239	10.06	ng	0.00
Spiked Amount 100.000			Recovery	=	10.06%	
32) Nitrobenzene-d5	6.343	128	30660	35.10	ng	0.00
Spiked Amount 50.000			Recovery	=	70.20%	
55) 2-Fluorobiphenyl	7.733	172	184612	31.82	ng	0.00
Spiked Amount 50.000			Recovery	=	63.64%	
80) 2,4,6-Tribromophenol	9.076	330	12946	16.66	ng	0.00
Spiked Amount 100.000			Recovery	=	16.66%	
94) Terphenyl-d14	11.601	244	240792	42.47	ng	0.00
Spiked Amount 50.000			Recovery	=	84.94%	
Target Compounds						
8) 1,4-Dioxane	2.770	88	56157	55.2785	ng	95
9) Pyridine	3.262	79	75032	32.6502	ng	78
10) N-Nitrosodimethylamine	3.187	74	87125	62.0201	ng	82
12) Benzaldehyde	5.530	77	152616	129.9332	ng	70
13) Aniline	5.621	93	174212	50.9197	ng	43
14) Pentachloroethane	5.658	117	64266	69.6055	ng	72
15) bis(2-Chloroethyl) ether	5.674	93	182180	74.7132	ng	77
17) Phenol	5.594	94	48905	14.9508	ng	83
18) 2-Chlorophenol	5.717	128	33502	12.2624	ng	70
19) N-Decane	5.749	57	138243	64.4722	ng	78
20) 1,3-Dichlorobenzene	5.845	146	194896	64.3333	ng	95
22) 1,4-Dichlorobenzene	5.910	146	207675	70.3069	ng	97
23) 1,2-Dichlorobenzene	6.033	146	200662	69.5202	ng	98
24) Benzyl alcohol	6.006	108	134073	82.3174	ng	73
25) bis(2-chloroisopropyl)...	6.113	45	182840	66.7257	ng	76
26) 2-Methylphenol	6.097	108	81677	34.9870	ng	97
27) Acetophenone	6.220	105	318581	96.3639	ng	69
28) Hexachloroethane	6.305	117	83100	72.6457	ng	90
29) N-Nitroso-di-n-propyla...	6.220	70	128144	83.1737	ng	82
30) 3&4-Methylphenol	6.214	108	71987	32.4659	ng	86
33) Nitrobenzene	6.359	77	220443	86.3474	ng	78
34) Isophorone	6.541	82	382310	87.0064	ng	84
35) 2-Nitrophenol	6.605	139	17764	12.7144	ng	90
36) 2,4-Dimethylphenol	6.626	107	159835	61.2862	ng	94
38) bis(2-Chloroethoxy)met...	6.701	93	235358	85.3877	ng	96
39) 2,4-Dichlorophenol	6.787	162	36290	15.9488	ng	84
40) 1,2,4-Trichlorobenzene	6.851	180	199910	81.0444	ng	96
41) Naphthalene	6.915	128	646297	83.7282	ng	99
42) 4-Chloroaniline	6.947	127	164650	65.1713	ng	94
43) Hexachlorobutadiene	6.995	225	111233	80.5530	ng	98
44) Caprolactam	7.209	113	74096	86.7465	ng	62
45) 4-Chloro-3-methylphenol	7.316	107	66286	31.7955	ng	71
46) 2-Methylnaphthalene	7.450	142	438241	85.0747	ng	99
47) 1-Methylnaphthalene	7.530	142	513605	101.3638	ng	94
49) 1,1'-Biphenyl	7.824	154	515621	80.5449	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	240420	96.8000	ng	98
52) Hexachlorocyclopentadiene	7.568	237	76680	78.1443	ng	99
53) 2,4,6-Trichlorophenol	7.669	196	27056	17.9304	ng	98
54) 2,4,5-Trichlorophenol	7.707	196	28961	18.0698	ng	93
56) 2-Chloronaphthalene	7.851	162	420625	87.9111	ng	91
57) 1,4-Dimethylnaphthalene	8.129	156	351639	89.0440	ng	90
59) Diphenyl Ether	7.910	170	375872	106.0297	ng	78
60) 2-Nitroaniline	7.931	65	147208	86.5766	ng	36
61) Coumarin	8.119	146	177902	100.9706	ng	61
62) Acenaphthylene	8.210	152	709392	100.5225	ng	99
63) Dimethylphthalate	8.065	163	526808	94.2715	ng	99
64) 2,6-Dinitrotoluene	8.129	165	113875	97.9195	ng	82
65) Acenaphthene	8.365	153	450365	90.4985	ng	96
66) 3-Nitroaniline	8.284	138	91117	65.9536	ng	70
67) 2,4-Dinitrophenol	8.386	184	3264	6.1288	ng	37
68) Dibenzofuran	8.520	168	666691	94.3970	ng	86

SampleID : AD07093-001(T) (MS) Operator : AH/JB Qt Meth : 10M 1008.M
 Data File: 10M71442.D Sam Mult : 1 Vial# : 6 Qt On : 10/19/18 15:11
 Acq On : 10/19/18 11:42 Misc : A,BNA Qt Upd On: 10/19/18 15:09

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69)	2,4-Dinitrotoluene	8.493	165	165489	90.3419	ng	65
70)	4-Nitrophenol	8.418	65	7241	7.4489	ng	72
71)	2,3,4,6-Tetrachlorophenol	8.621	232	26412	18.9132	ng	83
72)	Fluorene	8.841	166	542452	95.0732	ng	98
73)	4-Chlorophenyl-phenyle...	8.830	204	258724	95.0356	ng	82
74)	Diethylphthalate	8.702	149	521895	94.4871	ng	96
75)	4-Nitroaniline	8.851	138	73133	47.2109	ng	83
76)	Atrazine	9.472	200	169905	91.6642	ng	96
78)	4,6-Dinitro-2-methylph...	8.883	198	14550	16.3941	ng	78
79)	n-Nitrosodiphenylamine	8.942	169	378057	77.1501	ng	98
81)	1,2-Diphenylhydrazine	8.985	77	593675	99.3004	ng	84
82)	4-Bromophenyl-phenylether	9.317	248	147640	98.0859	ng	88
83)	Hexachlorobenzene	9.392	284	149652	92.5694	ng	70
84)	N-Octadecane	9.638	57	249343	90.6702	ng	74
85)	Pentachlorophenol	9.589	266	12745	17.6426	ng	96
86)	Phenanthrene	9.830	178	824955	96.0675	ng	99
87)	Anthracene	9.884	178	847658	97.2628	ng	99
88)	Carbazole	10.055	167	790269	99.6684	ng	98
89)	Di-n-butylphthalate	10.418	149	929905	94.9101	ng	98
90)	Fluoranthene	11.162	202	893864	98.6962	ng	86
92)	Pyrene	11.429	202	930491	97.5634	ng	82
93)	Benzidine	11.312	184	64002	17.6601	ng	90
97)	Butylbenzylphthalate	12.184	149	424282	95.6995	ng	76
99)	3,3'-Dichlorobenzidine	12.815	252	41187	14.2338	ng	91
100)	Benzo[a]anthracene	12.852	228	811972	94.5712	ng	100
101)	Chrysene	12.895	228	719573	85.3424	ng	100
102)	bis(2-Ethylhexyl)phtha...	12.868	149	585335	98.8794	ng	95
104)	Di-n-octylphthalate	13.617	149	993247	96.1084	ng	99
105)	Benzo[b]fluoranthene	14.066	252	806589	96.9413	ng	94
106)	Benzo[k]fluoranthene	14.098	252	801650m	97.7971	ng	
107)	Benzo[a]pyrene	14.435	252	751402	92.9984	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.863	276	804560	94.6030	ng	86
109)	Dibenzo[a,h]anthracene	15.879	278	698604	99.0239	ng	89
110)	Benzo[g,h,i]perylene	16.259	276	697300	92.8413	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : AD07093-001(T) (MSD) Operator : AH/JB
 Data File: 10M71443.D Sam Mult : 1 Vial# : 7
 Acq On : 10/19/18 12:04 Misc : A,BNA

Qt Meth : 10M_1008M
 Qt On : 10/19/18 12:28
 Qt Upd On: 10/08/18 12:40

8101509 0612

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

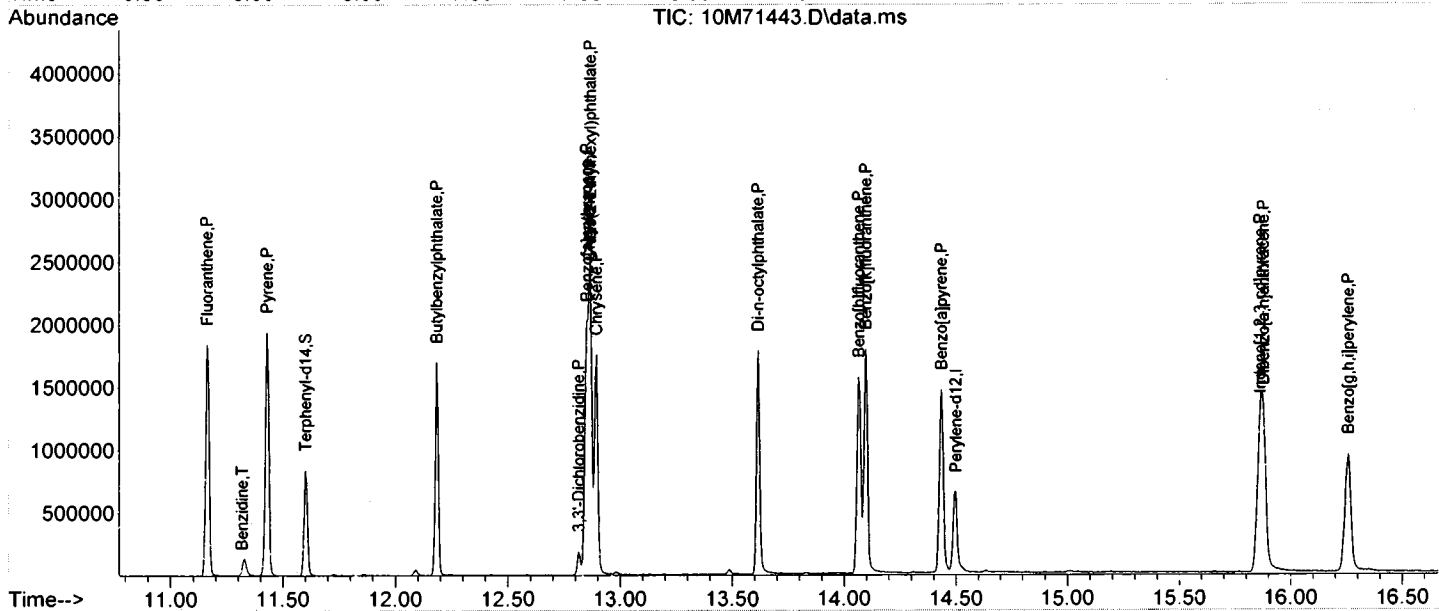
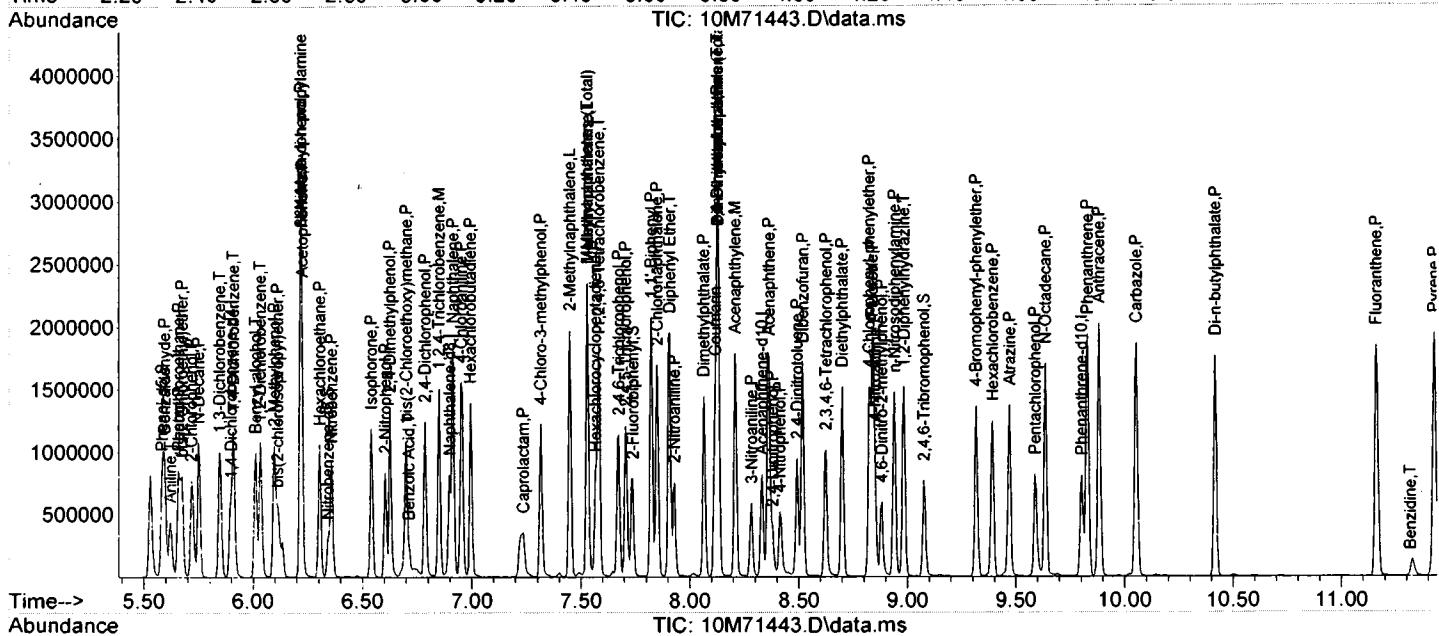
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.748	96	40101	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.899	152	80918	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	293194	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	179963	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	314090	40.00	ng	0.00
91) Chrysene-d12	12.863	240	298000	40.00	ng	0.00
103) Perylene-d12	14.499	264	288391	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.717	112	181827	78.33	ng	0.00
Spiked Amount 100.000			Recovery	=	78.33%	
16) Phenol-d5	5.583	99	255739	81.40	ng	0.00
Spiked Amount 100.000			Recovery	=	81.40%	
32) Nitrobenzene-d5	6.343	128	40639	42.95	ng	0.00
Spiked Amount 50.000			Recovery	=	85.90%	
55) 2-Fluorobiphenyl	7.739	172	235084	40.80	ng	0.00
Spiked Amount 50.000			Recovery	=	81.60%	
80) 2,4,6-Tribromophenol	9.076	330	69252	93.94	ng	0.00
Spiked Amount 100.000			Recovery	=	93.94%	
94) Terphenyl-d14	11.600	244	257169	47.10	ng	0.00
Spiked Amount 50.000			Recovery	=	94.20%	
Target Compounds						
8) 1,4-Dioxane	2.786	88	85364	88.3305	ng	87
9) Pyridine	3.289	79	99885	45.0047	ng	73
10) N-Nitrosodimethylamine	3.187	74	112405	84.1121	ng	74
12) Benzaldehyde	5.594	77	5889	5.2704	ng	15
13) Aniline	5.621	93	174085	53.4628	ng	98
14) Pentachloroethane	5.658	117	86396	98.3648	ng	71
15) bis(2-Chloroethyl)ether	5.674	93	209040	90.1403	ng	78
17) Phenol	5.658	94	22222	7.1413	ng	46
18) 2-Chlorophenol	5.717	128	231082	88.9105	ng	75
19) N-Decane	5.749	57	187067	91.7086	ng	77
20) 1,3-Dichlorobenzene	5.845	146	243929m	84.6408	ng	
22) 1,4-Dichlorobenzene	5.909	146	251621	84.5044	ng	97
23) 1,2-Dichlorobenzene	6.032	146	236307	81.2160	ng	98
24) Benzyl alcohol	6.011	108	153471	93.4750	ng	74
25) bis(2-chloroisopropyl)...	6.113	45	210858	76.3363	ng	81
26) 2-Methylphenol	6.097	108	205955	87.5182	ng	99
27) Acetophenone	6.225	105	364721	109.4396	ng	66
28) Hexachloroethane	6.305	117	102358	88.7666	ng	88
29) N-Nitroso-di-n-propyla...	6.220	70	140084	90.1977	ng	84
30) 3&4-Methylphenol	6.220	108	215987	96.6319	ng	96
33) Nitrobenzene	6.359	77	240545	94.4290	ng	79
34) Isophorone	6.541	82	399406	91.0974	ng	87
35) 2-Nitrophenol	6.605	139	129313	92.7584	ng	93
36) 2,4-Dimethylphenol	6.626	107	212555	81.6805	ng	96
37) Benzoic Acid	6.712	105	143679	66.3912	ng	83
38) bis(2-Chloroethoxy)met...	6.701	93	244920	89.0525	ng	96
39) 2,4-Dichlorophenol	6.787	162	215951	95.1159	ng	84
40) 1,2,4-Trichlorobenzene	6.851	180	230067	93.4757	ng	98
41) Naphthalene	6.915	128	730475	95.1742	ng	99
42) 4-Chloroaniline	6.952	127	166945	66.2253	ng	93
43) Hexachlorobutadiene	6.995	225	125942	91.4060	ng	95
44) Caprolactam	7.236	113	80108	92.9287	ng	59
45) 4-Chloro-3-methylphenol	7.316	107	207605	99.8015	ng	77
46) 2-Methylnaphthalene	7.450	142	485729	94.5012	ng	98
47) 1-Methylnaphthalene	7.530	142	560813	110.9245	ng	93
48) Methylnaphthalenes (To...	7.530	142	1039590m	204.2951	ng	
49) 1,1'-Biphenyl	7.824	154	607078	95.0403	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	274926	111.4509	ng	98
52) Hexachlorocyclopentadiene	7.567	237	96255	95.3923	ng	97
53) 2,4,6-Trichlorophenol	7.674	196	159561	106.4675	ng	100
54) 2,4,5-Trichlorophenol	7.707	196	151275	95.0322	ng	99
56) 2-Chloronaphthalene	7.851	162	458127	96.4045	ng	93
57) 1,4-Dimethylnaphthalene	8.129	156	375846	95.8254	ng	93
58) Dimethylnaphthalenes (...)	8.129	156	375846	95.8254	ng	93
59) Diphenyl Ether	7.910	170	401757	114.1075	ng	80
60) 2-Nitroaniline	7.931	65	147994	87.6347	ng	38
61) Coumarin	8.118	146	186579	106.6203	ng	60
62) Acenaphthylene	8.209	152	734430	104.7829	ng	99
63) Dimethylphthalate	8.065	163	533342	96.0941	ng	99
64) 2,6-Dinitrotoluene	8.129	165	117644	101.8529	ng	86
65) Acenaphthene	8.364	153	468853	94.8585	ng	96

SampleID : AD07093-001(T) (MSD) Operator : AH/JB Qt Meth : 10M_1008.M
 Data File: 10M71443.D Sam Mult : 1 Vial# : 7 Qt On : 10/19/18 12:28
 Acq On : 10/19/18 12:04 Misc : A,BNA Qt Upd On: 10/08/18 12:40

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	92957	67.8766	ng	77
67) 2,4-Dinitrophenol	8.380	184	58385	82.5761	ng	37
68) Dibenzofuran	8.520	168	675811	96.4206	ng	89
69) 2,4-Dinitrotoluene	8.493	165	163152	89.6786	ng	67
70) 4-Nitrophenol	8.413	65	80984	79.7018	ng	69
71) 2,3,4,6-Tetrachlorophenol	8.627	232	125486	90.4734	ng	85
72) Fluorene	8.840	166	539441	95.1927	ng	97
73) 4-Chlorophenyl-phenyle...	8.824	204	254635	94.1740	ng	86
74) Diethylphthalate	8.701	149	523763	95.4744	ng	97
75) 4-Nitroaniline	8.851	138	79170	51.3524	ng	94
76) Atrazine	9.472	200	165882	90.1065	ng	98
78) 4,6-Dinitro-2-methylph...	8.883	198	96006	99.9576	ng	63
79) n-Nitrosodiphenylamine	8.942	169	367394	77.5825	ng	97
81) 1,2-Diphenylhydrazine	8.985	77	588765	101.9052	ng	85
82) 4-Bromophenyl-phenylether	9.316	248	147187	101.1868	ng	90
83) Hexachlorobenzene	9.391	284	142969	91.5121	ng	71
84) N-Octadecane	9.637	57	261319	98.3309	ng	76
85) Pentachlorophenol	9.589	266	87914	105.5476	ng	97
86) Phenanthrene	9.830	178	788638	95.0333	ng	100
87) Anthracene	9.883	178	813511	96.5921	ng	100
88) Carbazole	10.055	167	824897	107.6550	ng	96
89) Di-n-butylphthalate	10.418	149	903090	95.4054	ng	98
90) Fluoranthene	11.162	202	870367	99.4451	ng	85
92) Pyrene	11.429	202	893885	97.3258	ng	82
93) Benzidine	11.317	184	8789	2.5529	ng	83
97) Butylbenzylphthalate	12.183	149	394285	92.8719	ng	77
99) 3,3'-Dichlorobenzidine	12.815	252	39007	13.9974	ng	89
100) Benzo[a]anthracene	12.852	228	776595	93.9256	ng	99
101) Chrysene	12.895	228	699377	86.1337	ng	98
102) bis(2-Ethylhexyl)phtha...	12.868	149	567198	99.4964	ng	95
104) Di-n-octylphthalate	13.617	149	938610	96.5511	ng	99
105) Benzo[b]fluoranthene	14.066	252	748773m	95.6713	ng	
106) Benzo[k]fluoranthene	14.098	252	768209	99.6312	ng	94
107) Benzo[a]pyrene	14.435	252	698282	91.8774	ng	92
108) Indeno[1,2,3-cd]pyrene	15.863	276	744236	93.0319	ng	93
109) Dibenzo[a,h]anthracene	15.879	278	652603	98.3406	ng	88
110) Benzo[g,h,i]perylene	16.259	276	655500	92.7831	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71479

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105898.D	AD06939-001(T)(MS)	10/22/2018 8:58:00 AM
Non Spike(If applicable): 5M105897.D	AD06939-001(T)	10/22/2018 8:35:00 AM
Inst Blank(If applicable):		

Method: 625.1

Matrix: Aqueous

QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	77.857	0	100	78	20	160
Pyridine	1	7.983	0	100	8	1	150
N-Nitrosodimethylamine	1	86.8562	0	100	87	20	150
Benzaldehyde	1	141.2897	0	100	141	20	234
Aniline	1	35.8284	0	100	36	20	150
Pentachloroethane	1	86.9434	0	100	87	5	140
bis(2-Chloroethyl)ether	1	87.5754	0	100	88	12	158
N-Decane	1	70.4172	0	100	70	40	130
1,3-Dichlorobenzene	1	82.7246	0	100	83	20	130
1,4-Dichlorobenzene	1	83.6878	0	100	84	25	130
1,2-Dichlorobenzene	1	84.6299	0	100	85	25	130
Benzyl alcohol	1	102.3139	0	100	102	35	130
bis(2-chloroisopropyl)ether	1	77.4704	0	100	77	36	166
Acetophenone	1	98.2235	0	100	98	50	130
Hexachloroethane	1	81.9007	0	100	82	40	120
N-Nitroso-di-n-propylamine	1	84.8854	0	100	85	1	230
Nitrobenzene	1	94.825	0	100	95	35	180
Isophorone	1	99.9692	0	100	100	21	196
Benzoic Acid	1	44.0751	0	100	44	1	130
bis(2-Chloroethoxy)methane	1	95.544	0	100	96	33	184
1,2,4-Trichlorobenzene	1	93.5408	0	100	94	44	142
Naphthalene	1	92.2102	7.6512	100	85	21	133
4-Chloroaniline	1	105.1189	0	100	105	30	170
Hexachlorobutadiene	1	93.1214	0	100	93	24	120
Caprolactam	1	102.6359	0	100	103	5	130
2-Methylnaphthalene	1	103.4607	0	100	103	40	130
1-Methylnaphthalene	1	110.2842	0	100	110	50	130
1,1'-Biphenyl	1	91.0241	0	100	91	50	130
1,2,4,5-Tetrachlorobenzene	1	107.0762	0	100	107	60	140
Hexachlorocyclopentadiene	1	96.9201	0	100	97	20	130
2-Chloronaphthalene	1	103.2298	0	100	103	60	120
1,4-Dimethylnaphthalene	1	89.7472	0	100	90	50	130
Diphenyl Ether	1	110.7226	0	100	111	50	140
2-Nitroaniline	1	97.5482	0	100	98	40	150
Coumarin	1	103.8067	0	100	104	1	180
Acenaphthylene	1	111.5918	0	100	112	33	145
Dimethylphthalate	1	105.915	0	100	106	1	120
2,6-Dinitrotoluene	1	100.5232	0	100	101	50	158
Acenaphthene	1	102.3924	0	100	102	47	145
3-Nitroaniline	1	118.0802	0	100	118	40	150
Dibenzofuran	1	101.5379	0	100	102	50	130
2,4-Dinitrotoluene	1	101.0231	0	100	101	39	139
Fluorene	1	105.124	0	100	105	59	121
4-Chlorophenyl-phenylether	1	105.706	0	100	106	1	132
Diethylphthalate	1	105.2871	0	100	105	1	120
4-Nitroaniline	1	103.0135	0	100	103	40	150
Atrazine	1	105.6294	0	100	106	40	150
n-Nitrosodiphenylamine	1	82.2599	0	100	82	30	130
1,2-Diphenylhydrazine	1	90.8987	0	100	91	40	130
4-Bromophenyl-phenylether	1	108.8576	0	100	109	53	127
Hexachlorobenzene	1	106.1678	0	100	106	1	152
N-Octadecane	1	81.4795	0	100	81	50	130
Phenanthrene	1	101.4946	0	100	101	54	120
Anthracene	1	104.5216	0	100	105	27	133
Carbazole	1	103.0421	0	100	103	40	130
Di-n-butylphthalate	1	98.1155	0	100	98	1	120
Fluoranthene	1	101.0344	0	100	101	26	137
Pyrene	1	110.9075	0	100	111	52	120
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	101.2463	0	100	101	1	152
3,3'-Dichlorobenzidine	1	97.2949	0	100	97	1	262

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

Benzo[a]anthracene	1	108.0028	0	100	108	33	143
Chrysene	1	97.4313	0	100	97	17	168
bis(2-Ethylhexyl)phthalate	1	99.563	0	100	100	8	158
Di-n-octylphthalate	1	102.6505	0	100	103	4	146
Benzo[b]fluoranthene	1	116.2156	0	100	116	42	159
Benzo[k]fluoranthene	1	114.4713	0	100	114	11	162
Benzo[a]pyrene	1	101.046	0	100	101	17	163
Indeno[1,2,3-cd]pyrene	1	102.6149	0	100	103	1	171
Dibenzo[a,h]anthracene	1	104.7473	0	100	105	1	227
Benzo[g,h,i]perylene	1	105.0016	0	100	105	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: WMB71479

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105899.D	AD06939-001(T)(MSD)	10/22/2018 9:21:00 AM
Non Spike(If applicable): 5M105897.D	AD06939-001(T)	10/22/2018 8:35:00 AM
Inst Blank(If applicable):		

Method: 625.1

Matrix: Aqueous

QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	76.3499	0	100	76	20	160
Pyridine	1	11.552	0	100	12	1	150
N-Nitrosodimethylamine	1	84.4133	0	100	84	20	150
Benzaldehyde	1	147.0652	0	100	147	20	234
Aniline	1	35.1592	0	100	35	20	150
Pentachloroethane	1	91.8136	0	100	92	5	140
bis(2-Chloroethyl)ether	1	85.5288	0	100	86	43	126
N-Decane	1	76.564	0	100	77	40	130
1,3-Dichlorobenzene	1	79.8158	0	100	80	20	130
1,4-Dichlorobenzene	1	84.5277	0	100	85	25	130
1,2-Dichlorobenzene	1	87.1238	0	100	87	25	130
Benzyl alcohol	1	106.5976	0	100	107	35	130
bis(2-chloroisopropyl)ether	1	79.2527	0	100	79	63	139
Acetophenone	1	104.9483	0	100	105	50	130
Hexachloroethane	1	84.3678	0	100	84	55	120
N-Nitroso-di-n-propylamine	1	85.1915	0	100	85	14	198
Nitrobenzene	1	96.3637	0	100	96	54	158
Isophorone	1	100.1544	0	100	100	47	180
Benzoic Acid	1	54.5759	0	100	55	1	130
bis(2-Chloroethoxy)methane	1	95.3517	0	100	95	49	165
1,2,4-Trichlorobenzene	1	93.6737	0	100	94	57	130
Naphthalene	1	92.6424	7.6512	100	85	36	120
4-Chloroaniline	1	105.2263	0	100	105	30	170
Hexachlorobutadiene	1	96.2439	0	100	96	38	120
Caprolactam	1	111.1943	0	100	111	5	130
2-Methylnaphthalene	1	106.2374	0	100	106	40	130
1-Methylnaphthalene	1	116.412	0	100	116	50	130
1,1'-Biphenyl	1	96.76	0	100	97	50	130
1,2,4,5-Tetrachlorobenzene	1	113.785	0	100	114	60	140
Hexachlorocyclopentadiene	1	102.1635	0	100	102	20	130
2-Chloronaphthalene	1	102.5285	0	100	103	65	120
1,4-Dimethylnaphthalene	1	93.9595	0	100	94	50	130
Diphenyl Ether	1	117.8408	0	100	118	50	140
2-Nitroaniline	1	99.2824	0	100	99	40	150
Coumarin	1	107.7802	0	100	108	1	180
Acenaphthylene	1	110.0305	0	100	110	54	126
Dimethylphthalate	1	104.3451	0	100	104	1	120
2,6-Dinitrotoluene	1	97.3107	0	100	97	68	137
Acenaphthene	1	99.6918	0	100	100	60	132
3-Nitroaniline	1	116.3944	0	100	116	40	150
Dibenzofuran	1	101.9938	0	100	102	50	130
2,4-Dinitrotoluene	1	100.4151	0	100	100	48	127
Fluorene	1	102.5783	0	100	103	70	120
4-Chlorophenyl-phenylether	1	103.3601	0	100	103	38	145
Diethylphthalate	1	100.8704	0	100	101	1	120
4-Nitroaniline	1	103.8011	0	100	104	40	150
Atrazine	1	108.1861	0	100	108	40	150
n-Nitrosodiphenylamine	1	84.05	0	100	84	30	130
1,2-Diphenylhydrazine	1	99.3625	0	100	99	40	130
4-Bromophenyl-phenylether	1	108.3889	0	100	108	65	120
Hexachlorobenzene	1	106.0492	0	100	106	8	142
N-Octadecane	1	87.2404	0	100	87	50	130
Phenanthrene	1	104.4312	0	100	104	65	120
Anthracene	1	104.2935	0	100	104	43	120
Carbazole	1	110.2573	0	100	110	40	130
Di-n-butylphthalate	1	99.3534	0	100	99	8	120
Fluoranthene	1	102.8683	0	100	103	43	121
Pyrene	1	107.8023	0	100	108	70	120
Benzidine	1	2.389	0	100	2.4	1	134
Butylbenzylphthalate	1	100.872	0	100	101	1	140
3,3'-Dichlorobenzidine	1	96.9888	0	100	97	8	213

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB71479

Benzo[a]anthracene	1	102.2728	0	100	102	42	133
Chrysene	1	93.8333	0	100	94	44	140
bis(2-Ethylhexyl)phthalate	1	98.532	0	100	99	29	137
Di-n-octylphthalate	1	99.4593	0	100	99	19	132
Benzo[b]fluoranthene	1	112.0012	0	100	112	42	140
Benzo[k]fluoranthene	1	108.7855	0	100	109	25	146
Benzo[a]pyrene	1	97.9594	0	100	98	32	148
Indeno[1,2,3-cd]pyrene	1	99.5223	0	100	100	1	151
Dibenzo[a,h]anthracene	1	100.8959	0	100	101	1	200
Benzo[g,h,i]perylene	1	100.3366	0	100	100	1	195

Form3
RPD Data Laboratory Limits
QC Batch: WMB71479

8101509 0619

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105899.D	AD06939-001(T)(MSD)	10/22/2018 9:21:00 AM
Duplicate(If applicable): 5M105898.D	AD06939-001(T)(MS)	10/22/2018 8:58:00 AM
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	76.3499	77.857	2	20
Pyridine	1	11.552	7.983	37	40
N-Nitrosodimethylamine	1	84.4133	86.8562	2.9	20
Benzaldehyde	1	147.0652	141.2897	4	20
Aniline	1	35.1592	35.8284	1.9	20
Pentachloroethane	1	91.8136	86.9434	5.4	20
bis(2-Chloroethyl)ether	1	85.5288	87.5754	2.4	108
N-Decane	1	76.564	70.4172	8.4	20
1,3-Dichlorobenzene	1	79.8158	82.7246	3.6	20
1,4-Dichlorobenzene	1	84.5277	83.6878	1	40
1,2-Dichlorobenzene	1	87.1238	84.6299	2.9	20
Benzyl alcohol	1	106.5976	102.3139	4.1	20
bis(2-chloroisopropyl)ether	1	79.2527	77.4704	2.3	76
Acetophenone	1	104.9483	98.2235	6.6	20
Hexachloroethane	1	84.3678	81.9007	3	52
N-Nitroso-di-n-propylamine	1	85.1915	84.8854	0.36	87
Nitrobenzene	1	96.3637	94.825	1.6	62
Isophorone	1	100.1544	99.9692	0.19	93
Benzoic Acid	1	54.5759	44.0751	21*	20
bis(2-Chloroethoxy)methane	1	95.3517	95.544	0.2	54
1,2,4-Trichlorobenzene	1	93.6737	93.5408	0.14	50
Naphthalene	1	92.6424	92.2102	0.47	65
4-Chloroaniline	1	105.2263	105.1189	0.1	20
Hexachlorobutadiene	1	96.2439	93.1214	3.3	62
Caprolactam	1	111.1943	102.6359	8	20
2-Methylnaphthalene	1	106.2374	103.4607	2.6	20
1-Methylnaphthalene	1	116.412	110.2842	5.4	20
1,1'-Biphenyl	1	96.76	91.0241	6.1	20
1,2,4,5-Tetrachlorobenzene	1	113.785	107.0762	6.1	20
Hexachlorocyclopentadiene	1	102.1635	96.9201	5.3	20
2-Chloronaphthalene	1	102.5285	103.2298	0.68	24
1,4-Dimethylnaphthalene	1	93.9595	89.7472	4.6	20
Diphenyl Ether	1	117.8408	110.7226	6.2	20
2-Nitroaniline	1	99.2824	97.5482	1.8	20
Coumarin	1	107.7802	103.8067	3.8	20
Acenaphthylene	1	110.0305	111.5918	1.4	74
Dimethylphthalate	1	104.3451	105.915	1.5	183
2,6-Dinitrotoluene	1	97.3107	100.5232	3.2	48
Acenaphthene	1	99.6918	102.3924	2.7	48
3-Nitroaniline	1	116.3944	118.0802	1.4	20
Dibenzofuran	1	101.9938	101.5379	0.45	20
2,4-Dinitrotoluene	1	100.4151	101.0231	0.6	42
Fluorene	1	102.5783	105.124	2.5	38
4-Chlorophenyl-phenylether	1	103.3601	105.706	2.2	61
Diethylphthalate	1	100.8704	105.2871	4.3	100
4-Nitroaniline	1	103.8011	103.0135	0.76	20
Atrazine	1	108.1861	105.6294	2.4	20
n-Nitrosodiphenylamine	1	84.05	82.2599	2.2	20
1,2-Diphenylhydrazine	1	99.3625	90.8987	8.9	20
4-Bromophenyl-phenylether	1	108.3889	108.8576	0.43	43
Hexachlorobenzene	1	106.0492	106.1678	0.11	55
N-Octadecane	1	87.2404	81.4795	6.8	20
Phenanthrene	1	104.4312	101.4946	2.9	39
Anthracene	1	104.2935	104.5216	0.22	66
Carbazole	1	110.2573	103.0421	6.8	20
Di-n-butylphthalate	1	99.3534	98.1155	1.3	47
Fluoranthene	1	102.8683	101.0344	1.8	66
Pyrene	1	107.8023	110.9075	2.8	49
Benzidine	1	2.389	0	200*	20
Butylbenzylphthalate	1	100.872	101.2463	0.37	60
3,3'-Dichlorobenzidine	1	96.9888	97.2949	0.32	108
Benzo[a]anthracene	1	102.2728	108.0028	5.4	53
Chrysene	1	93.8333	97.4313	3.8	87

Form3
RPD Data Laboratory Limits

QC Batch: WMB71479

bis(2-Ethylhexyl)phthalate	1	98.532	99.563	1	82
Di-n-octylphthalate	1	99.4593	102.6505	3.2	69
Benzo[b]fluoranthene	1	112.0012	116.2156	3.7	71
Benzo[k]fluoranthene	1	108.7855	114.4713	5.1	63
Benzo[a]pyrene	1	97.9594	101.046	3.1	72
Indeno[1,2,3-cd]pyrene	1	99.5223	102.6149	3.1	99
Dibenzo[a,h]anthracene	1	100.8959	104.7473	3.7	126
Benzo[g,h,i]perylene	1	100.3366	105.0016	4.5	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

SampleID : AD06939-001(T)
Data File: 5M105897.D
Acq On : 10/22/18 08:35

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/22/18 11:51
Qt Upd On: 10/19/18 12:32

Data Path : G:\GcmsData\2018\GCMS_5\Data\10-22-18\
Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	55340	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.737	152	94159	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	342580	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	201361	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	349049	40.00	ng	0.00
91) Chrysene-d12	12.660	240	324536	40.00	ng	0.00
103) Perylene-d12	14.274	264	266462	40.00	ng	0.00

System Monitoring Compounds

11) 2-Fluorophenol	4.540	112	134870	46.95	ng	0.00
Spiked Amount	100.000		Recovery	=	46.95%	
16) Phenol-d5	5.427	99	161587	36.47	ng	0.00
Spiked Amount	100.000		Recovery	=	36.47%	
32) Nitrobenzene-d5	6.196	128	29625	29.30	ng	0.00
Spiked Amount	50.000		Recovery	=	58.60%	
55) 2-Fluorobiphenyl	7.580	172	185586	28.82	ng	0.00
Spiked Amount	50.000		Recovery	=	57.64%	
80) 2,4,6-Tribromophenol	8.894	330	40753	62.35	ng	0.00
Spiked Amount	100.000		Recovery	=	62.35%	
94) Terphenyl-d14	11.410	244	197430	38.03	ng	0.00
Spiked Amount	50.000		Recovery	=	76.06%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

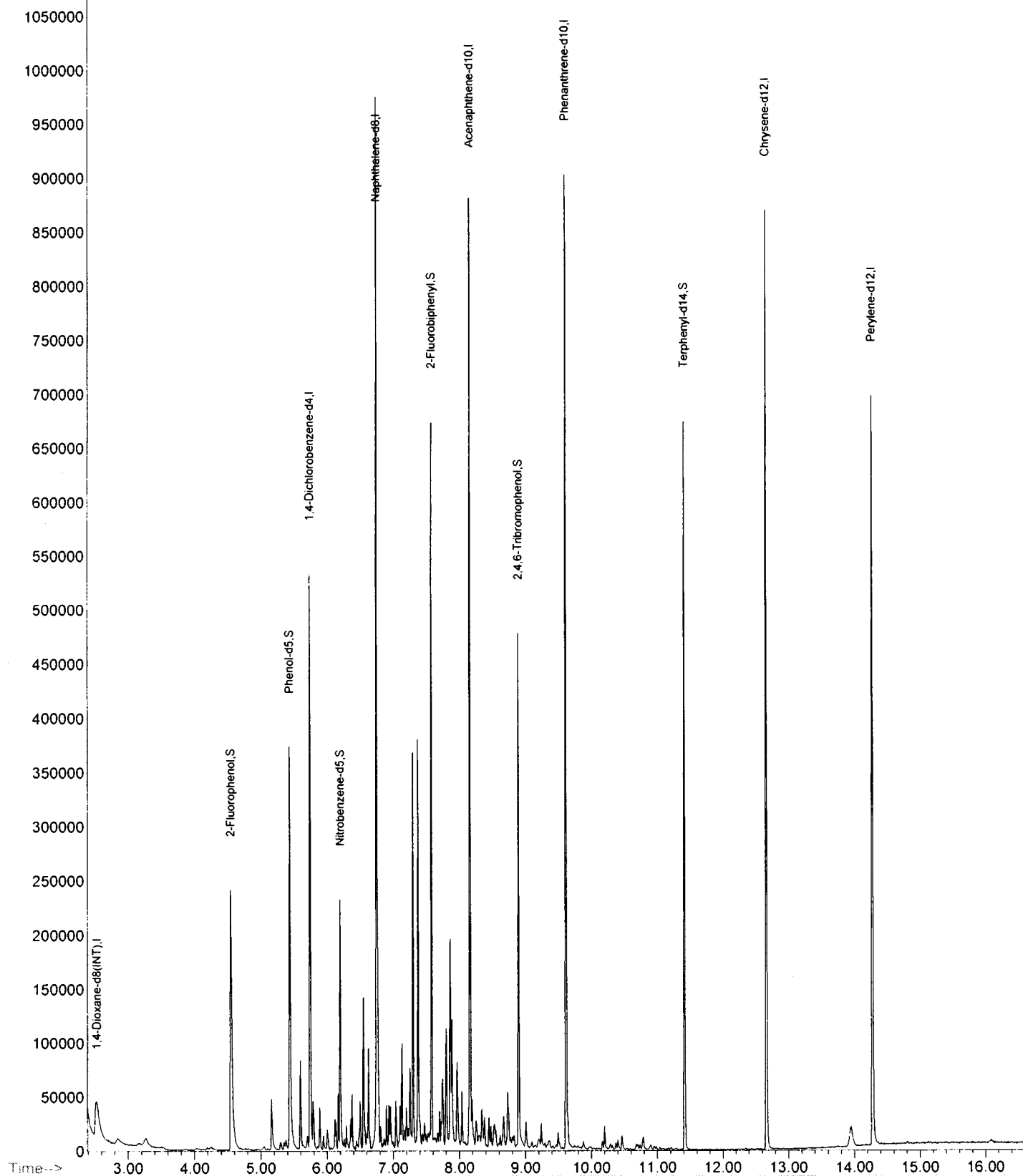
TIC: 5M105897.D\data.ms

Quant QT Reviewed

SampleID : AD06939-001(T)
Data File: 5M105897.D
Acq On : 10/22/18 08:35

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 5M 1008.M
Qt On : 10/22/18 11:51
Qt Upd On: 10/19/18 12:32



SampleID : AD06939-001(T) (MS) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105898.D Sam Mult : 1 Vial# : 4 Qt On : 10/22/18 11:51
 Acq On : 10/22/18 08:58 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	47018	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	85859	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	314281	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	177913	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	304363	40.00	ng	0.00
91) Chrysene-d12	12.666	240	300611	40.00	ng	0.00
103) Perylene-d12	14.274	264	238989	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	183050	74.99	ng	0.00
Spiked Amount 100.000			Recovery	=	74.99%	
16) Phenol-d5	5.432	99	275354	73.15	ng	0.00
Spiked Amount 100.000			Recovery	=	73.15%	
32) Nitrobenzene-d5	6.196	128	39952	43.08	ng	0.00
Spiked Amount 50.000			Recovery	=	86.16%	
55) 2-Fluorobiphenyl	7.580	172	213479	37.51	ng	0.00
Spiked Amount 50.000			Recovery	=	75.02%	
80) 2,4,6-Tribromophenol	8.900	330	55624	93.77	ng	0.00
Spiked Amount 100.000			Recovery	=	93.77%	
94) Terphenyl-d14	11.410	244	252148	52.44	ng	0.00
Spiked Amount 50.000			Recovery	=	104.88%	
Target Compounds						
8) 1,4-Dioxane	2.558	88	93917	77.8570	ng	94
9) Pyridine	3.103	79	23744	7.9830	ng	67
10) N-Nitrosodimethylamine	2.959	74	147088	86.8562	ng	77
12) Benzaldehyde	5.374	77	201076	141.2897	ng	74
13) Aniline	5.464	93	142081m	35.8284	ng	
14) Pentachloroethane	5.497	117	81595	86.9434	ng	78
15) bis(2-Chloroethyl)ether	5.523	93	258198	87.5754	ng	81
17) Phenol	5.502	94	21747	5.7627	ng	51
18) 2-Chlorophenol	5.561	128	252975	90.0549	ng	81
19) N-Decane	5.598	57	227106	70.4172	ng	87
20) 1,3-Dichlorobenzene	5.694	146	260872m	82.7246	ng	
22) 1,4-Dichlorobenzene	5.753	146	268467	83.6878	ng	95
23) 1,2-Dichlorobenzene	5.881	146	252408	84.6299	ng	97
24) Benzyl alcohol	5.860	108	179797	102.3139	ng	71
25) bis(2-chloroisopropyl)...	5.967	45	313654	77.4704	ng	99
26) 2-Methylphenol	5.951	108	246854	95.7466	ng	98
27) Acetophenone	6.073	105	369116	98.2235	ng	84
28) Hexachloroethane	6.148	117	97621	81.9007	ng	85
29) N-Nitroso-di-n-propyla...	6.073	70	168942	84.8854	ng	75
30) 3&4-Methylphenol	6.073	108	242069	89.4757	ng	86
33) Nitrobenzene	6.212	77	274859	94.8250	ng	80
34) Isophorone	6.394	82	501604	99.9692	ng	90
35) 2-Nitrophenol	6.458	139	143316	96.9832	ng	87
36) 2,4-Dimethylphenol	6.485	107	242796	83.9172	ng	93
37) Benzoic Acid	6.576	105	75625m	44.0751	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	311978	95.5440	ng	97
39) 2,4-Dichlorophenol	6.640	162	223648	96.8783	ng	87
40) 1,2,4-Trichlorobenzene	6.704	180	228761	93.5408	ng	98
41) Naphthalene	6.763	128	774950	92.2102	ng	98
42) 4-Chloroaniline	6.805	127	292236	105.1189	ng	92
43) Hexachlorobutadiene	6.848	225	121964	93.1214	ng	97
44) Caprolactam	7.088	113	93684	102.6359	ng	70
45) 4-Chloro-3-methylphenol	7.169	107	233448	99.4337	ng	82
46) 2-Methylnaphthalene	7.297	142	558850	103.4607	ng	100
47) 1-Methylnaphthalene	7.372	142	585965	110.2842	ng	94
48) Methylnaphthalenes (To...	7.372	142	1140257m	214.1632	ng	
49) 1,1'-Biphenyl	7.665	154	576848	91.0241	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	264016	107.0762	ng	99
52) Hexachlorocyclopentadiene	7.414	237	97118	96.9201	ng	100
53) 2,4,6-Trichlorophenol	7.516	196	155850	103.4450	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	164187	102.3321	ng	100
56) 2-Chloronaphthalene	7.687	162	493999	103.2298	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	360211	89.7472	ng	90
58) Dimethylnaphthalenes (...)	7.965	156	360211	89.7472	ng	90
59) Diphenyl Ether	7.746	170	393121	110.7226	ng	82
60) 2-Nitroaniline	7.772	65	192112	97.5482	ng	49
61) Coumarin	7.954	146	191149	103.8067	ng	75
62) Acenaphthylene	8.039	152	802869	111.5918	ng	99
63) Dimethylphthalate	7.906	163	567760	105.9150	ng	99
64) 2,6-Dinitrotoluene	7.970	165	125694	100.5232	ng	65
65) Acenaphthene	8.189	153	507121	102.3924	ng	97

Quantitation Report (QT Reviewed)

SampleID : AD06939-001(T) (MS) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105898.D Sam Mult : 1 Vial# : 4 Qt On : 10/22/18 11:51
 Acq On : 10/22/18 08:58 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.120	138	155724	118.0802	ng	77
67) 2,4-Dinitrophenol	8.216	184	61793	101.0338	ng	40
68) Dibenzofuran	8.344	168	727931	101.5379	ng	86
69) 2,4-Dinitrotoluene	8.328	165	172790	101.0231	ng	68
70) 4-Nitrophenol	8.253	65	88955	84.6151	ng	92
71) 2,3,4,6-Tetrachlorophenol	8.451	232	134642	98.1290	ng	85
72) Fluorene	8.664	166	574770	105.1240	ng	100
73) 4-Chlorophenyl-phenyle...	8.654	204	262097	105.7060	ng	85
74) Diethylphthalate	8.536	149	558572	105.2871	ng	97
75) 4-Nitroaniline	8.686	138	165534	103.0135	ng	80
76) Atrazine	9.295	200	171957	105.6294	ng	98
78) 4,6-Dinitro-2-methylph...	8.713	198	99013	113.4870	ng	60
79) n-Nitrosodiphenylamine	8.766	169	391045	82.2599	ng	100
81) 1,2-Diphenylhydrazine	8.809	77	616239	90.8987	ng	86
82) 4-Bromophenyl-phenylether	9.135	248	155821	108.8576	ng	86
83) Hexachlorobenzene	9.209	284	145968	106.1678	ng	68
84) N-Octadecane	9.460	57	332185	81.4795	ng	83
85) Pentachlorophenol	9.407	266	77176	105.4185	ng	95
86) Phenanthrene	9.642	178	837841	101.4946	ng	99
87) Anthracene	9.695	178	865700	104.5216	ng	99
88) Carbazole	9.866	167	791692	103.0421	ng	98
89) Di-n-butylphthalate	10.235	149	965975	98.1155	ng	98
90) Fluoranthene	10.967	202	902580	101.0344	ng	94
92) Pyrene	11.234	202	950615	110.9075	ng	87
93) Benzidine	11.138	184	4403	1.4531	ng	96
97) Butylbenzylphthalate	11.998	149	408735	101.2463	ng	76
99) 3,3'-Dichlorobenzidine	12.623	252	229492	97.2949	ng	97
100) Benzo[a]anthracene	12.655	228	877916	108.0028	ng	99
101) Chrysene	12.698	228	758470	97.4313	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	587647	99.5630	ng	95
104) Di-n-octylphthalate	13.435	149	947679	102.6505	ng	100
105) Benzo[b]fluoranthene	13.868	252	781858m	116.2156	ng	
106) Benzo[k]fluoranthene	13.900	252	774904	114.4713	ng	94
107) Benzo[a]pyrene	14.220	252	706944	101.0460	ng	93
108) Indeno[1,2,3-cd]pyrene	15.561	276	784406	102.6149	ng	95
109) Dibenzo[a,h]anthracene	15.577	278	690832	104.7473	ng	91
110) Benzo[g,h,i]perylene	15.925	276	682824	105.0016	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SampleID : AD06939-001(T) (MSD) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105899.D Sam Mult : 1 Vial# : 5 Qt On : 10/22/18 11:51
 Acq On : 10/22/18 09:21 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.526	96	54029	40.00	ng	0.02
21) 1,4-Dichlorobenzene-d4	5.742	152	95427	40.00	ng	0.00
31) Naphthalene-d8	6.752	136	350426	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	201098	40.00	ng	0.00
77) Phenanthrene-d10	9.616	188	335525	40.00	ng	0.00
91) Chrysene-d12	12.666	240	340534	40.00	ng	0.00
103) Perylene-d12	14.274	264	281051	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	195565	69.72	ng	0.00
Spiked Amount 100.000			Recovery =	69.72%		
16) Phenol-d5	5.433	99	286318	66.19	ng	0.00
Spiked Amount 100.000			Recovery =	66.19%		
32) Nitrobenzene-d5	6.196	128	43839	42.39	ng	0.00
Spiked Amount 50.000			Recovery =	84.78%		
55) 2-Fluorobiphenyl	7.580	172	220603	34.30	ng	0.00
Spiked Amount 50.000			Recovery =	68.60%		
80) 2,4,6-Tribromophenol	8.900	330	60674	92.89	ng	0.00
Spiked Amount 100.000			Recovery =	92.89%		
94) Terphenyl-d14	11.411	244	269032	49.39	ng	0.00
Spiked Amount 50.000			Recovery =	98.78%		
Target Compounds						
8) 1,4-Dioxane	2.564	88	105778	76.3499	ng	95
9) Pyridine	3.077	79	39483	11.5520	ng	81
10) N-Nitrosodimethylamine	2.959	74	164267	84.4133	ng	76
12) Benzaldehyde	5.368	77	240504	147.0652	ng	78
13) Aniline	5.465	93	160173m	35.1592	ng	
14) Pentachloroethane	5.502	117	99014	91.8136	ng	79
15) bis(2-Chloroethyl)ether	5.523	93	289765	85.5288	ng	81
17) Phenol	5.443	94	352729m	76.9429	ng	
18) 2-Chlorophenol	5.561	128	291331	90.2514	ng	81
19) N-Decane	5.598	57	283751	76.5640	ng	88
20) 1,3-Dichlorobenzene	5.689	146	289231m	79.8158	ng	
22) 1,4-Dichlorobenzene	5.753	146	301379	84.5277	ng	96
23) 1,2-Dichlorobenzene	5.881	146	288803	87.1238	ng	98
24) Benzyl alcohol	5.860	108	208200	106.5976	ng	72
25) bis(2-chloroisopropyl)...	5.967	45	356627	79.2527	ng	99
26) 2-Methylphenol	5.951	108	289192	100.9216	ng	94
27) Acetophenone	6.074	105	438337	104.9483	ng	83
28) Hexachloroethane	6.148	117	111768	84.3678	ng	83
29) N-Nitroso-di-n-propyla...	6.074	70	188395	85.1915	ng	73
30) 3&4-Methylphenol	6.074	108	275353	91.8197	ng	84
33) Nitrobenzene	6.213	77	311443	96.3637	ng	79
34) Isophorone	6.394	82	560329	100.1544	ng	91
35) 2-Nitrophenol	6.458	139	169890	102.4080	ng	88
36) 2,4-Dimethylphenol	6.485	107	284459	88.0069	ng	95
37) Benzoic Acid	6.581	105	110795m	54.5759	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	347158	95.3517	ng	97
39) 2,4-Dichlorophenol	6.640	162	258913	100.3386	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	255433	93.6737	ng	98
41) Naphthalene	6.768	128	868126	92.6424	ng	99
42) 4-Chloroaniline	6.806	127	326129	105.2263	ng	92
43) Hexachlorobutadiene	6.848	225	140551	96.2439	ng	96
44) Caprolactam	7.094	113	114298	111.1943	ng	68
45) 4-Chloro-3-methylphenol	7.174	107	270623	103.0258	ng	76
46) 2-Methylnaphthalene	7.297	142	639846	106.2374	ng	99
47) 1-Methylnaphthalene	7.372	142	689659	116.4120	ng	94
48) Methylnaphthalenes (To...	7.372	142	1320709m	222.4698	ng	
49) 1,1'-Biphenyl	7.666	154	683721	96.7600	ng	96
51) 1,2,4,5-Tetrachloroben...	7.425	216	317119	113.7850	ng	98
52) Hexachlorocyclopentadiene	7.415	237	117377	102.1635	ng	100
53) 2,4,6-Trichlorophenol	7.516	196	183521	107.4513	ng	99
54) 2,4,5-Trichlorophenol	7.553	196	192201	105.5797	ng	99
56) 2-Chloronaphthalene	7.687	162	554582	102.5285	ng	93
57) 1,4-Dimethylnaphthalene	7.965	156	426262	93.9595	ng	90
58) Dimethylnaphthalenes (...)	7.965	156	426262	93.9595	ng	90
59) Diphenyl Ether	7.746	170	472918	117.8408	ng	82
60) 2-Nitroaniline	7.772	65	221179	99.2824	ng	53
61) Coumarin	7.954	146	224329	107.7802	ng	71
62) Acenaphthylene	8.040	152	894799	110.0305	ng	99
63) Dimethylphthalate	7.911	163	632236	104.3451	ng	98
64) 2,6-Dinitrotoluene	7.970	165	137432	97.3107	ng	71
65) Acenaphthene	8.189	153	558089	99.6918	ng	100

Quantitation Report (QT Reviewed)

SampleID : AD06939-001(T) (MSD) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105899.D Sam Mult : 1 Vial# : 5 Qt On : 10/22/18 11:51
 Acq On : 10/22/18 09:21 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-22-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.125	138	173667	116.3944	ng	73
67) 2,4-Dinitrophenol	8.216	184	76067	107.6931	ng	42
68) Dibenzofuran	8.344	168	826494	101.9938	ng	88
69) 2,4-Dinitrotoluene	8.328	165	194045	100.4151	ng	69
70) 4-Nitrophenol	8.253	65	101596	85.3666	ng	90
71) 2,3,4,6-Tetrachlorophenol	8.451	232	154812	99.7242	ng	85
72) Fluorene	8.665	166	633940	102.5783	ng	100
73) 4-Chlorophenyl-phenyle...	8.654	204	289678	103.3601	ng	85
74) Diethylphthalate	8.536	149	604878	100.8704	ng	98
75) 4-Nitroaniline	8.691	138	188663	103.8011	ng	75
76) Atrazine	9.300	200	199708	108.1861	ng	96
78) 4,6-Dinitro-2-methylph...	8.713	198	119129	121.2625	ng	59
79) n-Nitrosodiphenylamine	8.771	169	440463	84.0500	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	742586	99.3625	ng	88
82) 4-Bromophenyl-phenylether	9.135	248	171035	108.3889	ng	87
83) Hexachlorobenzene	9.210	284	160733	106.0492	ng	69
84) N-Octadecane	9.461	57	392359	87.2404	ng	85
85) Pentachlorophenol	9.407	266	90647	110.5880	ng	95
86) Phenanthrene	9.642	178	950346	104.4312	ng	99
87) Anthracene	9.696	178	952252	104.2935	ng	100
88) Carbazole	9.867	167	933860	110.2573	ng	98
89) Di-n-butylphthalate	10.235	149	1079089	99.3534	ng	98
90) Fluoranthene	10.967	202	1014598	102.8683	ng	94
92) Pyrene	11.234	202	1046712	107.8023	ng	88
93) Benzidine	11.133	184	8203	2.3890	ng	87
97) Butylbenzylphthalate	11.998	149	461052	100.8720	ng	77
99) 3,3'-Dichlorobenzidine	12.623	252	259185	96.9888	ng	97
100) Benzo[a]anthracene	12.655	228	941746	102.2728	ng	100
101) Chrysene	12.698	228	827471	93.8333	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	658579	98.5320	ng	97
104) Di-n-octylphthalate	13.435	149	1073042	99.4593	ng	100
105) Benzo[b]fluoranthene	13.868	252	886121m	112.0012	ng	
106) Benzo[k]fluoranthene	13.900	252	866023	108.7855	ng	96
107) Benzo[a]pyrene	14.221	252	802019	97.9594	ng	94
108) Indeno[1,2,3-cd]pyrene	15.561	276	890147	99.5223	ng	98
109) Dibenzo[a,h]anthracene	15.577	278	778484	100.8959	ng	91
110) Benzo[g,h,i]perylene	15.930	276	761689	100.3366	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form3
Recovery Data Laboratory Limits
QC Batch: SMB71480

8101509 0629

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71460.D		AD07136-003(MS)		10/19/2018 6:52:00 PM			
Non Spike(If applicable): 10M71459.D		AD07136-003		10/19/2018 6:30:00 PM			
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	23.1032	0	50	46	1	150
N-Nitrosodimethylamine	1	34.3013	0	50	69	50	130
Benzaldehyde	1	73.1107	0	50	146	20	220
Aniline	1	26.0648	0	50	52	20	150
Pentachloroethane	1	40.8681	0	50	82	50	130
bis(2-Chloroethyl)ether	1	37.9532	0	50	76	50	130
Phenol	1	87.559	0	100	88	20	150
2-Chlorophenol	1	85.5731	0	100	86	50	130
N-Decane	1	34.1942	0	50	68	20	130
1,3-Dichlorobenzene	1	36.6728	0	50	73	60	130
1,4-Dichlorobenzene	1	37.5176	0	50	75	60	130
1,2-Dichlorobenzene	1	35.5485	0	50	71	50	130
Benzyl alcohol	1	42.2052	0	50	84	20	130
bis(2-chloroisopropyl)ether	1	34.7892	0	50	70	40	130
2-Methylphenol	1	85.7146	0	100	86	50	130
Acetophenone	1	46.8707	0	50	94	50	130
Hexachloroethane	1	38.2785	0	50	77	50	130
N-Nitroso-di-n-propylamine	1	40.6172	0	50	81	40	130
3&4-Methylphenol	1	94.9835	0	100	95	70	130
Nitrobenzene	1	40.5831	0	50	81	70	130
Isophorone	1	41.2265	0	50	82	60	130
2-Nitrophenol	1	87.613	0	100	88	70	130
2,4-Dimethylphenol	1	87.1908	0	100	87	50	130
Benzoic Acid	1	45.4584	0	100	45	20	130
bis(2-Chloroethoxy)methane	1	41.8846	0	50	84	60	130
2,4-Dichlorophenol	1	89.4897	0	100	89	70	130
1,2,4-Trichlorobenzene	1	39.8779	0	50	80	50	130
Naphthalene	1	39.6058	0	50	79	50	130
4-Chloroaniline	1	32.6478	0	50	65	10	150
Hexachlorobutadiene	1	39.2935	0	50	79	60	130
Caprolactam	1	51.0936	0	50	102	50	130
4-Chloro-3-methylphenol	1	95.2708	0	100	95	50	130
2-Methylnaphthalene	1	42.0726	0	50	84	70	130
1-Methylnaphthalene	1	45.9973	0	50	92	70	130
1,1'-Biphenyl	1	40.923	0	50	82	60	130
1,2,4,5-Tetrachlorobenzene	1	49.2296	0	50	98	70	130
Hexachlorocyclopentadiene	1	24.3635	0	50	49	20	160
2,4,6-Trichlorophenol	1	98.4871	0	100	98	70	130
2,4,5-Trichlorophenol	1	96.2235	0	100	96	70	130
2-Chloronaphthalene	1	44.4398	0	50	89	70	130
1,4-Dimethylnaphthalene	1	43.6087	0	50	87	70	130
Diphenyl Ether	1	50.945	0	50	102	70	130
2-Nitroaniline	1	45.1334	0	50	90	50	130
Coumarin	1	48.3697	0	50	97	70	130
Acenaphthylene	1	48.224	0	50	96	70	130
Dimethylphthalate	1	43.1029	0	50	86	70	130
2,6-Dinitrotoluene	1	46.7449	0	50	93	70	130
Acenaphthene	1	45.007	0	50	90	50	130
3-Nitroaniline	1	34.7015	0	50	69*	70	130
2,4-Dinitrophenol	1	76.4823	0	100	76	20	150
Dibenzofuran	1	43.7587	0	50	88	70	130
2,4-Dinitrotoluene	1	41.4652	0	50	83	40	130
4-Nitrophenol	1	88.9843	0	100	89	20	150
2,3,4,6-Tetrachlorophenol	1	93.3059	0	100	93	70	130
Fluorene	1	44.6241	0	50	89	50	130
4-Chlorophenyl-phenylether	1	43.3181	0	50	87	70	130
Diethylphthalate	1	43.8555	0	50	88	70	130
4-Nitroaniline	1	42.5611	0	50	85	50	130
Atrazine	1	50.0199	0	50	100	50	130
4,6-Dinitro-2-methylphenol	1	87.0177	0	100	87	70	130
n-Nitrosodiphenylamine	1	35.7089	0	50	71	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	45.7115	0	50	91	70	130
4-Bromophenyl-phenylether	1	43.4579	0	50	87	70	130
Hexachlorobenzene	1	41.4945	0	50	83	70	130
N-Octadecane	1	40.1622	0	50	80	70	130
Pentachlorophenol	1	101.0389	0	100	101	40	130
Phenanthrene	1	42.7047	0	50	85	70	130
Anthracene	1	42.8769	0	50	86	70	130
Carbazole	1	44.0177	0	50	88	70	130
Di-n-butylphthalate	1	42.0591	0.5347	50	83	70	130
Fluoranthene	1	44.8359	0	50	90	70	130
Pyrene	1	41.6923	0	50	83	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	45.2858	0	50	91	50	130
3,3'-Dichlorobenzidine	1	27.5678	0	50	55	10	130
Benzo[a]anthracene	1	41.8312	0	50	84	70	130
Chrysene	1	39.6551	0	50	79	60	130
bis(2-Ethylhexyl)phthalate	1	44.1528	0	50	88	70	130
Di-n-octylphthalate	1	44.734	0	50	89	70	130
Benzo[b]fluoranthene	1	47.294	0	50	95	70	130
Benzo[k]fluoranthene	1	44.772	0	50	90	70	130
Benzo[a]pyrene	1	42.5841	0	50	85	70	130
Indeno[1,2,3-cd]pyrene	1	43.4521	0	50	87	70	130
Dibenzo[a,h]anthracene	1	44.3127	0	50	89	60	130
Benzo[g,h,i]perylene	1	40.8198	0	50	82	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB71480

8101509 0631

Data File		Sample ID:		Analysis Date			
Spike or Dup: 10M71461.D		AD07136-003(MSD)		10/19/2018 7:14:00 PM			
Non Spike(If applicable): 10M71459.D		AD07136-003		10/19/2018 6:30:00 PM			
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	19.474	0	50	39	1	150
N-Nitrosodimethylamine	1	39.5078	0	50	79	50	130
Benzaldehyde	1	71.3589	0	50	143	20	220
Aniline	1	26.6193	0	50	53	20	150
Pentachloroethane	1	41.5957	0	50	83	50	130
bis(2-Chloroethyl)ether	1	39.8034	0	50	80	50	130
Phenol	1	92.2058	0	100	92	20	150
2-Chlorophenol	1	89.6034	0	100	90	50	130
N-Decane	1	32.3133	0	50	65	20	130
1,3-Dichlorobenzene	1	37.5716	0	50	75	60	130
1,4-Dichlorobenzene	1	36.3549	0	50	73	60	130
1,2-Dichlorobenzene	1	35.4587	0	50	71	50	130
Benzyl alcohol	1	43.0866	0	50	86	20	130
bis(2-chloroisopropyl)ether	1	34.9248	0	50	70	40	130
2-Methylphenol	1	87.2462	0	100	87	50	130
Acetophenone	1	47.6852	0	50	95	50	130
Hexachloroethane	1	36.6893	0	50	73	50	130
N-Nitroso-di-n-propylamine	1	42.3294	0	50	85	40	130
3&4-Methylphenol	1	97.1521	0	100	97	70	130
Nitrobenzene	1	41.0967	0	50	82	70	130
Isophorone	1	40.762	0	50	82	60	130
2-Nitrophenol	1	85.1588	0	100	85	70	130
2,4-Dimethylphenol	1	85.8001	0	100	86	50	130
Benzoic Acid	1	44.2023	0	100	44	20	130
bis(2-Chloroethoxy)methane	1	41.2245	0	50	82	60	130
2,4-Dichlorophenol	1	88.6255	0	100	89	70	130
1,2,4-Trichlorobenzene	1	39.0631	0	50	78	50	130
Naphthalene	1	40.4026	0	50	81	50	130
4-Chloroaniline	1	32.5696	0	50	65	10	150
Hexachlorobutadiene	1	38.4966	0	50	77	60	130
Caprolactam	1	52.1146	0	50	104	50	130
4-Chloro-3-methylphenol	1	94.4724	0	100	94	50	130
2-Methylnaphthalene	1	41.6256	0	50	83	70	130
1-Methylnaphthalene	1	47.0952	0	50	94	70	130
1,1'-Biphenyl	1	38.0481	0	50	76	60	130
1,2,4,5-Tetrachlorobenzene	1	43.5229	0	50	87	70	130
Hexachlorocyclopentadiene	1	20.688	0	50	41	20	160
2,4,6-Trichlorophenol	1	93.8013	0	100	94	70	130
2,4,5-Trichlorophenol	1	93.3347	0	100	93	70	130
2-Chloronaphthalene	1	42.3291	0	50	85	70	130
1,4-Dimethylnaphthalene	1	39.9849	0	50	80	70	130
Diphenyl Ether	1	45.9768	0	50	92	70	130
2-Nitroaniline	1	44.5067	0	50	89	50	130
Coumarin	1	46.0893	0	50	92	70	130
Acenaphthylene	1	44.3178	0	50	89	70	130
Dimethylphthalate	1	43.279	0	50	87	70	130
2,6-Dinitrotoluene	1	46.0087	0	50	92	70	130
Acenaphthene	1	42.7284	0	50	85	50	130
3-Nitroaniline	1	33.4218	0	50	67 *	70	130
2,4-Dinitrophenol	1	78.3257	0	100	78	20	150
Dibenzofuran	1	42.5902	0	50	85	70	130
2,4-Dinitrotoluene	1	40.3454	0	50	81	40	130
4-Nitrophenol	1	90.2347	0	100	90	20	150
2,3,4,6-Tetrachlorophenol	1	84.4188	0	100	84	70	130
Fluorene	1	42.6159	0	50	85	50	130
4-Chlorophenyl-phenylether	1	42.3303	0	50	85	70	130
Diethylphthalate	1	43.3161	0	50	87	70	130
4-Nitroaniline	1	39.9267	0	50	80	50	130
Atrazine	1	48.9531	0	50	98	50	130
4,6-Dinitro-2-methylphenol	1	93.7333	0	100	94	70	130
n-Nitrosodiphenylamine	1	37.4593	0	50	75	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: SMB71480

1,2-Diphenylhydrazine	1	46.1069	0	50	92	70	130
4-Bromophenyl-phenylether	1	45.0178	0	50	90	70	130
Hexachlorobenzene	1	43.1155	0	50	86	70	130
N-Octadecane	1	40.0609	0	50	80	70	130
Pentachlorophenol	1	105.1929	0	100	105	40	130
Phenanthrene	1	43.76	0	50	88	70	130
Anthracene	1	44.9908	0	50	90	70	130
Carbazole	1	44.0964	0	50	88	70	130
Di-n-butylphthalate	1	43.5521	0.5347	50	86	70	130
Fluoranthene	1	46.7431	0	50	93	70	130
Pyrene	1	44.5291	0	50	89	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	46.0475	0	50	92	50	130
3,3'-Dichlorobenzidine	1	28.1281	0	50	56	10	130
Benzo[a]anthracene	1	44.8842	0	50	90	70	130
Chrysene	1	41.3473	0	50	83	60	130
bis(2-Ethylhexyl)phthalate	1	47.4486	0	50	95	70	130
Di-n-octylphthalate	1	45.8937	0	50	92	70	130
Benzo[b]fluoranthene	1	48.8028	0	50	98	70	130
Benzo[k]fluoranthene	1	47.0116	0	50	94	70	130
Benzo[a]pyrene	1	43.5192	0	50	87	70	130
Indeno[1,2,3-cd]pyrene	1	45.4832	0	50	91	70	130
Dibenzo[a,h]anthracene	1	47.4901	0	50	95	60	130
Benzo[g,h,i]perylene	1	44.0135	0	50	88	70	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: SMB71480

8101509 0633

Data File	Sample ID:	Analysis Date
Spike or Dup: 10M71461.D	AD07136-003(MSD)	10/19/2018 7:14:00 PM
Duplicate(If applicable): 10M71460.D	AD07136-003(MS)	10/19/2018 6:52:00 PM
Inst Blank(If applicable):		
Method: 8270D	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	19.474	23.1032	17	30
N-Nitrosodimethylamine	1	39.5078	34.3013	14	30
Benzaldehyde	1	71.3589	73.1107	2.4	30
Aniline	1	26.6193	26.0648	2.1	30
Pentachloroethane	1	41.5957	40.8681	1.8	30
bis(2-Chloroethyl)ether	1	39.8034	37.9532	4.8	30
Phenol	1	92.2058	87.559	5.2	40
2-Chlorophenol	1	89.6034	85.5731	4.6	40
N-Decane	1	32.3133	34.1942	5.7	30
1,3-Dichlorobenzene	1	37.5716	36.6728	2.4	30
1,4-Dichlorobenzene	1	36.3549	37.5176	3.1	40
1,2-Dichlorobenzene	1	35.4587	35.5485	0.25	30
Benzyl alcohol	1	43.0866	42.2052	2.1	30
bis(2-chloroisopropyl)ether	1	34.9248	34.7892	0.39	30
2-Methylphenol	1	87.2462	85.7146	1.8	40
Acetophenone	1	47.6852	46.8707	1.7	30
Hexachloroethane	1	36.6893	38.2785	4.2	30
N-Nitroso-di-n-propylamine	1	42.3294	40.6172	4.1	40
3&4-Methylphenol	1	97.1521	94.9835	2.3	30
Nitrobenzene	1	41.0967	40.5831	1.3	30
Isophorone	1	40.762	41.2265	1.1	30
2-Nitrophenol	1	85.1588	87.613	2.8	30
2,4-Dimethylphenol	1	85.8001	87.1908	1.6	40
Benzoic Acid	1	44.2023	45.4584	2.8	30
bis(2-Chloroethoxy)methane	1	41.2245	41.8846	1.6	30
2,4-Dichlorophenol	1	88.6255	89.4897	0.97	30
1,2,4-Trichlorobenzene	1	39.0631	39.8779	2.1	40
Naphthalene	1	40.4026	39.6058	2	40
4-Chloroaniline	1	32.5696	32.6478	0.24	30
Hexachlorobutadiene	1	38.4966	39.2935	2	30
Caprolactam	1	52.1146	51.0936	2	30
4-Chloro-3-methylphenol	1	94.4724	95.2708	0.84	40
2-Methylnaphthalene	1	41.6256	42.0726	1.1	30
1-Methylnaphthalene	1	47.0952	45.9973	2.4	30
1,1'-Biphenyl	1	38.0481	40.923	7.3	30
1,2,4,5-Tetrachlorobenzene	1	43.5229	49.2296	12	30
Hexachlorocyclopentadiene	1	20.688	24.3635	16	30
2,4,6-Trichlorophenol	1	93.8013	98.4871	4.9	30
2,4,5-Trichlorophenol	1	93.3347	96.2235	3	30
2-Chloronaphthalene	1	42.3291	44.4398	4.9	30
1,4-Dimethylnaphthalene	1	39.9849	43.6087	8.7	30
Diphenyl Ether	1	45.9768	50.945	10	30
2-Nitroaniline	1	44.5067	45.1334	1.4	30
Coumarin	1	46.0893	48.3697	4.8	30
Acenaphthylene	1	44.3178	48.224	8.4	30
Dimethylphthalate	1	43.279	43.1029	0.41	30
2,6-Dinitrotoluene	1	46.0087	46.7449	1.6	30
Acenaphthene	1	42.7284	45.007	5.2	40
3-Nitroaniline	1	33.4218	34.7015	3.8	30
2,4-Dinitrophenol	1	78.3257	76.4823	2.4	30
Dibenzofuran	1	42.5902	43.7587	2.7	30
2,4-Dinitrotoluene	1	40.3454	41.4652	2.7	40
4-Nitrophenol	1	90.2347	88.9843	1.4	40
2,3,4,6-Tetrachlorophenol	1	84.4188	93.3059	10	30
Fluorene	1	42.6159	44.6241	4.6	40
4-Chlorophenyl-phenylether	1	42.3303	43.3181	2.3	30
Diethylphthalate	1	43.3161	43.8555	1.2	30
4-Nitroaniline	1	39.9267	42.5611	6.4	30
Atrazine	1	48.9531	50.0199	2.2	30
4,6-Dinitro-2-methylphenol	1	93.7333	87.0177	7.4	30
n-Nitrosodiphenylamine	1	37.4593	35.7089	4.8	30
1,2-Diphenylhydrazine	1	46.1069	45.7115	0.86	30
4-Bromophenyl-phenylether	1	45.0178	43.4579	3.5	30

Form3
RPD Data Laboratory Limits

QC Batch: SMB71480

Hexachlorobenzene	1	43.1155	41.4945	3.8	30
N-Octadecane	1	40.0609	40.1622	0.25	30
Pentachlorophenol	1	105.1929	101.0389	4	40
Phenanthrene	1	43.76	42.7047	2.4	30
Anthracene	1	44.9908	42.8769	4.8	30
Carbazole	1	44.0964	44.0177	0.18	30
Di-n-butylphthalate	1	43.5521	42.0591	3.5	30
Fluoranthene	1	46.7431	44.8359	4.2	30
Pyrene	1	44.5291	41.6923	6.6	40
Benzidine	1	0	0	NA	30
Butylbenzylphthalate	1	46.0475	45.2858	1.7	40
3,3'-Dichlorobenzidine	1	28.1281	27.5678	2	30
Benzo[a]anthracene	1	44.8842	41.8312	7	30
Chrysene	1	41.3473	39.6551	4.2	30
bis(2-Ethylhexyl)phthalate	1	47.4486	44.1528	7.2	30
Di-n-octylphthalate	1	45.8937	44.734	2.6	30
Benzo[b]fluoranthene	1	48.8028	47.294	3.1	30
Benzo[k]fluoranthene	1	47.0116	44.772	4.9	30
Benzo[a]pyrene	1	43.5192	42.5841	2.2	30
Indeno[1,2,3-cd]pyrene	1	45.4832	43.4521	4.6	30
Dibenzo[a,h]anthracene	1	47.4901	44.3127	6.9	30
Benzo[g,h,i]perylene	1	44.0135	40.8198	7.5	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

SampleID : AD07136-003
Data File: 10M71459.D
Acq On : 10/19/18 18:30

Operator : AH/JB
Sam Mult : 1 Vial# : 22
Misc : S,BNA

Qt Meth : 10M_1008.M
Qt On : 10/22/18 10:38
Qt Upd On: 10/19/18 15:07

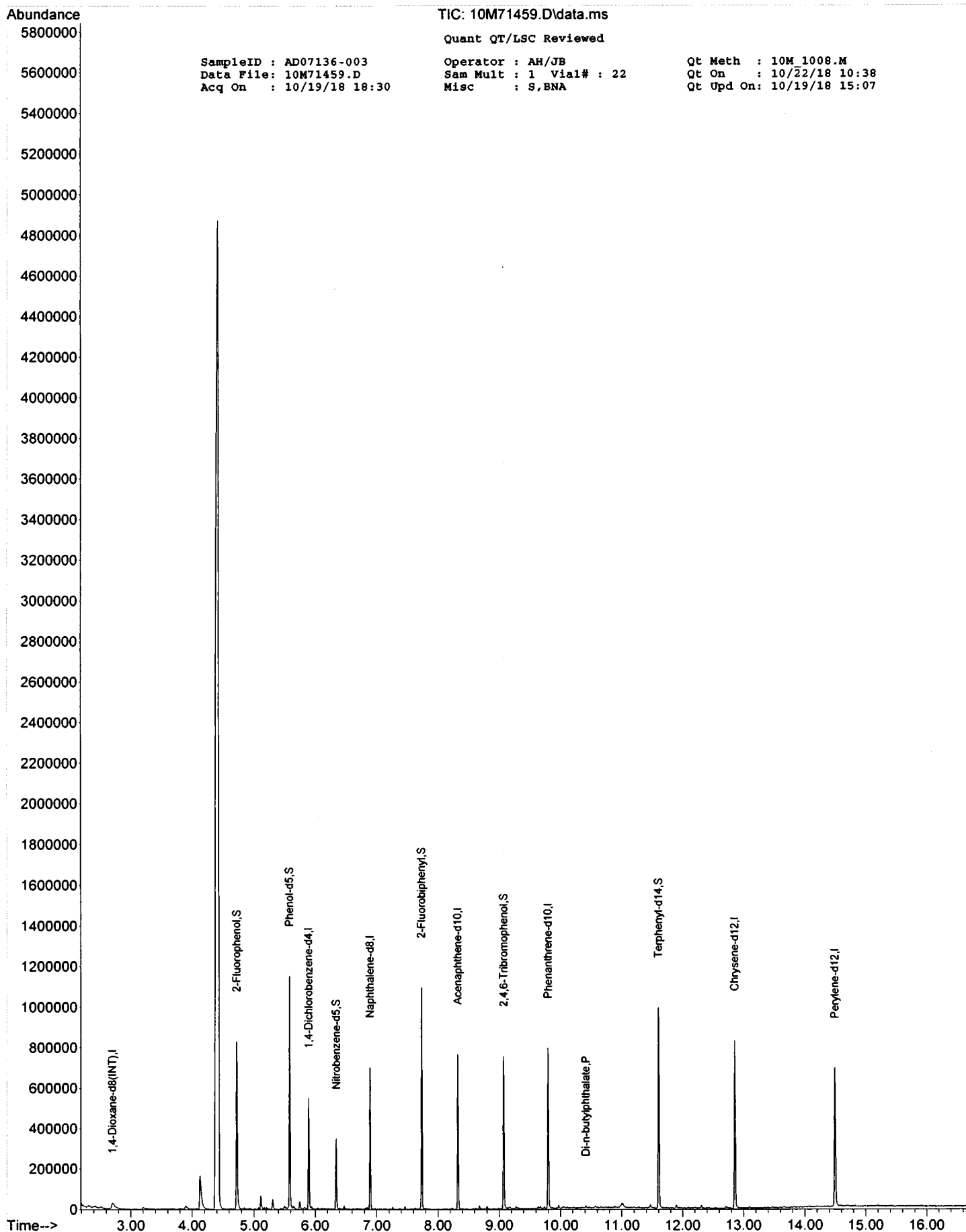
Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.700	96	41251	40.00	ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.894	152	79431	40.00	ng	0.00
31) Naphthalene-d8	6.894	136	285711	40.00	ng	0.00
50) Acenaphthene-d10	8.327	164	178478	40.00	ng	0.00
77) Phenanthrene-d10	9.798	188	304096	40.00	ng	0.00
91) Chrysene-d12	12.857	240	319863	40.00	ng	0.00
103) Perylene-d12	14.494	264	291423	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	252365	105.68	ng	0.00
Spiked Amount 100.000			Recovery	=	105.68%	
16) Phenol-d5	5.583	99	347735	107.59	ng	0.00
Spiked Amount 100.000			Recovery	=	107.59%	
32) Nitrobenzene-d5	6.343	128	47336	51.49	ng	0.00
Spiked Amount 50.000			Recovery	=	102.98%	
55) 2-Fluorobiphenyl	7.733	172	306439	53.63	ng	0.00
Spiked Amount 50.000			Recovery	=	107.26%	
80) 2,4,6-Tribromophenol	9.076	330	75784	106.50	ng	0.00
Spiked Amount 100.000			Recovery	=	106.50%	
94) Terphenyl-d14	11.601	244	302104	51.55	ng	0.00
Spiked Amount 50.000			Recovery	=	103.10%	
Target Compounds						
89) Di-n-butylphthalate	10.413	149	5151	0.5347	ng	Qvalue 90

(#) = qualifier out of range (m) = manual integration (+) = signals summed





SampleID : AD07136-003(MS)
Data File: 10M71460.D
Acq On : 10/19/18 18:52

Operator : AH/JB
Sam Mult : 1 Vial# : 23
Misc : S,BNA

Qt Meth : 10M 1008.M
Qt On : 10/22/18 10:39
Qt Upd On: 10/19/18 15:07

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.716	96	42937	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.894	152	87372	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	311164	40.00	ng	0.00
50) Acenaphthene-d10	8.333	164	189222	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	347697	40.00	ng	0.00
91) Chrysene-d12	12.863	240	342555	40.00	ng	0.00
103) Perylene-d12	14.494	264	313686	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	283444	114.04	ng	0.00
Spiked Amount 100.000			Recovery =	114.04%		
16) Phenol-d5	5.589	99	392331	116.62	ng	0.00
Spiked Amount 100.000			Recovery =	116.62%		
32) Nitrobenzene-d5	6.343	128	56270	55.74	ng	0.00
Spiked Amount 50.000			Recovery =	111.48%		
55) 2-Fluorobiphenyl	7.734	172	348727	57.56	ng	0.00
Spiked Amount 50.000			Recovery =	115.12%		
80) 2,4,6-Tribromophenol	9.076	330	92503	113.90	ng	0.00
Spiked Amount 100.000			Recovery =	113.90%		
94) Terphenyl-d14	11.601	244	348737	55.56	ng	0.00
Spiked Amount 50.000			Recovery =	111.12%		
Target Compounds						
8) 1,4-Dioxane	2.749	88	22686	21.9239	ng	Qvalue 85
9) Pyridine	3.246	79	53442	23.1032	ng	61
10) N-Nitrosodimethylamine	3.176	74	49081	34.3013	ng	94
12) Benzaldehyde	5.525	77	87469	73.1107	ng	77
13) Aniline	5.621	93	90421	26.0648	ng	24
14) Pentachloroethane	5.658	117	38434	40.8681	ng	76
15) bis(2-Chloroethyl)ether	5.674	93	94320	37.9532	ng	77
17) Phenol	5.599	94	291731	87.5590	ng	87
18) 2-Chlorophenol	5.722	128	238137	85.5731	ng	74
19) N-Decane	5.749	57	74682	34.1942	ng	79
20) 1,3-Dichlorobenzene	5.845	146	113163	36.6728	ng	95
22) 1,4-Dichlorobenzene	5.910	146	120623	37.5176	ng	98
23) 1,2-Dichlorobenzene	6.033	146	111682	35.5485	ng	94
24) Benzyl alcohol	6.011	108	74821	42.2052	ng	68
25) bis(2-chloroisopropyl)...	6.113	45	103760	34.7892	ng	85
26) 2-Methylphenol	6.097	108	217799	85.7146	ng	93
27) Acetophenone	6.220	105	168661	46.8707	ng	96
28) Hexachloroethane	6.305	117	47660	38.2785	ng	86
29) N-Nitroso-di-n-propyla...	6.214	70	68113	40.6172	ng	80
30) 3&4-Methylphenol	6.214	108	229236	94.9835	ng	89
33) Nitrobenzene	6.359	77	109716	40.5831	ng	79
34) Isophorone	6.541	82	191831	41.2265	ng	87
35) 2-Nitrophenol	6.605	139	129626	87.6130	ng	89
36) 2,4-Dimethylphenol	6.626	107	240801	87.1908	ng	96
37) Benzoic Acid	6.707	105	97308	45.4584	ng	88
38) bis(2-Chloroethoxy)met...	6.696	93	122255	41.8846	ng	94
39) 2,4-Dichlorophenol	6.787	162	215630	89.4897	ng	85
40) 1,2,4-Trichlorobenzene	6.851	180	104165	39.8779	ng	94
41) Naphthalene	6.915	128	328096	39.6058	ng	99
42) 4-Chloroaniline	6.953	127	87345	32.6478	ng	94
43) Hexachlorobutadiene	6.995	225	57458	39.2935	ng	95
44) Caprolactam	7.231	113	43167	51.0936	ng	61
45) 4-Chloro-3-methylphenol	7.311	107	210327	95.2708	ng	83
46) 2-Methylnaphthalene	7.450	142	229504	42.0726	ng	99
47) 1-Methylnaphthalene	7.530	142	246807	45.9973	ng	90
48) Methylnaphthalenes (To...	7.530	142	480548m	88.9812	ng	
49) 1,1'-Biphenyl	7.824	154	277420	40.9230	ng	93
51) 1,2,4,5-Tetrachloroben...	7.584	216	127687	49.2296	ng	97
52) Hexachlorocyclopentadiene	7.568	237	22214	24.3635	ng	96
53) 2,4,6-Trichlorophenol	7.669	196	155195m	98.4871	ng	
54) 2,4,5-Trichlorophenol	7.707	196	161052	96.2235	ng	97
56) 2-Chloronaphthalene	7.851	162	222049	44.4398	ng	89
57) 1,4-Dimethylnaphthalene	8.129	156	179842	43.6087	ng	84
58) Dimethylnaphthalenes (...)	8.129	156	179842	43.6087	ng	84
59) Diphenyl Ether	7.905	170	188599	50.9450	ng	80
60) 2-Nitroaniline	7.926	65	80141	45.1334	ng	45
61) Coumarin	8.113	146	88999	48.3697	ng	68
62) Acenaphthylene	8.210	152	355395	48.2240	ng	98
63) Dimethylphthalate	8.065	163	251538	43.1029	ng	98
64) 2,6-Dinitrotoluene	8.129	165	56770	46.7449	ng	67
65) Acenaphthene	8.359	153	233899	45.0070	ng	96

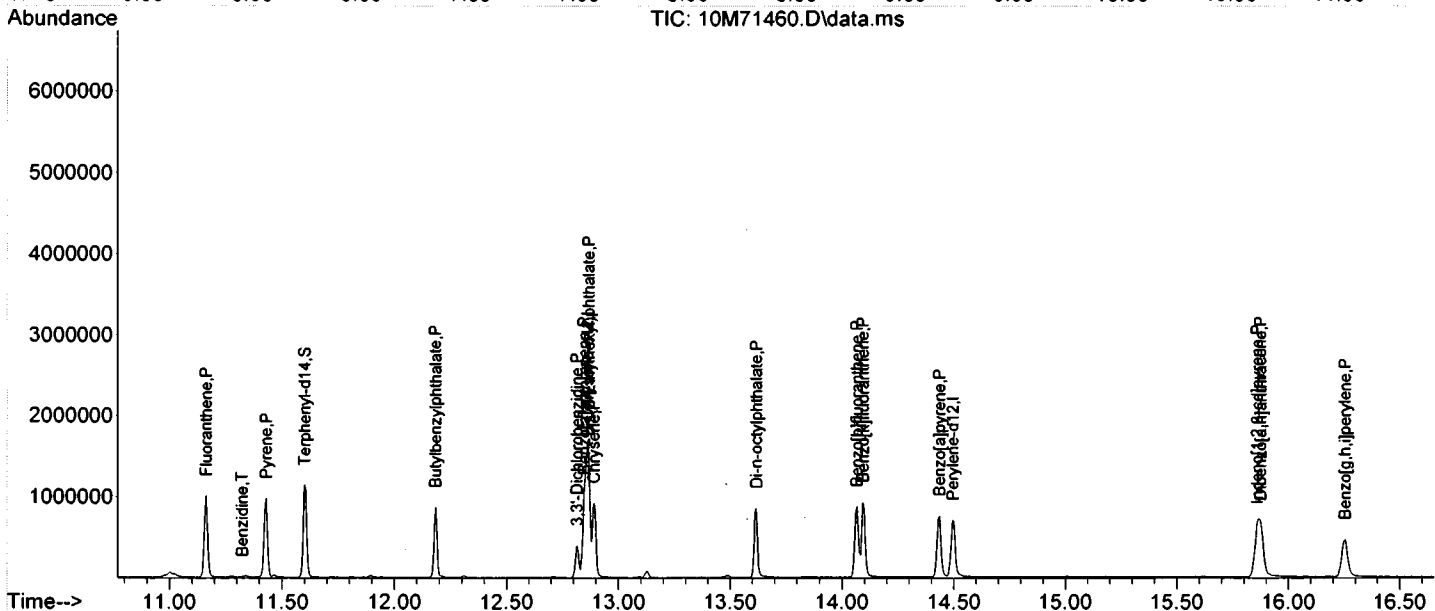
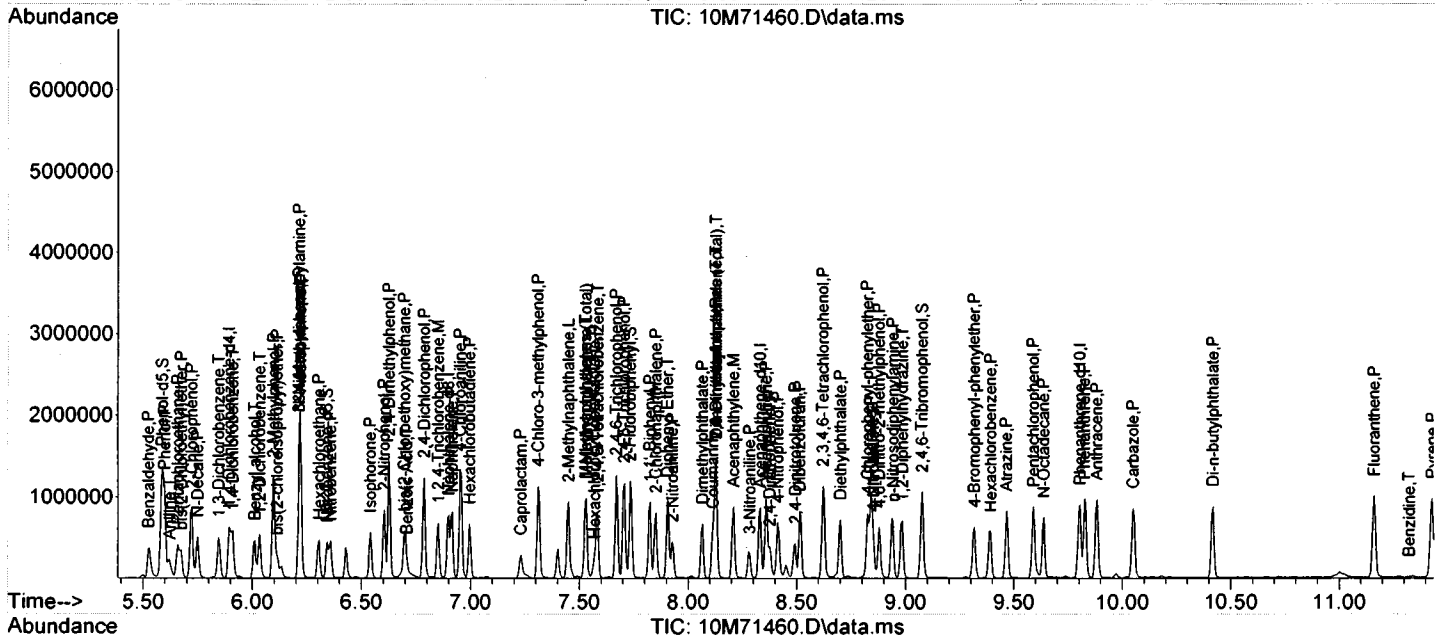
Quantitation Report (QT Reviewed)

SampleID : AD07136-003 (MS) Operator : AH/JB Qt Meth : 10M_1008.M
 Data File: 10M71460.D Sam Mult : 1 Vial# : 23 Qt On : 10/22/18 10:39
 Acq On : 10/19/18 18:52 Misc : S,BNA Qt Upd On: 10/19/18 15:07

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.284	138	51629	34.7015	ng	70
67) 2,4-Dinitrophenol	8.375	184	55717	76.4823	ng	40
68) Dibenzofuran	8.514	168	329215	43.7587	ng	89
69) 2,4-Dinitrotoluene	8.493	165	79142	41.4652	ng	62
70) 4-Nitrophenol	8.413	65	95676	88.9843	ng	66
71) 2,3,4,6-Tetrachlorophenol	8.621	232	136073	93.3059	ng	87
72) Fluorene	8.841	166	265888	44.6241	ng	98
73) 4-Chlorophenyl-phenyle...	8.825	204	123153	43.3181	ng	82
74) Diethylphthalate	8.702	149	252965	43.8555	ng	94
75) 4-Nitroaniline	8.851	138	68692	42.5611	ng	85
76) Atrazine	9.466	200	96822	50.0199	ng	96
78) 4,6-Dinitro-2-methylph...	8.878	198	90987	87.0177	ng	52
79) n-Nitrosodiphenylamine	8.942	169	187194	35.7089	ng	100
81) 1,2-Diphenylhydrazine	8.985	77	292360	45.7115	ng	84
82) 4-Bromophenyl-phenylether	9.317	248	69978	43.4579	ng	84
83) Hexachlorobenzene	9.392	284	71763	41.4945	ng	67
84) N-Octadecane	9.638	57	118153	40.1622	ng	82
85) Pentachlorophenol	9.589	266	92390	101.0389	ng	96
86) Phenanthrene	9.825	178	392305	42.7047	ng	99
87) Anthracene	9.884	178	399753	42.8769	ng	99
88) Carbazole	10.049	167	373370	44.0177	ng	95
89) Di-n-butylphthalate	10.419	149	453378	42.0591	ng	97
90) Fluoranthene	11.162	202	434402	44.8359	ng	88
92) Pyrene	11.429	202	440173	41.6923	ng	84
93) Benzidine	11.322	184	3480	0.8807	ng	89
97) Butylbenzylphthalate	12.184	149	199987	45.2858	ng	75
99) 3,3'-Dichlorobenzidine	12.815	252	88009	27.5678	ng	94
100) Benzo[a]anthracene	12.847	228	397580	41.8312	ng	99
101) Chrysene	12.890	228	370128	39.6551	ng	98
102) bis(2-Ethylhexyl)phtha...	12.868	149	289334	44.1528	ng	95
104) Di-n-octylphthalate	13.617	149	472178	44.7340	ng	99
105) Benzo[b]fluoranthene	14.066	252	402613	47.2940	ng	93
106) Benzo[k]fluoranthene	14.093	252	375495m	44.7720	ng	
107) Benzo[a]pyrene	14.435	252	352033	42.5841	ng	90
108) Indeno[1,2,3-cd]pyrene	15.858	276	378097	43.4521	ng	83
109) Dibenzo[a,h]anthracene	15.874	278	319858	44.3127	ng	89
110) Benzo[g,h,i]perylene	16.254	276	313681	40.8198	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : AD07136-003(MSD)
 Data File: 10M71461.D
 Acq On : 10/19/18 19:14

Operator : AH/JB
 Sam Mult : 1 Vial# : 24
 Misc : S,BNA

Qt Meth : 10M_1008.M
 Qt On : 10/22/18 10:39
 Qt Upd On: 10/19/18 15:07

Data Path : G:\GCMSData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.700	96	39690	40.00	ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.893	152	83743	40.00	ng	0.00
31) Naphthalene-d8	6.899	136	310137	40.00	ng	0.00
50) Acenaphthene-d10	8.332	164	196273	40.00	ng	0.00
77) Phenanthrene-d10	9.803	188	345741	40.00	ng	0.00
91) Chrysene-d12	12.863	240	338499	40.00	ng	0.00
103) Perylene-d12	14.494	264	312488	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.722	112	267802	116.56	ng	0.00
Spiked Amount 100.000			Recovery =	116.56%		
16) Phenol-d5	5.588	99	386661	124.34	ng	0.00
Spiked Amount 100.000			Recovery =	124.34%		
32) Nitrobenzene-d5	6.343	128	53571	53.48	ng	0.00
Spiked Amount 50.000			Recovery =	106.96%		
55) 2-Fluorobiphenyl	7.739	172	330343	52.57	ng	0.00
Spiked Amount 50.000			Recovery =	105.14%		
80) 2,4,6-Tribromophenol	9.076	330	94292	116.84	ng	0.00
Spiked Amount 100.000			Recovery =	116.84%		
94) Terphenyl-d14	11.606	244	368420	59.40	ng	0.00
Spiked Amount 50.000			Recovery =	118.80%		
Target Compounds						
8) 1,4-Dioxane	2.754	88	17950	18.7661	ng	67
9) Pyridine	3.246	79	41452	19.4740	ng	71
10) N-Nitrosodimethylamine	3.176	74	52256	39.5078	ng	92
12) Benzaldehyde	5.524	77	78917	71.3589	ng	75
13) Aniline	5.620	93	85370	26.6193	ng	19
14) Pentachloroethane	5.658	117	36160	41.5957	ng	74
15) bis(2-Chloroethyl)ether	5.674	93	91435	39.8034	ng	73
17) Phenol	5.599	94	283981	92.2058	ng	88
18) 2-Chlorophenol	5.722	128	230496	89.6034	ng	71
19) N-Decane	5.749	57	65237m	32.3133	ng	
20) 1,3-Dichlorobenzene	5.845	146	107169	37.5716	ng	97
22) 1,4-Dichlorobenzene	5.909	146	112030	36.3549	ng	99
23) 1,2-Dichlorobenzene	6.032	146	106773	35.4587	ng	92
24) Benzyl alcohol	6.011	108	73211	43.0866	ng	65
25) bis(2-chloroisopropyl)...	6.113	45	99838	34.9248	ng	81
26) 2-Methylphenol	6.096	108	212483	87.2462	ng	96
27) Acetophenone	6.220	105	164465	47.6852	ng	95
28) Hexachloroethane	6.305	117	43784	36.6893	ng	90
29) N-Nitroso-di-n-propyla...	6.214	70	68036	42.3294	ng	81
30) 3&4-Methylphenol	6.214	108	224731	97.1521	ng	81
33) Nitrobenzene	6.359	77	110738	41.0967	ng	76
34) Isophorone	6.540	82	189044	40.7620	ng	85
35) 2-Nitrophenol	6.605	139	125579	85.1588	ng	90
36) 2,4-Dimethylphenol	6.626	107	236178	85.8001	ng	94
37) Benzoic Acid	6.706	105	93894	44.2023	ng	85
38) bis(2-Chloroethoxy)met...	6.696	93	119931	41.2245	ng	93
39) 2,4-Dichlorophenol	6.786	162	212843	88.6255	ng	85
40) 1,2,4-Trichlorobenzene	6.851	180	101700	39.0631	ng	96
41) Naphthalene	6.915	128	333512	40.4026	ng	97
42) 4-Chloroaniline	6.952	127	86848	32.5696	ng	92
43) Hexachlorobutadiene	6.995	225	56107	38.4966	ng	95
44) Caprolactam	7.230	113	43973	52.1146	ng	56
45) 4-Chloro-3-methylphenol	7.311	107	207876	94.4724	ng	77
46) 2-Methylnaphthalene	7.450	142	226316	41.6256	ng	95
47) 1-Methylnaphthalene	7.530	142	251864	47.0952	ng	94
48) Methylnaphthalenes (To...	7.530	142	473938m	88.0479	ng	
49) 1,1'-Biphenyl	7.824	154	257080	38.0481	ng	92
51) 1,2,4,5-Tetrachloroben...	7.583	216	117092	43.5229	ng	96
52) Hexachlorocyclopentadiene	7.567	237	19400	20.6880	ng	95
53) 2,4,6-Trichlorophenol	7.669	196	153319	93.8013	ng	96
54) 2,4,5-Trichlorophenol	7.706	196	162038m	93.3347	ng	
56) 2-Chloronaphthalene	7.851	162	219384	42.3291	ng	91
57) 1,4-Dimethylnaphthalene	8.129	156	171042	39.9849	ng	89
58) Dimethylnaphthalenes (...)	8.129	156	171042	39.9849	ng	89
59) Diphenyl Ether	7.904	170	176549	45.9768	ng	85
60) 2-Nitroaniline	7.926	65	81973	44.5067	ng	53
61) Coumarin	8.113	146	87963	46.0893	ng	64
62) Acenaphthylene	8.209	152	338778	44.3178	ng	98
63) Dimethylphthalate	8.065	163	261977	43.2790	ng	98
64) 2,6-Dinitrotoluene	8.129	165	57958	46.0087	ng	71
65) Acenaphthene	8.359	153	230332	42.7284	ng	94

Quantitation Report (QT Reviewed)

SampleID : AD07136-003(MSD) Operator : AH/JB Qt Meth : 10M_1008.M
 Data File: 10M71461.D Sam Mult : 1 Vial# : 24 Qt On : 10/22/18 10:39
 Acq On : 10/19/18 19:14 Misc : S,BNA Qt Upd On: 10/19/18 15:07

Data Path : G:\GcMsData\2018\GCMS_10\Data\10-19-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_10\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.279	138	51642	33.4218	ng	75
67) 2,4-Dinitrophenol	8.375	184	59553	78.3257	ng	42
68) Dibenzofuran	8.514	168	332515	42.5902	ng	90
69) 2,4-Dinitrotoluene	8.493	165	79870	40.3454	ng	65
70) 4-Nitrophenol	8.412	65	100722	90.2347	ng	58
71) 2,3,4,6-Tetrachlorophenol	8.626	232	127700	84.4188	ng	87
72) Fluorene	8.840	166	263384	42.6159	ng	98
73) 4-Chlorophenyl-phenyle...	8.824	204	124829	42.3303	ng	82
74) Diethylphthalate	8.701	149	259164	43.3161	ng	97
75) 4-Nitroaniline	8.851	138	66754	39.9267	ng	94
76) Atrazine	9.471	200	98288	48.9531	ng	95
78) 4,6-Dinitro-2-methylph...	8.878	198	98310	93.7333	ng	43
79) n-Nitrosodiphenylamine	8.937	169	195265	37.4593	ng	99
81) 1,2-Diphenylhydrazine	8.985	77	293230	46.1069	ng	85
82) 4-Bromophenyl-phenylether	9.316	248	72082	45.0178	ng	89
83) Hexachlorobenzene	9.391	284	74147	43.1155	ng	69
84) N-Octadecane	9.637	57	117192	40.0609	ng	81
85) Pentachlorophenol	9.589	266	96385	105.1929	ng	97
86) Phenanthrene	9.824	178	399738	43.7600	ng	99
87) Anthracene	9.883	178	417102	44.9908	ng	99
88) Carbazole	10.049	167	371934	44.0964	ng	98
89) Di-n-butylphthalate	10.418	149	466466	43.5521	ng	97
90) Fluoranthene	11.162	202	450333	46.7431	ng	86
92) Pyrene	11.429	202	464557	44.5291	ng	81
93) Benzidine	11.322	184	2423	0.6207	ng	98
97) Butylbenzylphthalate	12.183	149	201281	46.0475	ng	76
99) 3,3'-Dichlorobenzidine	12.814	252	88722	28.1281	ng	96
100) Benzo[a]anthracene	12.846	228	421546	44.8842	ng	97
101) Chrysene	12.889	228	381353	41.3473	ng	98
102) bis(2-Ethylhexyl)phtha...	12.868	149	307250	47.4486	ng	95
104) Di-n-octylphthalate	13.617	149	482588	45.8937	ng	99
105) Benzo[b]fluoranthene	14.066	252	413871	48.8028	ng	91
106) Benzo[k]fluoranthene	14.093	252	392772m	47.0116	ng	
107) Benzo[a]pyrene	14.430	252	358389	43.5192	ng	93
108) Indeno[1,2,3-cd]pyrene	15.863	276	394259	45.4832	ng	90
109) Dibenzo[a,h]anthracene	15.879	278	341484	47.4901	ng	89
110) Benzo[g,h,i]perylene	16.254	276	336931	44.0135	ng	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71497

8101509 0643

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105928.D	AD07161-001(MS)	10/23/2018 10:45:00 A
Non Spike(If applicable): 5M105927.D	AD07161-001	10/23/2018 10:21:00 A
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	79.05	0	100	79	20	160
Pyridine	1	42.8366	0	100	43	1	150
N-Nitrosodimethylamine	1	74.2596	0	100	74	20	150
Benzaldehyde	1	138.2068	0	100	138	20	234
Aniline	1	66.4807	0	100	66	20	150
Pentachloroethane	1	87.705	0	100	88	5	140
bis(2-Chloroethyl)ether	1	77.0152	0	100	77	12	158
Phenol	1	76.0985	0	100	76	5	120
2-Chlorophenol	1	86.984	0	100	87	23	134
N-Decane	1	75.8828	0	100	76	40	130
1,3-Dichlorobenzene	1	72.8177	0	100	73	20	130
1,4-Dichlorobenzene	1	75.3521	0	100	75	25	130
1,2-Dichlorobenzene	1	76.9314	0	100	77	25	130
Benzyl alcohol	1	100.2758	0	100	100	35	130
bis(2-chloroisopropyl)ether	1	69.7337	0	100	70	36	166
2-Methylphenol	1	91.9522	0	100	92	35	130
Acetophenone	1	99.8858	0	100	100	50	130
Hexachloroethane	1	74.7076	0	100	75	40	120
N-Nitroso-di-n-propylamine	1	76.4543	0	100	76	1	230
3&4-Methylphenol	1	86.7057	0	100	87	30	130
Nitrobenzene	1	83.2033	0	100	83	35	180
Isophorone	1	85.3608	0	100	85	21	196
2-Nitrophenol	1	93.5174	0	100	94	29	182
2,4-Dimethylphenol	1	80.9145	0	100	81	32	120
Benzoic Acid	1	38.437	0	100	38	1	130
bis(2-Chloroethoxy)methane	1	80.3537	0	100	80	33	184
2,4-Dichlorophenol	1	91.7772	0	100	92	39	135
1,2,4-Trichlorobenzene	1	80.8283	0	100	81	44	142
Naphthalene	1	80.0422	0	100	80	21	133
4-Chloroaniline	1	103.1922	0	100	103	30	170
Hexachlorobutadiene	1	82.8454	0	100	83	24	120
Caprolactam	1	99.4056	0	100	99	5	130
4-Chloro-3-methylphenol	1	93.8997	0	100	94	22	147
2-Methylnaphthalene	1	100.3154	0	100	100	40	130
1-Methylnaphthalene	1	104.404	0	100	104	50	130
1,1'-Biphenyl	1	89.4267	0	100	89	50	130
1,2,4,5-Tetrachlorobenzene	1	104.4884	0	100	104	60	140
Hexachlorocyclopentadiene	1	78.9205	0	100	79	20	130
2,4,6-Trichlorophenol	1	95.9188	0	100	96	37	144
2,4,5-Trichlorophenol	1	95.8201	0	100	96	50	130
2-Chloronaphthalene	1	87.2742	0	100	87	60	120
1,4-Dimethylnaphthalene	1	83.1617	0	100	83	50	130
Diphenyl Ether	1	106.3235	0	100	106	50	140
2-Nitroaniline	1	97.8076	0	100	98	40	150
Coumarin	1	97.0873	0	100	97	1	180
Acenaphthylene	1	94.5488	0	100	95	33	145
Dimethylphthalate	1	88.9533	0	100	89	1	120
2,6-Dinitrotoluene	1	82.6502	0	100	83	50	158
Acenaphthene	1	89.1847	0	100	89	47	145
3-Nitroaniline	1	114.4031	0	100	114	40	150
2,4-Dinitrophenol	1	97.1961	0	100	97	1	191
Dibenzofuran	1	99.8598	0	100	100	50	130
2,4-Dinitrotoluene	1	87.1642	0	100	87	39	139
4-Nitrophenol	1	75.3343	0	100	75	1	132
2,3,4,6-Tetrachlorophenol	1	89.0021	0	100	89	50	130
Fluorene	1	88.352	0	100	88	59	121
4-Chlorophenyl-phenylether	1	88.6811	0	100	89	1	132
Diethylphthalate	1	86.2868	0	100	86	1	120
4-Nitroaniline	1	102.1912	0	100	102	40	150
Atrazine	1	96.9905	0	100	97	40	150
4,6-Dinitro-2-methylphenol	1	106.8505	0	100	107	1	181

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	71.3249	0	100	71	30	130
1,2-Diphenylhydrazine	1	85.5388	0	100	86	40	130
4-Bromophenyl-phenylether	1	91.4732	0	100	91	53	127
Hexachlorobenzene	1	90.6183	0	100	91	1	152
N-Octadecane	1	80.5188	0	100	81	50	130
Pentachlorophenol	1	97.7678	0	100	98	14	176
Phenanthrene	1	87.0894	0	100	87	54	120
Anthracene	1	88.5778	0	100	89	27	133
Carbazole	1	98.0528	0	100	98	40	130
Di-n-butylphthalate	1	83.6981	0	100	84	1	120
Fluoranthene	1	88.1544	0	100	88	26	137
Pyrene	1	94.7395	0	100	95	52	120
Benzidine	1	20.4431	0	100	20	1	130
Butylbenzylphthalate	1	85.8754	0	100	86	1	152
3,3'-Dichlorobenzidine	1	83.0334	0	100	83	1	262
Benzo[a]anthracene	1	89.8715	0	100	90	33	143
Chrysene	1	84.295	0	100	84	17	168
bis(2-Ethylhexyl)phthalate	1	80.3978	0	100	80	8	158
Di-n-octylphthalate	1	80.2598	0	100	80	4	146
Benzo[b]fluoranthene	1	97.6704	0	100	98	42	159
Benzo[k]fluoranthene	1	95.7484	0	100	96	11	162
Benzo[a]pyrene	1	86.0635	0	100	86	17	163
Indeno[1,2,3-cd]pyrene	1	89.8322	0	100	90	1	171
Dibenzo[a,h]anthracene	1	90.1092	0	100	90	1	227
Benzo[g,h,i]perylene	1	87.6259	0	100	88	1	219

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB71497

8101509 0645

Data File		Sample ID:		Analysis Date			
Spike or Dup: 5M105929.D		AD07161-001(MSD)		10/23/2018 11:08:00 A			
Non Spike(If applicable): 5M105927.D		AD07161-001		10/23/2018 10:21:00 A			
Inst Blank(If applicable):							
Method: 625.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	68.2816	0	100	68	20	160
Pyridine	1	44.349	0	100	44	1	150
N-Nitrosodimethylamine	1	71.8197	0	100	72	20	150
Benzaldehyde	1	125.3219	0	100	125	20	234
Aniline	1	69.1928	0	100	69	20	150
Pentachloroethane	1	80.7511	0	100	81	5	140
bis(2-Chloroethyl)ether	1	75.1887	0	100	75	43	126
Phenol	1	74.6329	0	100	75	17	120
2-Chlorophenol	1	78.1276	0	100	78	36	120
N-Decane	1	68.0295	0	100	68	40	130
1,3-Dichlorobenzene	1	69.1102	0	100	69	20	130
1,4-Dichlorobenzene	1	70.7609	0	100	71	25	130
1,2-Dichlorobenzene	1	71.9242	0	100	72	25	130
Benzyl alcohol	1	92.7663	0	100	93	35	130
bis(2-chloroisopropyl)ether	1	67.7582	0	100	68	63	139
2-Methylphenol	1	86.8524	0	100	87	35	130
Acetophenone	1	94.2778	0	100	94	50	130
Hexachloroethane	1	69.4415	0	100	69	55	120
N-Nitroso-di-n-propylamine	1	76.4395	0	100	76	14	198
3&4-Methylphenol	1	81.178	0	100	81	30	130
Nitrobenzene	1	82.7286	0	100	83	54	158
Isophorone	1	88.7169	0	100	89	47	180
2-Nitrophenol	1	89.8817	0	100	90	45	167
2,4-Dimethylphenol	1	78.5171	0	100	79	42	120
Benzoic Acid	1	41.4355	0	100	41	1	130
bis(2-Chloroethoxy)methane	1	83.3905	0	100	83	49	165
2,4-Dichlorophenol	1	88.7551	0	100	89	53	122
1,2,4-Trichlorobenzene	1	78.1487	0	100	78	57	130
Naphthalene	1	78.8212	0	100	79	36	120
4-Chloroaniline	1	99.6196	0	100	100	30	170
Hexachlorobutadiene	1	81.2486	0	100	81	38	120
Caprolactam	1	99.1742	0	100	99	5	130
4-Chloro-3-methylphenol	1	92.8232	0	100	93	41	128
2-Methylnaphthalene	1	97.0789	0	100	97	40	130
1-Methylnaphthalene	1	103.286	0	100	103	50	130
1,1'-Biphenyl	1	86.8566	0	100	87	50	130
1,2,4,5-Tetrachlorobenzene	1	96.3947	0	100	96	60	140
Hexachlorocyclopentadiene	1	81.2069	0	100	81	20	130
2,4,6-Trichlorophenol	1	90.732	0	100	91	52	129
2,4,5-Trichlorophenol	1	91.8772	0	100	92	50	130
2-Chloronaphthalene	1	87.747	0	100	88	65	120
1,4-Dimethylnaphthalene	1	82.7931	0	100	83	50	130
Diphenyl Ether	1	100.8384	0	100	101	50	140
2-Nitroaniline	1	95.1044	0	100	95	40	150
Coumarin	1	98.7609	0	100	99	1	180
Acenaphthylene	1	94.4233	0	100	94	54	126
Dimethylphthalate	1	90.3794	0	100	90	1	120
2,6-Dinitrotoluene	1	87.5912	0	100	88	68	137
Acenaphthene	1	86.3864	0	100	86	60	132
3-Nitroaniline	1	110.7095	0	100	111	40	150
2,4-Dinitrophenol	1	98.3072	0	100	98	1	173
Dibenzofuran	1	96.1558	0	100	96	50	130
2,4-Dinitrotoluene	1	88.613	0	100	89	48	127
4-Nitrophenol	1	72.8742	0	100	73	13	129
2,3,4,6-Tetrachlorophenol	1	85.4238	0	100	85	50	130
Fluorene	1	90.0064	0	100	90	70	120
4-Chlorophenyl-phenylether	1	88.9804	0	100	89	38	145
Diethylphthalate	1	90.7178	0	100	91	1	120
4-Nitroaniline	1	97.3619	0	100	97	40	150
Atrazine	1	96.2728	0	100	96	40	150
4,6-Dinitro-2-methylphenol	1	108.4842	0	100	108	53	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: WMB71497

n-Nitrosodiphenylamine	1	74.5203	0	100	75	30	130
1,2-Diphenylhydrazine	1	89.0789	0	100	89	40	130
4-Bromophenyl-phenylether	1	94.5851	0	100	95	65	120
Hexachlorobenzene	1	92.6342	0	100	93	8	142
N-Octadecane	1	77.9372	0	100	78	50	130
Pentachlorophenol	1	99.9717	0	100	100	38	152
Phenanthrene	1	88.9241	0	100	89	65	120
Anthracene	1	92.0549	0	100	92	43	120
Carbazole	1	98.5842	0	100	99	40	130
Di-n-butylphthalate	1	87.89	0	100	88	8	120
Fluoranthene	1	91.0675	0	100	91	43	121
Pyrene	1	96.823	0	100	97	70	120
Benzidine	1	25.6712	0	100	26	1	134
Butylbenzylphthalate	1	90.5018	0	100	91	1	140
3,3'-Dichlorobenzidine	1	87.6906	0	100	88	8	213
Benzo[a]anthracene	1	94.1764	0	100	94	42	133
Chrysene	1	87.0349	0	100	87	44	140
bis(2-Ethylhexyl)phthalate	1	84.5013	0	100	85	29	137
Di-n-octylphthalate	1	82.2926	0	100	82	19	132
Benzo[b]fluoranthene	1	97.9836	0	100	98	42	140
Benzo[k]fluoranthene	1	99.8666	0	100	100	25	146
Benzo[a]pyrene	1	89.5215	0	100	90	32	148
Indeno[1,2,3-cd]pyrene	1	91.5163	0	100	92	1	151
Dibenzo[a,h]anthracene	1	90.6074	0	100	91	1	200
Benzo[g,h,i]perylene	1	90.1772	0	100	90	1	195

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB71497

8101509 0647

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M105929.D	AD07161-001(MSD)	10/23/2018 11:08:00 A
Duplicate(If applicable): 5M105928.D	AD07161-001(MS)	10/23/2018 10:45:00 A
Inst Blank(If applicable):		
Method: 625.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBSD Conc	RPD	Limit
1,4-Dioxane	1	68.2816	79.05	15	20
Pyridine	1	44.349	42.8366	3.5	40
N-Nitrosodimethylamine	1	71.8197	74.2596	3.3	20
Benzaldehyde	1	125.3219	138.2068	9.8	20
Aniline	1	69.1928	66.4807	4	20
Pentachloroethane	1	80.7511	87.705	8.3	20
bis(2-Chloroethyl)ether	1	75.1887	77.0152	2.4	108
Phenol	1	74.6329	76.0985	1.9	64
2-Chlorophenol	1	78.1276	86.984	11	61
N-Decane	1	68.0295	75.8828	11	20
1,3-Dichlorobenzene	1	69.1102	72.8177	5.2	20
1,4-Dichlorobenzene	1	70.7609	75.3521	6.3	40
1,2-Dichlorobenzene	1	71.9242	76.9314	6.7	20
Benzyl alcohol	1	92.7663	100.2758	7.8	20
bis(2-chloroisopropyl)ether	1	67.7582	69.7337	2.9	76
2-Methylphenol	1	86.8524	91.9522	5.7	40
Acetophenone	1	94.2778	99.8858	5.8	20
Hexachloroethane	1	69.4415	74.7076	7.3	52
N-Nitroso-di-n-propylamine	1	76.4395	76.4543	0.02	87
3&4-Methylphenol	1	81.178	86.7057	6.6	40
Nitrobenzene	1	82.7286	83.2033	0.57	62
Isophorone	1	88.7169	85.3608	3.9	93
2-Nitrophenol	1	89.8817	93.5174	4	55
2,4-Dimethylphenol	1	78.5171	80.9145	3	58
Benzoic Acid	1	41.4355	38.437	7.5	20
bis(2-Chloroethoxy)methane	1	83.3905	80.3537	3.7	54
2,4-Dichlorophenol	1	88.7551	91.7772	3.3	50
1,2,4-Trichlorobenzene	1	78.1487	80.8283	3.4	50
Naphthalene	1	78.8212	80.0422	1.5	65
4-Chloroaniline	1	99.6196	103.1922	3.5	20
Hexachlorobutadiene	1	81.2486	82.8454	1.9	62
Caprolactam	1	99.1742	99.4056	0.23	20
4-Chloro-3-methylphenol	1	92.8232	93.8997	1.2	73
2-Methylnaphthalene	1	97.0789	100.3154	3.3	20
1-Methylnaphthalene	1	103.286	104.404	1.1	20
1,1'-Biphenyl	1	86.8566	89.4267	2.9	20
1,2,4,5-Tetrachlorobenzene	1	96.3947	104.4884	8.1	20
Hexachlorocyclopentadiene	1	81.2069	78.9205	2.9	20
2,4,6-Trichlorophenol	1	90.732	95.9188	5.6	58
2,4,5-Trichlorophenol	1	91.8772	95.8201	4.2	40
2-Chloronaphthalene	1	87.747	87.2742	0.54	24
1,4-Dimethylnaphthalene	1	82.7931	83.1617	0.44	20
Diphenyl Ether	1	100.8384	106.3235	5.3	20
2-Nitroaniline	1	95.1044	97.8076	2.8	20
Coumarin	1	98.7609	97.0873	1.7	20
Acenaphthylene	1	94.4233	94.5488	0.13	74
Dimethylphthalate	1	90.3794	88.9533	1.6	183
2,6-Dinitrotoluene	1	87.5912	82.6502	5.8	48
Acenaphthene	1	86.3864	89.1847	3.2	48
3-Nitroaniline	1	110.7095	114.4031	3.3	20
2,4-Dinitrophenol	1	98.3072	97.1961	1.1	132
Dibenzofuran	1	96.1558	99.8598	3.8	20
2,4-Dinitrotoluene	1	88.613	87.1642	1.6	42
4-Nitrophenol	1	72.8742	75.3343	3.3	131
2,3,4,6-Tetrachlorophenol	1	85.4238	89.0021	4.1	20
Fluorene	1	90.0064	88.352	1.9	38
4-Chlorophenyl-phenylether	1	88.9804	88.6811	0.34	61
Diethylphthalate	1	90.7178	86.2868	5	100
4-Nitroaniline	1	97.3619	102.1912	4.8	20
Atrazine	1	96.2728	96.9905	0.74	20
4,6-Dinitro-2-methylphenol	1	108.4842	106.8505	1.5	203
n-Nitrosodiphenylamine	1	74.5203	71.3249	4.4	20
1,2-Diphenylhydrazine	1	89.0789	85.5388	4.1	20

Form3
RPD Data Laboratory Limits

8101509 0648

QC Batch: WMB71497

4-Bromophenyl-phenylether	1	94.5851	91.4732	3.3	43
Hexachlorobenzene	1	92.6342	90.6183	2.2	55
N-Octadecane	1	77.9372	80.5188	3.3	20
Pentachlorophenol	1	99.9717	97.7678	2.2	86
Phenanthrene	1	88.9241	87.0894	2.1	39
Anthracene	1	92.0549	88.5778	3.8	66
Carbazole	1	98.5842	98.0528	0.54	20
Di-n-butylphthalate	1	87.89	83.6981	4.9	47
Fluoranthene	1	91.0675	88.1544	3.3	66
Pyrene	1	96.823	94.7395	2.2	49
Benzidine	1	25.6712	20.4431	23 *	20
Butylbenzylphthalate	1	90.5018	85.8754	5.2	60
3,3'-Dichlorobenzidine	1	87.6906	83.0334	5.5	108
Benzo[a]anthracene	1	94.1764	89.8715	4.7	53
Chrysene	1	87.0349	84.295	3.2	87
bis(2-Ethylhexyl)phthalate	1	84.5013	80.3978	5	82
Di-n-octylphthalate	1	82.2926	80.2598	2.5	69
Benzo[b]fluoranthene	1	97.9836	97.6704	0.32	71
Benzo[k]fluoranthene	1	99.8666	95.7484	4.2	63
Benzo[a]pyrene	1	89.5215	86.0635	3.9	72
Indeno[1,2,3-cd]pyrene	1	91.5163	89.8322	1.9	99
Dibenzo[a,h]anthracene	1	90.6074	90.1092	0.55	126
Benzo[g,h,i]perylene	1	90.1772	87.6259	2.9	97

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

SampleID : AD07161-001
 Data File: 5M105927.D
 Acq On : 10/23/18 10:21

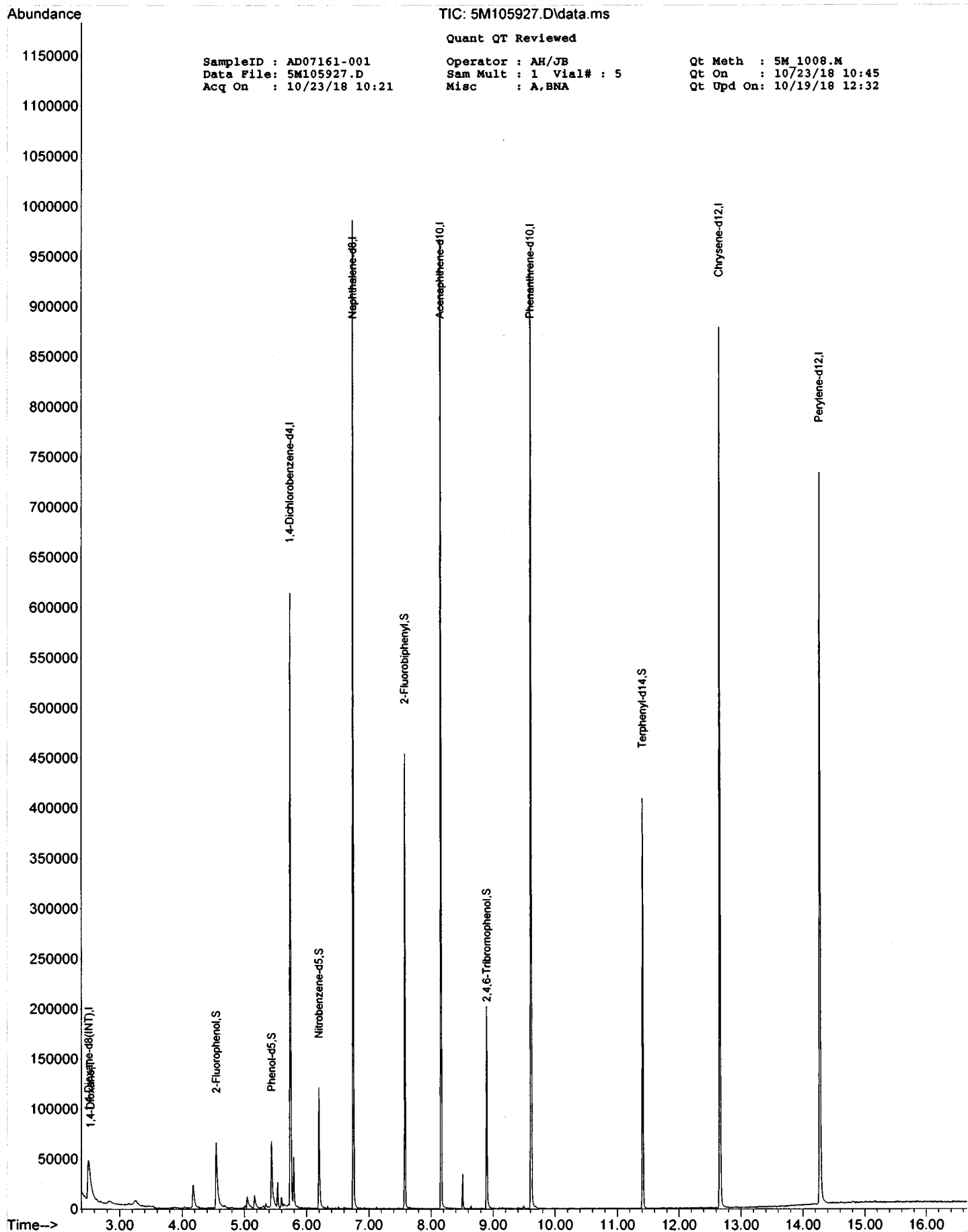
Operator : AH/JB
 Sam Mult : 1 Vial# : 5
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/23/18 10:45
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	52520	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	96344	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	351855	40.00	ng	0.00
50) Acenaphthene-d10	8.157	164	205521	40.00	ng	0.00
77) Phenanthrene-d10	9.610	188	354822	40.00	ng	0.00
91) Chrysene-d12	12.661	240	317341	40.00	ng	0.00
103) Perylene-d12	14.274	264	262415	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.546	112	37791	13.86	ng	0.00
Spiked Amount 100.000			Recovery =	13.86%		
16) Phenol-d5	5.438	99	38265	9.10	ng	0.01
Spiked Amount 100.000			Recovery =	9.10%		
32) Nitrobenzene-d5	6.196	128	18396	17.72	ng	0.00
Spiked Amount 50.000			Recovery =	35.44%		
55) 2-Fluorobiphenyl	7.580	172	127870	19.45	ng	0.00
Spiked Amount 50.000			Recovery =	38.90%		
80) 2,4,6-Tribromophenol	8.900	330	17574	27.70	ng	0.00
Spiked Amount 100.000			Recovery =	27.70%		
94) Terphenyl-d14	11.411	244	120873	23.81	ng	0.00
Spiked Amount 50.000			Recovery =	47.62%		
Target Compounds						
8) 1,4-Dioxane	2.532	88	960	0.7316	ng	21

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : AD07161-001(MS)
Data File: 5M105928.D
Acq On : 10/23/18 10:45

Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA

Qt Meth : 5M_1008.M
Qt On : 10/23/18 11:21
Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-23-18\
Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.505	96	52526	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	94175	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	349064	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	201461	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	340989	40.00	ng	0.00
91) Chrysene-d12	12.666	240	335379	40.00	ng	0.00
103) Perylene-d12	14.279	264	269230	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	135671	49.75	ng	0.00
Spiked Amount 100.000			Recovery =	49.75%		
16) Phenol-d5	5.427	99	204646	48.67	ng	0.00
Spiked Amount 100.000			Recovery =	48.67%		
32) Nitrobenzene-d5	6.196	128	28554	27.72	ng	0.00
Spiked Amount 50.000			Recovery =	55.44%		
55) 2-Fluorobiphenyl	7.580	172	171495	26.61	ng	0.00
Spiked Amount 50.000			Recovery =	53.22%		
80) 2,4,6-Tribromophenol	8.900	330	40186	62.89	ng	0.00
Spiked Amount 100.000			Recovery =	62.89%		
94) Terphenyl-d14	11.410	244	186478	34.76	ng	0.00
Spiked Amount 50.000			Recovery =	69.52%		
Target Compounds						
8) 1,4-Dioxane	2.537	88	106570	79.0500	ng	Qvalue 87
9) Pyridine	3.012	79	142336	42.8366	ng	72
10) N-Nitrosodimethylamine	2.932	74	140488	74.2596	ng	79
12) Benzaldehyde	5.368	77	219730	138.2068	ng	80
13) Aniline	5.459	93	298275m	66.4807	ng	
14) Pentachloroethane	5.497	117	91952	87.7050	ng	78
15) bis(2-Chloroethyl) ether	5.518	93	253663	77.0152	ng	83
17) Phenol	5.438	94	338936	76.0985	ng	85
18) 2-Chlorophenol	5.561	128	272973	86.9840	ng	81
19) N-Decane	5.593	57	273403	75.8828	ng	89
20) 1,3-Dichlorobenzene	5.689	146	256531	72.8177	ng	96
22) 1,4-Dichlorobenzene	5.753	146	265139	75.3521	ng	97
23) 1,2-Dichlorobenzene	5.876	146	251671	76.9314	ng	99
24) Benzyl alcohol	5.860	108	193283	100.2758	ng	72
25) bis(2-chloroisopropyl) ...	5.967	45	309676	69.7337	ng	100
26) 2-Methylphenol	5.951	108	260033	91.9522	ng	96
27) Acetophenone	6.073	105	411719	99.8858	ng	80
28) Hexachloroethane	6.148	117	97672	74.7076	ng	83
29) N-Nitroso-di-n-propyla...	6.073	70	168141	76.4543	ng	73
30) 3&4-Methylphenol	6.073	108	258110	86.7057	ng	85
33) Nitrobenzene	6.212	77	267864	83.2033	ng	78
34) Isophorone	6.394	82	475708	85.3608	ng	90
35) 2-Nitrophenol	6.458	139	152819	93.5174	ng	88
36) 2,4-Dimethylphenol	6.485	107	259651	80.9145	ng	95
37) Benzoic Acid	6.576	105	70846m	38.4370	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	291416	80.3537	ng	96
39) 2,4-Dichlorophenol	6.640	162	234466	91.7772	ng	86
40) 1,2,4-Trichlorobenzene	6.704	180	219549	80.8283	ng	98
41) Naphthalene	6.763	128	747138	80.0422	ng	99
42) 4-Chloroaniline	6.805	127	319498	103.1922	ng	92
43) Hexachlorobutadiene	6.848	225	120514	82.8454	ng	96
44) Caprolactam	7.094	113	100398	99.4056	ng	70
45) 4-Chloro-3-methylphenol	7.169	107	243563	93.8997	ng	87
46) 2-Methylnaphthalene	7.297	142	601831	100.3154	ng	100
47) 1-Methylnaphthalene	7.372	142	616116	104.4040	ng	93
49) 1,1'-Biphenyl	7.665	154	629447	89.4267	ng	95
51) 1,2,4,5-Tetrachloroben...	7.425	216	291735	104.4884	ng	97
52) Hexachlorocyclopentadiene	7.414	237	85128	78.9205	ng	99
53) 2,4,6-Trichlorophenol	7.516	196	162733	95.9188	ng	98
54) 2,4,5-Trichlorophenol	7.553	196	172760	95.8201	ng	98
56) 2-Chloronaphthalene	7.687	162	472923	87.2742	ng	92
57) 1,4-Dimethylnaphthalene	7.965	156	377957	83.1617	ng	89
59) Diphenyl Ether	7.746	170	427467	106.3235	ng	83
60) 2-Nitroaniline	7.772	65	218143	97.8076	ng	56
61) Coumarin	7.954	146	202438	97.0873	ng	73
62) Acenaphthylene	8.039	152	770286	94.5488	ng	99
63) Dimethylphthalate	7.911	163	539949	88.9533	ng	99
64) 2,6-Dinitrotoluene	7.970	165	116543	82.6502	ng	71
65) Acenaphthene	8.189	153	500170	89.1847	ng	96
66) 3-Nitroaniline	8.125	138	171193	114.4031	ng	73
67) 2,4-Dinitrophenol	8.216	184	66471	97.1961	ng	45

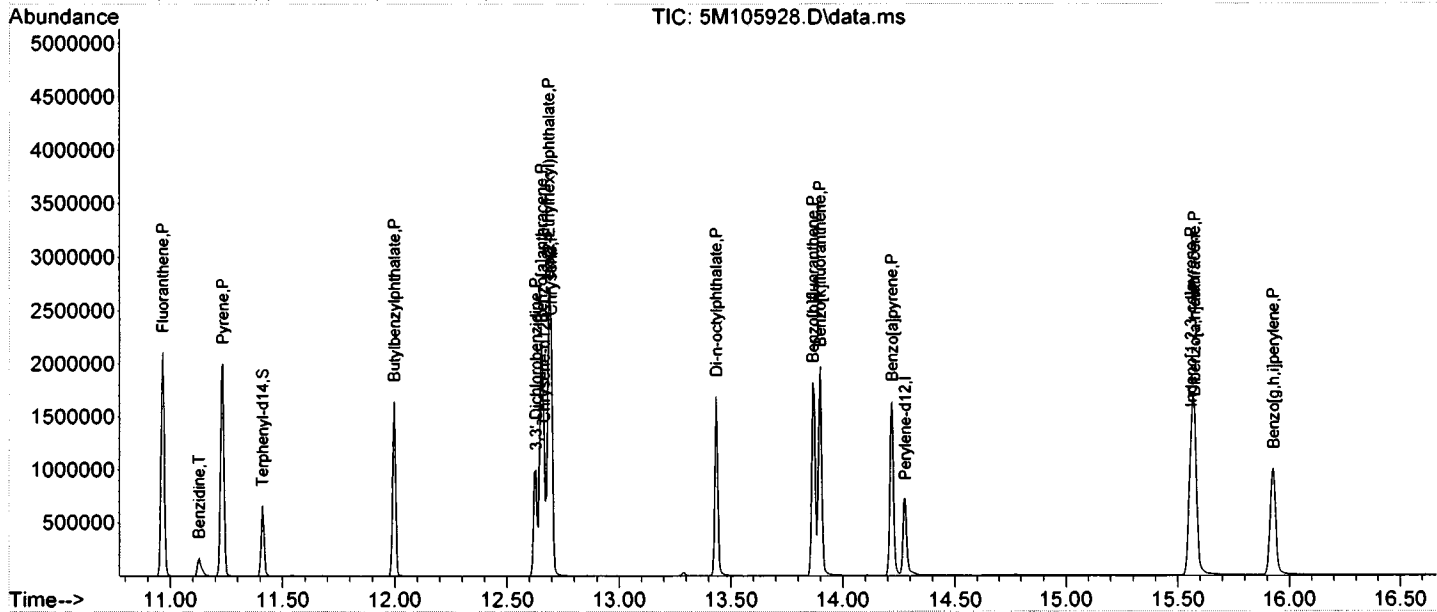
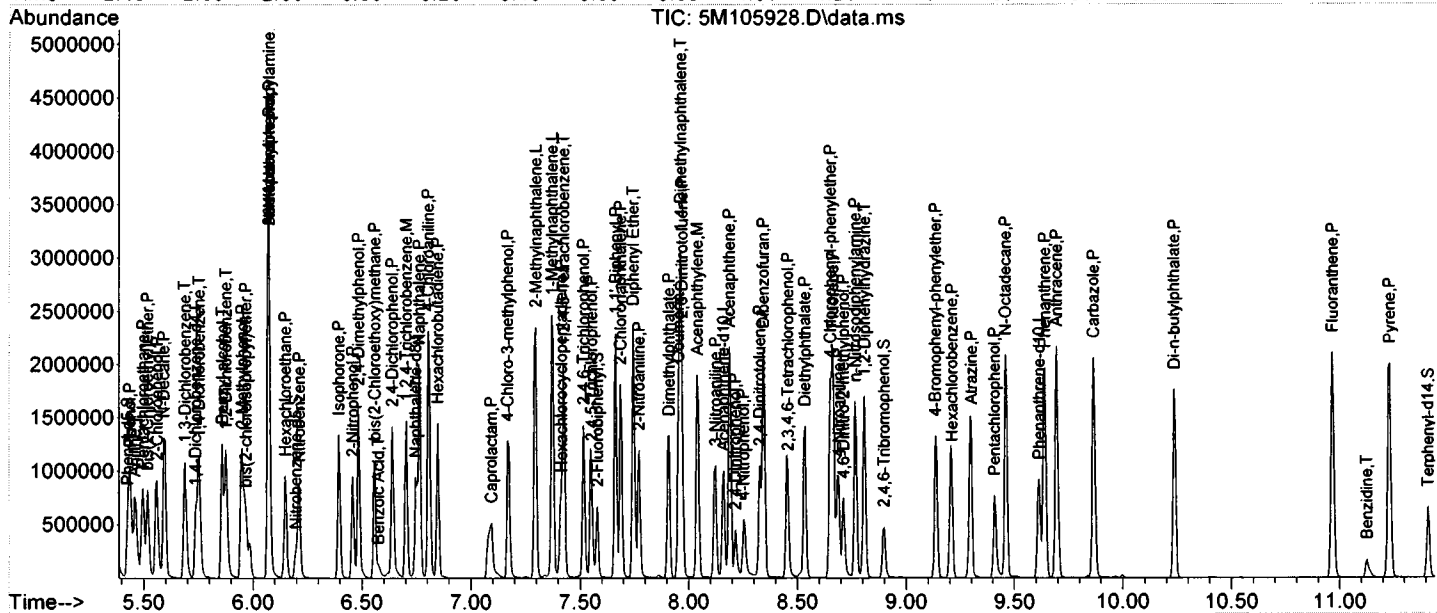
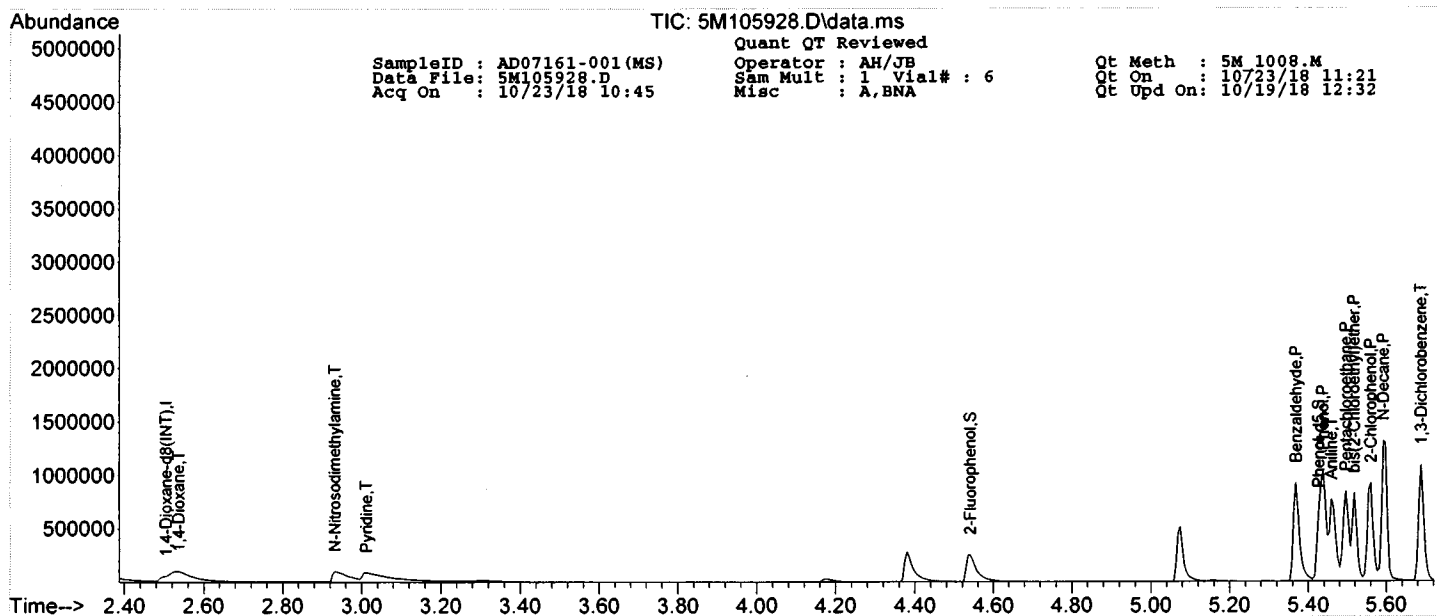
Quantitation Report (QT Reviewed)

SampleID : AD07161-001(MS) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105928.D Sam Mult : 1 Vial# : 6 Qt On : 10/23/18 11:21
 Acq On : 10/23/18 10:45 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) Dibenzofuran	8.344	168	810630	99.8598	ng	89
69) 2,4-Dinitrotoluene	8.328	165	167095	87.1642	ng	70
70) 4-Nitrophenol	8.253	65	87980	75.3343	ng	94
71) 2,3,4,6-Tetrachlorophenol	8.456	232	137515	89.0021	ng	86
72) Fluorene	8.664	166	547006	88.3520	ng	100
73) 4-Chlorophenyl-phenyle...	8.654	204	248987	88.6811	ng	83
74) Diethylphthalate	8.536	149	518360	86.2868	ng	96
75) 4-Nitroaniline	8.691	138	185817	102.1912	ng	76
76) Atrazine	9.300	200	176856	96.9905	ng	95
78) 4,6-Dinitro-2-methylph...	8.713	198	102530	106.8505	ng	58
79) n-Nitrosodiphenylamine	8.766	169	379864	71.3249	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	649685	85.5388	ng	87
82) 4-Bromophenyl-phenylether	9.135	248	146693	91.4732	ng	88
83) Hexachlorobenzene	9.209	284	139582	90.6183	ng	70
84) N-Octadecane	9.460	57	367728	80.5188	ng	84
85) Pentachlorophenol	9.407	266	78330	97.7678	ng	97
86) Phenanthrene	9.642	178	805439	87.0894	ng	100
87) Anthracene	9.696	178	821930	88.5778	ng	99
88) Carbazole	9.866	167	844015	98.0528	ng	98
89) Di-n-butylphthalate	10.235	149	915427	83.6981	ng	98
90) Fluoranthene	10.967	202	872817	88.1544	ng	95
92) Pyrene	11.234	202	905953	94.7395	ng	89
93) Benzidine	11.127	184	69524	20.4431	ng	87
97) Butylbenzylphthalate	11.998	149	378034	85.8754	ng	76
99) 3,3'-Dichlorobenzidine	12.628	252	219796	83.0334	ng	97
100) Benzo[a]anthracene	12.655	228	815025	89.8715	ng	99
101) Chrysene	12.698	228	732104	84.2950	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	526162	80.3978	ng	94
104) Di-n-octylphthalate	13.435	149	797939	80.2598	ng	100
105) Benzo[b]fluoranthene	13.868	252	740239	97.6704	ng	97
106) Benzo[k]fluoranthene	13.900	252	730177m	95.7484	ng	
107) Benzo[a]pyrene	14.220	252	662168	86.0635	ng	94
108) Indeno[1,2,3-cd]pyrene	15.561	276	757455	89.8322	ng	96
109) Dibenzo[a,h]anthracene	15.577	278	656281	90.1092	ng	92
110) Benzo[g,h,i]perylene	15.930	276	624370	87.6259	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : AD07161-001(MSD)
 Data File: 5M105929.D
 Acq On : 10/23/18 11:08

Operator : AH/JB
 Sam Mult : 1 Vial# : 7
 Misc : A,BNA

Qt Meth : 5M_1008.M
 Qt On : 10/23/18 12:49
 Qt Upd On: 10/19/18 12:32

Data Path : G:\GCMSData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSData\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8 (INT)	2.499	96	54034	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.737	152	99212	40.00	ng	0.00
31) Naphthalene-d8	6.747	136	363582	40.00	ng	0.00
50) Acenaphthene-d10	8.162	164	215321	40.00	ng	0.00
77) Phenanthrene-d10	9.615	188	353822	40.00	ng	0.00
91) Chrysene-d12	12.666	240	352868	40.00	ng	0.00
103) Perylene-d12	14.279	264	287142	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.540	112	113073	40.31	ng	0.00
Spiked Amount 100.000			Recovery =	40.31%		
16) Phenol-d5	5.427	99	174843	40.42	ng	0.00
Spiked Amount 100.000			Recovery =	40.42%		
32) Nitrobenzene-d5	6.196	128	27690	25.81	ng	0.00
Spiked Amount 50.000			Recovery =	51.62%		
55) 2-Fluorobiphenyl	7.580	172	159228	23.12	ng	0.00
Spiked Amount 50.000			Recovery =	46.24%		
80) 2,4,6-Tribromophenol	8.899	330	39525	59.85	ng	0.00
Spiked Amount 100.000			Recovery =	59.85%		
94) Terphenyl-d14	11.410	244	181596	32.17	ng	0.00
Spiked Amount 50.000			Recovery =	64.34%		
Target Compounds						
8) 1,4-Dioxane	2.537	88	94349m	68.2816	ng	Qvalue
9) Pyridine	3.007	79	151592	44.3490	ng	74
10) N-Nitrosodimethylamine	2.932	74	139773	71.8197	ng	79
12) Benzaldehyde	5.368	77	204965	125.3219	ng	78
13) Aniline	5.459	93	319712	69.1928	ng	43
14) Pentachloroethane	5.497	117	87092	80.7511	ng	78
15) bis(2-Chloroethyl) ether	5.518	93	254757	75.1887	ng	84
17) Phenol	5.438	94	341571	74.6329	ng	85
18) 2-Chlorophenol	5.561	128	252219	78.1276	ng	81
19) N-Decane	5.593	57	252145	68.0295	ng	88
20) 1,3-Dichlorobenzene	5.689	146	250460	69.1102	ng	96
22) 1,4-Dichlorobenzene	5.753	146	262301	70.7609	ng	98
23) 1,2-Dichlorobenzene	5.876	146	247875	71.9242	ng	97
24) Benzyl alcohol	5.860	108	188372	92.7663	ng	70
25) bis(2-chloroisopropyl) ...	5.967	45	316997	67.7582	ng	100
26) 2-Methylphenol	5.951	108	258748	86.8524	ng	97
27) Acetophenone	6.073	105	409388	94.2778	ng	78
28) Hexachloroethane	6.148	117	95643	69.4415	ng	84
29) N-Nitroso-di-n-propyla...	6.073	70	177102	76.4395	ng	73
30) 3&4-Methylphenol	6.073	108	256184	81.1780	ng	85
33) Nitrobenzene	6.212	77	277413	82.7286	ng	79
34) Isophorone	6.394	82	514974	88.7169	ng	90
35) 2-Nitrophenol	6.458	139	152283	89.8817	ng	89
36) 2,4-Dimethylphenol	6.485	107	262141	78.5171	ng	94
37) Benzoic Acid	6.576	105	80985m	41.4355	ng	
38) bis(2-Chloroethoxy)met...	6.560	93	315008	83.3905	ng	96
39) 2,4-Dichlorophenol	6.640	162	235666	88.7551	ng	88
40) 1,2,4-Trichlorobenzene	6.704	180	221099	78.1487	ng	97
41) Naphthalene	6.763	128	766341	78.8212	ng	99
42) 4-Chloroaniline	6.805	127	322883	99.6196	ng	91
43) Hexachlorobutadiene	6.848	225	123107	81.2486	ng	95
44) Caprolactam	7.094	113	104302	99.1742	ng	68
45) 4-Chloro-3-methylphenol	7.169	107	250526	92.8232	ng	84
46) 2-Methylnaphthalene	7.297	142	606637	97.0789	ng	99
47) 1-Methylnaphthalene	7.372	142	634869	103.2860	ng	94
49) 1,1'-Biphenyl	7.665	154	636784	86.8566	ng	96
51) 1,2,4,5-Tetrachloroben...	7.425	216	287653	96.3947	ng	97
52) Hexachlorocyclopentadiene	7.409	237	94238	81.2069	ng	98
53) 2,4,6-Trichlorophenol	7.516	196	163893	90.7320	ng	99
54) 2,4,5-Trichlorophenol	7.548	196	176224	91.8772	ng	98
56) 2-Chloronaphthalene	7.687	162	508197	87.7470	ng	93
57) 1,4-Dimethylnaphthalene	7.965	156	402169	82.7931	ng	91
59) Diphenyl Ether	7.746	170	433306	100.8384	ng	84
60) 2-Nitroaniline	7.772	65	226433	95.1044	ng	56
61) Coumarin	7.954	146	220095	98.7609	ng	76
62) Acenaphthylene	8.039	152	822187	94.4233	ng	99
63) Dimethylphthalate	7.911	163	586348	90.3794	ng	99
64) 2,6-Dinitrotoluene	7.970	165	132158	87.5912	ng	70
65) Acenaphthene	8.189	153	517807	86.3864	ng	97
66) 3-Nitroaniline	8.125	138	177426	110.7095	ng	73
67) 2,4-Dinitrophenol	8.216	184	72120	98.3072	ng	45

Quantitation Report (QT Reviewed)

SampleID : AD07161-001(MSD) Operator : AH/JB Qt Meth : 5M_1008.M
 Data File: 5M105929.D Sam Mult : 1 Vial# : 7 Qt On : 10/23/18 12:49
 Acq On : 10/23/18 11:08 Misc : A,BNA Qt Upd On: 10/19/18 12:32

Data Path : G:\GcMsData\2018\GCMS_5\Data\10-23-18\
 Qt Path : G:\GCMSDATA\2018\GCMS_5\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) Dibenzofuran	8.344	168	834207	96.1558	ng	88
69) 2,4-Dinitrotoluene	8.328	165	181755	88.6130	ng	70
70) 4-Nitrophenol	8.253	65	90496	72.8742	ng	93
71) 2,3,4,6-Tetrachlorophenol	8.451	232	140758	85.4238	ng	86
72) Fluorene	8.664	166	595586	90.0064	ng	99
73) 4-Chlorophenyl-phenyle...	8.654	204	267015	88.9804	ng	85
74) Diethylphthalate	8.536	149	582472	90.7178	ng	98
75) 4-Nitroaniline	8.691	138	188436	97.3619	ng	77
76) Atrazine	9.300	200	187454	96.2728	ng	97
78) 4,6-Dinitro-2-methylph...	8.713	198	108511	108.4842	ng	56
79) n-Nitrosodiphenylamine	8.766	169	411819	74.5203	ng	99
81) 1,2-Diphenylhydrazine	8.809	77	702036	89.0789	ng	87
82) 4-Bromophenyl-phenylether	9.135	248	157392	94.5851	ng	87
83) Hexachlorobenzene	9.209	284	148057	92.6342	ng	71
84) N-Octadecane	9.460	57	369219	77.9372	ng	85
85) Pentachlorophenol	9.407	266	83678	99.9717	ng	98
86) Phenanthrene	9.642	178	853358	88.9241	ng	100
87) Anthracene	9.695	178	886342	92.0549	ng	99
88) Carbazole	9.866	167	880525	98.5842	ng	98
89) Di-n-butylphthalate	10.235	149	999912	87.8900	ng	98
90) Fluoranthene	10.967	202	937888	91.0675	ng	95
92) Pyrene	11.234	202	974158	96.8230	ng	89
93) Benzidine	11.127	184	92007	25.6712	ng	85
97) Butylbenzylphthalate	11.998	149	422094	90.5018	ng	75
99) 3,3'-Dichlorobenzidine	12.628	252	243760	87.6906	ng	96
100) Benzo[a]anthracene	12.655	228	898602	94.1764	ng	99
101) Chrysene	12.698	228	795318	87.0349	ng	99
102) bis(2-Ethylhexyl)phtha...	12.687	149	582625	84.5013	ng	96
104) Di-n-octylphthalate	13.435	149	876234	82.2926	ng	100
105) Benzo[b]fluoranthene	13.873	252	792019	97.9836	ng	94
106) Benzo[k]fluoranthene	13.900	252	812251m	99.8666	ng	
107) Benzo[a]pyrene	14.220	252	738732	89.5215	ng	95
108) Indeno[1,2,3-cd]pyrene	15.561	276	825303	91.5163	ng	94
109) Dibenzo[a,h]anthracene	15.577	278	704295	90.6074	ng	93
110) Benzo[g,h,i]perylene	15.930	276	688129	90.1772	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

**GC/MS Base Neutral/Acid Extractable Data
Logbook Data**

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-269657



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: akmal	
Description: 8270 EXTRA MIX#1(2nd Source)(DAN		BatchNumber:	ApproveDate: 12/18/17	
Prep Date: 12/18/2017		Concentration: 10000 ppm	Checked: Yes	
Expiration Date: 12/18/2018		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9154	Caprolactum	.25 g	NEAT neat	10000 ppm
9155	1,2,4,5-Tetrachlorobenzene	.25 g	NEAT neat	10000 ppm
10779	Atrazine	.25 g	Neat neat	10000 ppm
9402	ACETOPHENONE	.25 g	NEAT neat	10000 ppm
9149	Diphenyl Ether	.25 g	NEAT neat	10000 ppm
10781	1-Methylnaphthalene	.2626 g	95.2% neat	10000 ppm
10780	1,4-Dioxane	.25 g	NEAT neat	10000 ppm
11299	Acetone	25 ml	neta neta	

Veritech Lot Number: V-269658



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: akmal	
Description: Benzaldehyde Std		BatchNumber:	ApproveDate: 12/18/17	
Prep Date: 12/18/2017		Concentration: 10000 ppm	Checked: Yes	
Expiration Date: 12/18/2018		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9150	Benzaldehyde	.25 g	NEAT neat	10000 ppm
11299	Acetone	25 ml	neta neta	

Veritech Lot Number: V-269839



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: jean	
Description: 8270 EXTRA MIX#1(DANGER)		BatchNumber:	ApproveDate: 02/27/18	
Prep Date: 12/18/2017		Concentration: 10000 ppm	Checked: Yes	
Expiration Date: 12/18/2018		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9154	Caprolactum	.1 g	NEAT neat	10000 ppm
9155	1,2,4,5-Tetrachlorobenzene	.1 g	NEAT neat	10000 ppm
10779	Atrazine	.1 g	Neat neat	10000 ppm
9402	ACETOPHENONE	.1 g	NEAT neat	10000 ppm
9149	Diphenyl Ether	.1 g	NEAT neat	10000 ppm
10780	1,4-Dioxane	.1 g	NEAT neat	10000 ppm
10789	methylene chloride	10 ml	neat neat	

Veritech Lot Number: V-270853



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: jean	
Description: BNA-Pest Mix		BatchNumber:	ApproveDate: 02/27/18	
Prep Date: 1/5/2018		Concentration: 5000 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11366	4,4'-DDD	.05 g	NEAT neat	5000 ppm
7908	4,4'-DDE	.05 g	neat neat	5000 ppm
9939	4,4'-DDT	.05 g	neat neat	5000 ppm
10789	methylene chloride	10 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-280889



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: akmal	
Description: BNA Internal Std.		BatchNumber:	ApproveDate: 06/01/18	
Prep Date: 6/1/2018		Concentration: 2000 ppm	Checked: Yes	
Expiration Date: 6/1/2019		Final Volume: 250 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9325	Naphthlene,d8	.5 g	NEAT neat	2000 ppm
9326	Phenanthrene, d10	.5 g	NEAT neat	2000 ppm
10002	Chrysene (D12, 98%)	.5 g	NEAT neat	2000 ppm
10003	Perylene (D12, 98%)	.5 g	NEAT neat	2000 ppm
6948	1,4-Dichlorobenzene(D4)	.5 g	neat neat	2000 ppm
9329	Acenaphthene, d10	.5 g	NEAT neat	2000 ppm
11103	1,4-Dioxane-D8	.5 g	NEAT neat	2000 ppm
10789	methylene chloride	250 ml	neat neat	

Veritech Lot Number: V-282441



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: DFTPP Mix		BatchNumber:	ApproveDate: 07/05/18	
Prep Date: 6/26/2018		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 12/26/2018		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11490	DFTPP	20 ul	2500 ppm	50 ppm
11565	DDT-Endrin Mix	200 ul	500 ppm	100 ppm
11035	Pentachlorophenol	20 ul	5000 ppm	100 ppm
11034	Benzidine	20 ul	5000 ppm	100 ppm
11729	methylene chloride	740 ul	neat neat	

Veritech Lot Number: V-285891



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: akmal	
Description: BNA Surrog. Std.		BatchNumber:	ApproveDate: 08/18/18	
Prep Date: 8/18/2018		Concentration: 1000-2000 pp	Checked: Yes	
Expiration Date: 8/18/2019		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7755	2-Fluorobiphenyl	1 g	Neat neat	1000 ppm
10573	p-Terphenyl-d14	1 g	NEAT neat	1000 ppm
10521	Phenol-2,3,4,5,6-d5	2 g	NEAT neat	2000 ppm
10572	2,4,6-Tribromophenol	2 g	NEAT neat	2000 ppm
8746	Nitrobenzene-d5	800 ul	NEAT neat	1000 ppm
8747	2-Fluorophenol	1.6 ml	NEAT neat	2000 ppm
11911	Acetone	1000 ml	neat neat	

Veritech Lot Number: V-289043



Prepared By: Hamid, Akmal		Department: Organics	ApprovedBy: akmal	
Description: BNA-6 MIX		BatchNumber:	ApproveDate: 10/03/18	
Prep Date: 10/3/2018		Concentration: 5000 ppm	Checked: Yes	
Expiration Date: 10/3/2019		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9726	Biphenyl	.05 g	Neat neat	5000 ppm
9755	Coumarin	.05 g	neat neat	5000 ppm
11200	n-Octadecane	.05 g	NEAT neat	5000 ppm
9756	Pentachloroethane	.05 g	neat neat	5000 ppm
9435	1,4-Dimethylnaphthalene	.0518 g	95 %	5000 ppm
11201	N-Decane	.05 g	NEAT neat	5000 ppm
12001	acetone	10 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-289376



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA STOCK Std.A (DANGER)		BatchNumber:	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 250 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 1.2 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11125	8270 MegaMix	300 ul	1000 ppm	250 ppm
11169	Benzoic Acid	150 ul	2000 ppm	250 ppm
11722	EPA TCL Benzidines Mix	150 ul	2000 ppm	250 ppm
V-285891	BNA Surrog. Std.	150 ul	1000-2000 pp	125-250 pp
v-270853	BNA-Pest Mix	60 ul	5000 ppm	250 ppm
V-289043	BNA-6 MIX	60 ul	5000 ppm	250 ppm
10789	methylene chloride	330 ul	neat neat	

Veritech Lot Number: V-289382



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 10 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 10 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	5 ul	200 ppm	10 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	93 ul	neat neat	

Veritech Lot Number: V-289383



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 20 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 20 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	10 ul	200 ppm	20 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	88 ul	neat neat	

Veritech Lot Number: V-289384



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 50 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 600 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	150 ul	200 ppm	50 ppm
V-280889	BNA Internal Std.	12 ul	2000 ppm	40 ppm
10789	methylene chloride	438 ul	neat neat	

Veritech Lot Number: V-289385



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 80 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 80 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	40 ul	200 ppm	80 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	58 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-289386

Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 120 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 120 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	60 ul	200 ppm	120 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	38 ul	neat neat	

Veritech Lot Number: V-289387

Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 160 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 160 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	80 ul	200 ppm	160 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	18 ul	neat neat	

Veritech Lot Number: V-289388

Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 196 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 196 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	98 ul	200 ppm	196 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	0	neat neat	

Veritech Lot Number: V-289389

Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 50 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289392	BNA STOCK Std.(DANGER)	25 ul	200 ppm	50 ppm
10789	methylene chloride	75 ul	neat neat	

Veritech Lot Number: V-289390

Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 2 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 2 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289389	BNA 50 ppm curve(DANGER)	4 ul	50 ppm	2 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	94 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-289391



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA 0.5 ppm curve(DANGER)		BatchNumber: B-25853	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 0.5 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 100 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289389	BNA 50 ppm curve(DANGER)	1 ul	50 ppm	2 ppm
V-280889	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	97 ul	neat neat	

Veritech Lot Number: V-289392



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA STOCK Std.(DANGER)		BatchNumber:	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 200 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 500 ul		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
v-269839	8270 EXTRA MIX#1(DANGER)	10 ul	10000 ppm	250 ppm
V-289376	BNA STOCK Std.A (DANGER)	400 ul	250 ppm	250 ppm
V-269658	Benzaldehyde Std	10 ul	10000 ppm	250 ppm
10789	methylene chloride	80 ul	neat neat	

Veritech Lot Number: V-289420



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA STOCK Std.A (DANGER)		BatchNumber:	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 250 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 1.2 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11745	8270 MegaMix	150 ul	1000 ppm	250 ppm
11169	Benzoic Acid	75 ul	2000 ppm	250 ppm
11722	EPA TCL Benzidines Mix	75 ul	2000 ppm	250 ppm
V-285891	BNA Surrog.Std.	75 ul	1000-2000 pp	125-250 pp
v-270853	BNA-Pest Mix	30 ul	5000 ppm	250 ppm
V-289043	BNA-6 MIX	30 ul	5000 ppm	250 ppm
10789	methylene chloride	165 ul	neat neat	

Veritech Lot Number: V-289433



Prepared By: Bis, Yolanta		Department: Organics	ApprovedBy: akmal	
Description: BNA ICV CAL@50ppm(DANGER)		BatchNumber:	ApproveDate: 10/11/18	
Prep Date: 10/8/2018		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 11/30/2018		Final Volume: 0.2 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-289420	BNA STOCK Std.A (DANGER)	40 ul	250 ppm	50 ppm
v-269657	8270 EXTRA MIX#1(2nd Source)(DANGER)	1 ul	10000 ppm	50 ppm
V-269658	Benzaldehyde Std	1 ul	10000 ppm	50 ppm
V-280889	BNA Internal Std.	4 ul	2000 ppm	40 ppm
10789	methylene chloride	154 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-290101



Prepared By: Bis, Yolanta

Department: Organics

ApprovedBy: akmal

Description: DFTPP Mix

BatchNumber:

ApproveDate: 10/23/18

Prep Date: 10/18/2018

Concentration: 50 ppm

Checked: Yes

Expiration Date: 4/18/2019

Final Volume: 1 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11490	DFTPP	20 ul	2500 ppm	50 ppm
11585	DDT-ENDRIN Mix	200 ul	500 ppm	100 ppm
11035	Pentachlorophenol	20 ul	5000 ppm	100 ppm
11034	Benzidine	20 ul	5000 ppm	100 ppm
10789	methylene chloride	740 ul	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6948



Description

1,4-Dichlorobenzene(D4)

ApprovedBy: akmal

ApproveDate: 04/23/12

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-268-0	PR-18488/07257CB2	04/19/12	04/19/20	Hamid, Akmal	1	5g	neat	neat

Veritech Control/Receipt Number: 7755



Description

2-Fluorobiphenyl

ApprovedBy: jean

ApproveDate: 03/11/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	102741-10G	MKBN8688V	03/07/13	03/07/23	Hamid, Akmal	1	10G	Neat	Neat

Veritech Control/Receipt Number: 7908



Description

4,4'-DDE

ApprovedBy: akmal

ApproveDate: 05/22/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ChemService	N-10875-100MG	1487800	05/22/13	11/30/18	Hamid, Akmal	5	100m	neat	neat

Veritech Control/Receipt Number: 8746



Description

Nitrobenzene-d5

ApprovedBy: akmal

ApproveDate: 06/10/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	151955-5g	MBBB1337V	06/10/14	03/17/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 8747



Description

2-Fluorophenol

ApprovedBy: akmal

ApproveDate: 06/10/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	F12804	STBC5591V	06/10/14	03/17/25	Hamid, Akmal	1	10G	NEAT	NEAT

Veritech Control/Receipt Number: 9149



Description

Diphenyl Ether

ApprovedBy: akmal

ApproveDate: 12/15/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	240834-5g	MKBH5698V	12/12/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 9150



Description

Benzaldehyde

ApprovedBy: akmal

ApproveDate: 12/15/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	B1334-5g	MKBP5021V	12/12/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9154



Description
Caprolactum

ApprovedBy: jean
ApproveDate: 03/05/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	C2204-5G	MKBC5149V	12/15/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 9155



Description
1,2,4,5-Tetrachlorobenzene

ApprovedBy: jean
ApproveDate: 03/05/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	131857-5G	06024IV	12/15/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 9325



Description
Naphthlene,d8

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-365-1	PR-25998	03/11/15	06/30/24	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9326



Description
Phenanthrene, d10

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM370-1	PR-23065/081711PN	03/11/15	09/07/21	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9329



Description
Acenaphthene, d10

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-108-1	PR-25443	03/11/15	10/25/23	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9402



Description
ACETOPHENONE

ApprovedBy: akmal
ApproveDate: 04/14/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N-11020-1G	3707800	04/14/15	01/31/23	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9435



Description
1,4-Dimethylnaphthalene

ApprovedBy: akmal
ApproveDate: 04/24/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	D170305-5G	STBD6188V	04/24/15	04/24/25	Hamid, Akmal	5	5G	95	%

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9726



Description
Biphenyl

ApprovedBy: akmal
ApproveDate: 10/09/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11207-1G	3936400	10/01/15	12/31/20	Hamid, Akmal	2	1ml	Neat	Neat

Veritech Control/Receipt Number: 9755



Description
Coumarin

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11508-1G	4171300	10/16/15	07/31/23	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 9756



Description
Pentachloroethane

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-12829-1G	4377000	10/16/15	11/30/19	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 9939



Description
4,4'-DDT

ApprovedBy: akmal
ApproveDate: 01/27/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-10876-100MG	4679800	01/27/16	01/31/23	Hamid, Akmal	2	100m	neat	neat

Veritech Control/Receipt Number: 10002



Description
Chrysene (D12, 98%)

ApprovedBy: akmal
ApproveDate: 02/12/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-261-1	PR-26960	02/12/16	11/19/25	Hamid, Akmal	1	1g	NEAT	NEAT

Veritech Control/Receipt Number: 10003



Description
Perylene (D12, 98%)

ApprovedBy: akmal
ApproveDate: 02/12/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-366-1	PR-24113	02/12/16	10/10/22	Hamid, Akmal	1	1g	NEAT	NEAT

Veritech Control/Receipt Number: 10521



Description
Phenol-2,3,4,5,6-d5

ApprovedBy: akmal
ApproveDate: 11/02/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	425370-5G	MBBC0235V	11/02/16	11/02/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10572



Description

2,4,6-Tribromophenol

ApprovedBy: akmal

ApproveDate: 11/28/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	137715-5G	29699MJV	11/07/16	11/07/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 10573



Description

p-Terphenyl-d14

ApprovedBy: akmal

ApproveDate: 11/28/16

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	364630-500MG	EB2136V	11/07/16	11/07/25	Hamid, Akmal	2	500M	NEAT	NEAT

Veritech Control/Receipt Number: 10779



Description

Atrazine

ApprovedBy: akmal

ApproveDate: 03/03/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	49085	LC25183V	03/02/17	02/29/20	Hamid, Akmal	5	100m	Neat	Neat

Veritech Control/Receipt Number: 10780



Description

1,4-Dioxane

ApprovedBy: akmal

ApproveDate: 03/03/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	76887-5ML-F	BCBR4405V	03/02/17	12/31/18	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 10781



Description

1-Methylnaphthalene

ApprovedBy: akmal

ApproveDate: 03/03/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	38383-100MG	BCBQ5833V	03/02/17	09/30/19	Hamid, Akmal	3	100M	95.2%	NEAT

Veritech Control/Receipt Number: 10789



Description

methylene chloride

ApprovedBy: akmal

ApproveDate: 03/09/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	D151-4	170232	03/07/17	02/28/22	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 11034



Description

Benzidine

ApprovedBy: akmal

ApproveDate: 06/27/17

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	40005	XA22234V	06/27/17	10/31/19	Hamid, Akmal	1	1ML	5000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11035



Description
Pentachlorophenol

ApprovedBy: akmal
ApproveDate: 06/27/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	40062	XA25377V	06/27/17	02/29/20	Hamid, Akmal	1	1ML	5000	PPM

Veritech Control/Receipt Number: 11103



Description
1,4-Dioxane-D8

ApprovedBy: akmal
ApproveDate: 08/23/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	I-19942	DLM-28-5	08/04/17	04/30/22	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 11125



Description
8270 MegaMix

ApprovedBy: akmal
ApproveDate: 08/23/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Restek	31850	A0129012	08/23/17	01/31/19	Hamid, Akmal	4	1ML	1000	PPM

Veritech Control/Receipt Number: 11169



Description
Benzoic Acid

ApprovedBy: akmal
ApproveDate: 09/13/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	CRM47508	XA20010V	09/13/17	04/30/19	Hamid, Akmal	2	1ML	2000	PPM

Veritech Control/Receipt Number: 11200



Description
n-Octadecane

ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-12582-1G	6095500	09/28/17	05/31/21	Hamid, Akmal	2	1ML	NEAT	NEAT

Veritech Control/Receipt Number: 11201



Description
N-Decane

ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-12526-1G	6585700	09/28/17	05/31/22	Hamid, Akmal	2	1ML	NEAT	NEAT

Veritech Control/Receipt Number: 11299



Description
Acetone

ApprovedBy: akmal
ApproveDate: 11/30/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T Baker	9254-03	176288	11/30/17	05/08/20	Lopez, Jose	16	4L	neta	neta

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11366



Description
4,4' -DDD

ApprovedBy: akmal
ApproveDate: 01/03/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	35486-250mg	BCBS3969V	01/02/18	06/30/21	Hamid, Akmal	2	250M	NEAT	NEAT

Veritech Control/Receipt Number: 11490



Description
DFTTP

ApprovedBy: akmal
ApproveDate: 02/12/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
RESTEK	31001	A0132483	02/12/18	11/30/20	Hamid, Akmal	1	1ML	2500	PPM

Veritech Control/Receipt Number: 11565



Description
DDT-Endrin Mix

ApprovedBy: akmal
ApproveDate: 04/02/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	48282	LRAB7729	03/26/18	02/28/21	Hamid, Akmal	2	1ml	500	PPM

Veritech Control/Receipt Number: 11585



Description
DDT-ENDRIN Mix

ApprovedBy: akmal
ApproveDate: 04/04/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	48282	LRAB7729	04/04/18	02/28/21	Hamid, Akmal	2	1ML	500	PPM

Veritech Control/Receipt Number: 11722



Description
EPA TCL Benzidines Mix

ApprovedBy: akmal
ApproveDate: 05/25/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	48906	XA26144V	05/24/18	04/30/20	Hamid, Akmal	2	1ml	2000	PPM

Veritech Control/Receipt Number: 11729



Description
methylene chloride

ApprovedBy: akmal
ApproveDate: 06/01/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T Baker	9264-03	191771	06/01/18	03/21/19	Lopez, Jose	120	4L	neat	neat

Veritech Control/Receipt Number: 11745



Description
8270 MegaMix

ApprovedBy: akmal
ApproveDate: 06/06/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Restek	31850	A0132384	06/06/18	05/31/19	Hamid, Akmal	2	1ML	1000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11911



Description

Acetone

ApprovedBy: akmal

ApproveDate: 08/18/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	179319	08/14/18	06/13/20	Lopez, Jose	32	4L	neat	neat

Veritech Control/Receipt Number: 12001



Description

acetone

ApprovedBy: akmal

ApproveDate: 09/26/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	179319	09/25/18	06/13/20	Lopez, Jose	24	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11759



Description
BASE NEUTRAL COMP MIX

ApprovedBy: jean
ApproveDate: 06/08/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
ACCUSTANDAR CLP-HC-BN-PAK 217031389-01 06/08/18 12/16/18 Revolus, Jean

Num of Volume
Cont /Cont Conc: Units:
15 1ml 2000 PPM

Veritech Control/Receipt Number: 11761



Description
Toxic Substances Mix #2

ApprovedBy: jean
ApproveDate: 06/08/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
ACCUSTANDAR Z-014E-PAK 218031110 06/08/18 04/14/20 Revolus, Jean

Num of Volume
Cont /Cont Conc: Units:
15 1ml 20000 PPM

Veritech Control/Receipt Number: 12011



Description
Acid Composite Mix

ApprovedBy: akmal
ApproveDate: 10/01/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
ACCUSTANDAR CLP-HC-A-R-PAK 217121025-01 09/27/18 06/13/21 Revolus, Jean

Num of Volume
Cont /Cont Conc: Units:
15 1ml 2000 PPM

Veritech Control/Receipt Number: 12028



Description
methylene chloride

ApprovedBy: jean
ApproveDate: 10/10/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
J.T.Baker 9264-03 206560 10/05/18 10/18/19 Lopez, Jose

Num of Volume
Cont /Cont Conc: Units:
156 4L neat neat

Veritech Control/Receipt Number: 12030



Description
sodium sulfate

ApprovedBy: jean
ApproveDate: 10/10/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
Seidler SC3375-1C 743502 10/05/18 10/04/23 Lopez, Jose

Num of Volume
Cont /Cont Conc: Units:
4 100L neat neat

Veritech Control/Receipt Number: 12049



Description
Base/Neutral Comp Mix

ApprovedBy: akmal
ApproveDate: 10/23/18
Checked: Yes

Manufacturer Catalog Num: Lot Num: Date Rec: Exp Date: Rec By:
ACCUSTANDAR CLP-HC-BN-PAK 218091380 10/05/18 11/02/19 Revolus, Jean

Num of Volume
Cont /Cont Conc: Units:
10 1ml 2000 PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11761



Description

Toxic Substances Mix #2

ApprovedBy: jean

ApproveDate: 06/08/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ACCUSTANDAR	Z-014E-PAK	218031110	06/08/18	04/14/20	Revolus, Jean	15	1ml	20000	PPM

Veritech Control/Receipt Number: 12001



Description

acetone

ApprovedBy: akmal

ApproveDate: 09/26/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	179319	09/25/18	06/13/20	Lopez, Jose	24	4L	neat	neat

Veritech Control/Receipt Number: 12011



Description

Acid Composite Mix

ApprovedBy: akmal

ApproveDate: 10/01/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ACCUSTANDAR	CLP-HC-A-R-PAK	217121025-01	09/27/18	06/13/21	Revolus, Jean	15	1ml	2000	PPM

Veritech Control/Receipt Number: 12028



Description

methylene chloride

ApprovedBy: jean

ApproveDate: 10/10/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9264-03	206560	10/05/18	10/18/19	Lopez, Jose	156	4L	neat	neat

Veritech Control/Receipt Number: 12030



Description

sodium sulfate

ApprovedBy: jean

ApproveDate: 10/10/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Seidler	SC3375-1C	743502	10/05/18	10/04/23	Lopez, Jose	4	100L	neat	neat

Veritech Control/Receipt Number: 12049



Description

Base/Neutral Comp Mix

ApprovedBy: akmal

ApproveDate: 10/23/18

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ACCUSTANDAR	CLP-HC-BN-PAK	218091380	10/05/18	11/02/19	Revolus, Jean	10	1ml	2000	PPM



QC71496

Extraction of Semi-volatile – Aqueous
Method 3510 C

Hampton 8101509 0673

Method Blank No. WMB- _____
 Blank Spike (MBS): _____
 Start extraction time: 8:00
 End extraction time: 3:00
 Recirculator: Start temp: _____
 End temp: _____

Date: 10/22/18
 Matrix Spike: _____
 Shaker Used: 4,5,6
 Condenser used: JIR 6,7,8
 Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract	Ext. by	TCLP QC
				NaOH ≥12	H2SO4 <2	BN	BNA	AE			
MB 71496	X	1000ml	1ml	X	X		X		EF-1 (10/18)	JIR	07157
MBS 71496		↓							V-289820		-001
MS07157-001		250ml									
MS07157-001											
AD07157-001	1								1		1
↓ -002	2								2		2
↓ -003	3								3		3
↓ -004	4								4		4
EF-1, V-289820 (10/18)											
AD07132-001	5								(1) EF-1 (10/18)		5
EF-1, V-289820 (10/17)									V-289820		
AD06943-001	6								(1) EF-1 (10/18)		6
EF-1, V-289820 (10/19)									V-289820		
AD07118-003	R	1000ml	↓	↓	↓		↓			↓	

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	11759	BN mix
↓	↓	12011	Acid comp
↓	↓	11761	Toxic mix
↓	↓	288615	CLP mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	28589	BN SURV

Reagent Lots: MeCl₂ 12028 Acetone _____ Hexane _____ Na₂SO₄ 12030

Other _____

Relinquished By: JIRDate: 10/22/18Received By: RLDate: 10/23/18

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0033



Extraction of Semi-volatile – Aqueous
Method 3510 C

8101509 0674

Method Blank No. WMB- _____
Blank Spike (MBS): _____
Start extraction time: 12:14 pm
End extraction time: 9:11 pm
Recirculator: Start temp: 20.0, 14.8
End temp: 20.1, 14.8

Date: 10/22/18
Matrix Spike: 71497
Shaker Used: 1,2,3
Condenser used: 1,2,5
Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract Fluid	Ext. by	TCLP QC
				NaOH ≥12	H2SO4 ≤2	BN	BNA	AE			
MB 71497	X	1000	0.5	X	X		X			Jn	11/2 Surr.
MBS 71497	X	↓	1.0								
MS 07161-001	X	250	↓								
MSD 07161-001	X	↓	↓								
AD 07161-001	1	1000	0.5								11/2 Surr.
↓ -003	2	910									
↓ -005	3	980									
↓ -007	4	↓									
↓ -008	5	1000			↓		↓				
AD 07142-003	6	↓				X					
↓ -004	7	990									
↓ -005	8	980									
↓ -006	9	995									
↓ -007	10	950									
↓ -008	11	965									
↓ -009	12	950	↓								↓
AD 07149-008	13	1000	1.0								
AD 07150-001	14	↓	↓								
↓ -002	15										
↓ -003	16	↓	↓								
AD 07165-002	17	↓	0.5								
↓ -003	18	960	↓	↓		↓				↓	11/2 Surr.

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	12049	BN Mix
↓	↓	12011	Acid Comp
↓	↓	11761	Toxic Mix
↓	↓	288415	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285891	BN Surr.

Reagent Lots: MeCl₂ 12028 Acetone _____ Hexane _____ Na₂SO₄ 12030

Other _____

Relinquished By: Jn

Date: 10/22/18

Received By: 2

Date: 10/30/18

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Method 3510 C

8101509 0675

Method Blank No. WMB-
Blank Spike (MBS):
Start extraction time: 11:34 am
End extraction time: 8:37 pm
Recirculator: Start temp: 20.0, 14.8
End temp: 20.0, 14.6

Date: 10/18/18
Matrix Spike: 71471
Shaker Used: 1, 2, 3
Condenser used: 1, 2, 5
Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract	Ext.	TCLP
				NaOH ≥12	H2SO4 <2	BN	BNA	AE			
MB 71471	X	1000	0.5	X	X		X		EF, 289820 10/16	g	07093-001 1/2 S
MBS 71471	X	↓	1.0								
MS 07093-001	X	250									
MSD 07093-001	X	↓									
AD 07093-001	1	↓									
AD 07113-001	2	1000									
AD 07114-001	3	↓									
AD 07115-001	4	↓				X					
↓ -002	5	↓				↓					
AD 07118-001	6	970	0.5		X		X				1/2 S
↓ -003	7	1000									
↓ -005	8	↓									
↓ -007	9	↓									↓
AD 07120-001	10	↓	1.0			X					
↓ -002	11	970									
AD 07121-001	12	960	0.5								1/2 S
↓ -002	13	980									
↓ -003	14	975									
↓ -004	15	980									
↓ -006	16	1000									
↓ -007	17	990									
↓ -008	18	1000									↓
AD 07056-C11	R	1000	1.0	X	X		X			AP	

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	11759	BN Mix
↓	↓	12011	Acid Comp
↓	↓	11761	Toxic Mix
↓	↓	288615	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285841	BN Sur.

Reagent Lots: MeCl₂ 12028 Acetone Hexane Na₂SO₄ 12030

Other

Relinquished By: g

Date: 10/18/18

Received By: x

Date: 10/19/18

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QC71479

Hampton-Clark 8101509 0676

Extraction of Semi-volatile - Aqueous
Method 3510 C

Method Blank No. WMB- _____
 Blank Spike (MBS): _____
 Start extraction time: 10:39 am
 End extraction time: 7:16 pm
 Recirculator: Start temp: 20.0, 14.8
 End temp: 20.1, 14.6

Date: 10/19/18
 Matrix Spike: 71479
 Shaker Used: 1, 2, 3
 Condenser used: 1, 2, 5
 Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract Fluid	Ext. by	TCLP QC
				NaOH ≥12	H2SO4 ≤2	BN	BNA	AE			
MB 71479	X	1000	0.5	X	X		X		SPLP 289066 10/12	Jm	106939-001 1/2 Surr.
MBS 71479	X	↓	1.0								
MS 06939-001	X	250	↓								
MSD 06939-001	X	↓	↓								
AD 06939-001	1	500	0.5		↓		↓				1/2 Surr.
SPLP 289066 10/12	X					X			SPLP 289066 W10		
AD 06821-001	2										
SPLP 289066 10/10	X								SPLP 289066 10/17		
AD 06980-005	3										
SPLP 289066 10/17	X	↓	↓								↓
AD 07131-001	4	1000	1.0								1/2 Surr.
↓ -002	5	↓	↓								
AD 07142-001	6	995	0.5								
AD 07133-001	7	1000	1.0								
↓ -002	8		↓			↓					
AD 07137-001	9		0.5		X		X				1/2 Surr.
↓ -003	10										
↓ -005	11				↓		↓				
AD 07143-001	12					X					
↓ -002	13										
↓ -003	14										
↓ -004	15										
↓ -005	16		↓								↓
AD 07081-015	R	↓	1.0								
↓ -017	R	960									
AD 07072-007	R	1000				↓					
AD 07113-001	R	↓	↓	↓	X		X				

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	11759	BN Mix
↓	↓	12011	Acid Comp
↓	↓	11761	Toxic Mix
↓	↓	288615	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285891	BN Surr.

Reagent Lots: MeCl₂ 12028 Acetone _____ Hexane _____ Na₂SO₄ 12030

Other _____

Relinquished By: JmDate: 10/19/18Received By: JcDate: 10/22/18

QC71480

Analysis: BN/ BNA /AE

Method Blank No. SMB- _____
Blank Spike (SMBS): _____
Blank Spike (SMBS): _____
Start Ext Time: 11:08 AM
End Ext. Time: 5:01 PM
Recirculator: Start temp: 14.9
End temp: 14.2

Date: 10/19/18
Matrix Spike: 7/480
Matrix Spike: _____
Sonicator Used: 42
Condenser Used: 3.4
Condenser Flow: 2500 CCM

[illegible]

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
25	1000	288144	AN TOX
		288614	GLP MIX
	2000	12011	Abul com

[illegible]

Reagent Lots: MeCl_2 12029 Acetone 12001 Hexane _____ Na_2SO_4 12030 Ether _____
MTBE _____ MeCl_2 :Acetone _____ Other _____

Relinquished By: LV
Received By: JP

Date: 10/19/18
Date: 10/22/18



QC71506

Hampton-Clarke 8101509 0678

Extraction of Semi-volatile - Aqueous
Method 3510 C

Method Blank No. WMB- _____

Blank Spike (MBS): _____

Start extraction time: 11:29 amEnd extraction time: 8:27 pmRecirculator: Start temp: 20.0, 14.8End temp: 20.1, 14.7Date: 10/23/18Matrix Spike: 71506Shaker Used: 1,2,3Condenser used: 1,2,5Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract Fluid	Ext. by	TCLP QC
				NaOH ≥12	H2SO4 ≤2	BN	BNA	AE			
MB 71506	X	1000	0.5	X	X		X		SPLP 289965 10/23	Jm	07249-006 1/2 Surr.
MBS 71506	X	↓	1.0								
MS 07249-006	X	250	↓								
MSD 07249-006	X	↓	↓								
AD 07249-006	1	500	0.5		↓		↓		1		1 1/2 Surr.
↓ -009	2	↓	↓			X			2		2
↓ -010	3	↓	↓						3		3
SPLP 289965 10/23	X	↓	↓								
AD 07165-004	4	990	↓								
↓ -005	5	970	↓								
↓ -006	6	955	↓								
↓ -007	7	↓	↓								
↓ -008	8	940	↓								
↓ -009	9	945	↓								
↓ -010	10	995	↓								
↓ -011	11	1000	↓								
↓ -012	12	990	↓								
↓ -013	13	970	↓								
↓ -014	14	965	↓								
↓ -015	15	1000	↓								
AD 07179-001	16	↓	1.0			↓					
↓ -002	17	↓	↓								
AD 07166-023	18	925	↓		X		X				
AD 07224-005	19	950	↓			X					
AD 07137-001	R	1000	0.5	↓	X		X				1/2 Surr.

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	12049	BN Mix
↓	↓	12061	Acid Comp
↓	↓	11761	Toxic Mix
↓	↓	288615	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285891	BN Surr.

Reagent Lots: MeCl₂ 12028 Acetone _____ Hexane _____ Na₂SO₄ 12030

Other _____

Relinquished By: JmDate: 10/23/18Received By: 2Date: 10/24/18

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QC71518

Extraction of Semi-volatile - Aqueous
Method 3510 C8101509 0679
Hampton-Clarke

Method Blank No. WMB- _____
 Blank Spike (MBS): _____
 Start extraction time: 12:51 pm
 End extraction time: _____
 Recirculator: Start temp: _____
 End temp: _____

Date: 10/24/18
 Matrix Spike: 71518
 Shaker Used: 1,2,3
 Condenser used: 1,2,5
 Condenser Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	pH Verification		Fraction			Extracted By/ Comments Extract Fluid	Ext. by	TCLP QC
				NaOH ≥12	H2SO4 ≤2	BN	BNA	AE			
MB 71518	X	1000	0.5	X	X		X		EF, 289820 10/23	Jn	07252-002 1/25
MBS 71518	X	↓	1.0								
MS 07252-002	X	250									
MSD 07252-002	X	↓									
AD 07252-002	1	↓							1		1
AD 07187-002	2	↓							2		2
EF, 289820 10/23	X	↓									
AD 07180-001	3	1000				X					
↓ -002	4	↓				↓					
AD 07186-009	5	↓				↓					
AD 07185-008	6	↓	↓		X		X				
AD 07188-009	7	505	0.5		↓		↓				1/25
AD 07212-001	8	1000	1.0			X					
AD 07204-001	9	↓			X		X				
AD 07205-001	10	↓			↓		↓				
AD 07207-009	11	↓	↓		↓		↓				
AD 07249-009	R	500	0.5			X					1/25
↓ -010	R	↓				↓					
AD 07161-001	R	400			X		X				
AD 07142-003	R	1000				X					
↓ -004	R	995	↓	↓		↓					↓

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	12049	BN Mix
↓	↓	12011	Acid Comp
		12010	Toxic Mix
↓	↓	288615	CP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285891	BN Sur.

Reagent Lots: MeCl2 12028 Acetone _____ Hexane _____ Na2SO4 12030

Other _____

Relinquished By: JnDate: 10/24/18Received By: 2Date: 10/25/18

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0036



8101509 0680

Extraction of Sediment Samples
Method 3010C

Method Blank No. WMB- _____
Blank Spike (MBS): _____
Start extraction time: 12:26
End extraction time: 4:54 pm
Recirculator: Start temp: 20.0, 14.8
End temp: 20.1, 14.6

Date: 10/25/18
Blank Spike: 71532
Sample ID: 4567
Concentration: 1.25
Concentration Flow: 2500 CCM

Sample Number	# In Batch	Initial Volume	Final Volume	Verification		Fraction			Extracted By/ Comments Date	Ext by	REL QC
				WASH	MES04	BN	BNA	AE			
MB 71532	X			X	X		X			Jm	1/25 Surr.
MBS 71532	X										
MS 07294-001	X	500									
MSH 07294-001	X										
AD 07294-001	1										1/25 Surr.
AD 07212-002	2										
AD 07212-003	3	1000	0.5	X		X				Jm	1/25 Surr.
-004	4										
-005	5										
AD 07142-005	R	945									
-006	R	940									
-007	R	965									
-008	R	960									
-009	R	950									
AD 07161-003	R	865	0.25		X		X				1/45 Surr.
-005	R										
-007	R	970	0.5								1/25 Surr.
-008	R	960									
AD 07165-002	R	1000				X					
-003	R	970									
-007	R	970									
-008	R	920									
-009	R	940									
-010	R	965									
-015	R	970									

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	12049	BN Mix
		12011	Acid Comp
		12010	Toxic Mix
		288615	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	285891	BN Surr.

Reagent Lots: MeCl₂ 12028 Acetone _____ Hexane _____ Na₂SO₄ 12030

Other _____

Relinquished By: JmDate: 10/25/18Received By: 2Date: 10/26/18

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1-1-10M71228

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M71228	CAL DFTPP	Ee1=2.2;Ed1=0.31;	OK, V-282441	JB 10/09/18		Aqueous	1	1		10/08 08:27
10M71229	CAL BNA@10PPM		OK, V-289382	JB 10/09/18		Aqueous	1	1	625/827	10/08 08:51
10M71230	CAL BNA@2PPM		OK, V-289390	JB 10/09/18		Aqueous	1	1	625/827	10/08 09:15
10M71231	CAL BNA@196PPM		OK, V-289388	JB 10/09/18		Aqueous	1	1	625/827	10/08 09:38
10M71232	CAL BNA@160PPM		OK, V-289387	JB 10/09/18		Aqueous	1	1	625/827	10/08 10:00
10M71233	CAL BNA@120PPM		OK, V-289386	JB 10/09/18		Aqueous	1	1	625/827	10/08 10:22
10M71234	CAL BNA@80PPM		OK, V-289385	JB 10/09/18		Aqueous	1	1	625/827	10/08 10:44
10M71235	CAL BNA@20PPM		OK, V-289383	JB 10/09/18		Aqueous	1	1	625/827	10/08 11:06
10M71236	CAL BNA@.5PPM		OK, V-289391	JB 10/09/18		Aqueous	1	1	625/827	10/08 11:28
10M71237	CAL BNA@50PPM		OK, V-289384	JB 10/09/18		Aqueous	1	1	625/827	10/08 11:51
10M71238	ICV BNA@50PPM Is		OK, V-289433	JB 10/09/18		Aqueous	1	1	625/827	10/08 12:15

Ans	Area Not Checked	Ex	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Exm	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
R8m	Blank 600 series missing	Exn	Totl/Solvent Extraction Date Missing/Not checked	Cm	C30/C20 failed for enh
R8m	Blank 8000 series missing	Exo	Totl Extraction Performed Outside of Hold	EVF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evnc	Eval Mix missing dth or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMet (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMet (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
CRf	600 series sample/blank did not have missing cal	Is	Initial Cal Not Checked	Rln	Can't Calculate Drift
CRf	8000 series sample/blank did not have missing cal	Iv	Pmth with calmr csv for init calibration check rfs	S6	600 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS-5 Year: 2018
Analyst: AFIJG
8101509-1682

1-1-5M105686

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105686	CAL DFTPP	Ee1=4 5;Ed1=0.58;	OK, V-282441	JB 10/09/18		Aqueous	1	1		10/08 08:31
5M105687	CAL BNA@10PPM		OK, V-289382	JB 10/09/18		Aqueous	1	1	6251827	10/08 08:57
5M105688	CAL BNA@2PPM	IsC16C18	RR	JB 10/09/18		Aqueous	1	1	6251827	10/08 09:20
5M105689	CAL BNA@196PPM		OK, V-289388	JB 10/09/18		Aqueous	1	1	6251827	10/08 09:45
5M105690	CAL BNA@160PPM		OK, V-289387	JB 10/09/18		Aqueous	1	1	6251827	10/08 10:11
5M105691	CAL BNA@120PPM		OK, V-289386	JB 10/09/18		Aqueous	1	1	6251827	10/08 10:34
5M105692	CAL BNA@80PPM		OK, V-289385	JB 10/09/18		Aqueous	1	1	6251827	10/08 10:57
5M105693	CAL BNA@20PPM		OK, V-289383	JB 10/09/18		Aqueous	1	1	6251827	10/08 11:26
5M105694	CAL BNA@.5PPM		OK, V-289391	JB 10/09/18		Aqueous	1	1	6251827	10/08 11:49
5M105695	CAL BNA@50PPM		OK, V-289384	JB 10/09/18		Aqueous	1	1	6251827	10/08 12:12
5M105696	CAL BNA@2PPM		OK, V-289390	JB 10/09/18		Aqueous	1	1	6251827	10/08 12:40
5M105697	ICV BNA@50PPM	Is	OK, V-289433	JB 10/09/18		Aqueous	1	1	6251827	10/08 13:09

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B8m	Blank 8000 series missing	Etn	Tcin/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8n	Blank 8000 series missing	Etn	Tcin Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evmc	Eval Mix Not Checked
C16	Calibration Column 1 Out (8000 Series)	Hb	Analysis Before Collection Date	Evmc	Eval Mix missing dft or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (8000 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmh with calmt.csv for init calibration check rfs	S6	600 series surrogate out
Cma	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iv	Initial Cal Files Not Updated Properly for a sample	ISa6.Sb6	Acid and/or BN Surrogate Out (600 series)



RUN LOG

Instrument: CN6197050683
Analyst: AH/JB

1-1-9M88300

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
9M88300.D	CAL DFTPP	Ee1=3.3;Ed1=0.4;	OK, V-282441	JB 10/09/18		Aqueous	1	1		10/08 09:00
9M88301.D	CAL BNA@10PPM		OK, V-289382	JB 10/09/18		Aqueous	1	1	625\827	10/08 10:20
9M88302.D	CAL BNA@2PPM		OK, V-289390	JB 10/09/18		Aqueous	1	1	625\827	10/08 10:42
9M88303.D	CAL BNA@196PPM		OK, V-289388	JB 10/09/18		Aqueous	1	1	625\827	10/08 11:05
9M88304.D	CAL BNA@160PPM		OK, V-289387	JB 10/09/18		Aqueous	1	1	625\827	10/08 11:29
9M88305.D	CAL BNA@120PPM		OK, V-289386	JB 10/09/18		Aqueous	1	1	625\827	10/08 11:52
9M88306.D	CAL BNA@80PPM		OK, V-289385	JB 10/09/18		Aqueous	1	1	625\827	10/08 12:15
9M88307.D	CAL BNA@20PPM		OK, V-289383	JB 10/09/18		Aqueous	1	1	625\827	10/08 12:38
9M88308.D	CAL BNA@.5PPM		OK, V-289391	JB 10/09/18		Aqueous	1	1	625\827	10/08 13:02
9M88309.D	CAL BNA@50PPM		OK, V-289384	JB 10/09/18		Aqueous	1	1	625\827	10/08 13:26
9M88310.D	ICV BNA@50PPM Is		OK, V-289433	JB 10/09/18		Aqueous	1	1	625\827	10/08 13:50

Anc	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Am	Area Out	Exm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/r20 not checked
B6m	Blank 600 series missing	Ein	Totl/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eln	Totl Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MSMSd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MSMSd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rn	Can't Calculate Ddt
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt.csv for init calibration check rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning: In cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Is6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS Year: 2018
Analyst: AH/JB

1-1-7M95168

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M95168.D	CAL DFTPP	Ee1=3.9;Ed1=4.5;	OK, V-282441	JB 10/09/18		Aqueous	1	1		10/08 12:40
7M95169.D	CAL BNA@10PPM		OK, V-289382	JB 10/09/18		Aqueous	1	1	625\8270	10/08 13:05
7M95170.D	CAL BNA@196PPM		OK, V-289388	JB 10/09/18		Aqueous	1	1	625\8270	10/08 13:29
7M95171.D	CAL BNA@160PPM		OK, V-289387	JB 10/09/18		Aqueous	1	1	625\8270	10/08 13:53
7M95172.D	CAL BNA@120PPM		OK, V-289386	JB 10/09/18		Aqueous	1	1	625\8270	10/08 14:16
7M95173.D	CAL BNA@80PPM		OK, V-289385	JB 10/09/18		Aqueous	1	1	625\8270	10/08 14:40
7M95174.D	CAL BNA@20PPM		OK, V-289383	JB 10/09/18		Aqueous	1	1	625\8270	10/08 15:03
7M95175.D	CAL BNA@2PPM		OK, V-289390	JB 10/09/18		Aqueous	1	1	625\8270	10/08 15:27
7M95176.D	CAL BNA@0.5PPM		OK, V-289391	JB 10/09/18		Aqueous	1	1	625\8270	10/08 15:50
7M95177.D	CAL BNA@50PPM		OK, V-289384	JB 10/09/18		Aqueous	1	1	625\8270	10/08 16:13
7M95178.D	ICV BNA@50PPM		OK, V-289433	JB 10/09/18		Aqueous	1	1	625\8270	10/08 16:37
7M95179.D	OMB71379		OK	AH 10/09/18		OIL/OTH	1	1	8270D	10/08 17:00
7M95180.D	OMB71380		OK	AH 10/09/18		OIL/OTH	1	1	8270D	10/08 17:23
7M95181.D	AD06831-001	Sa8Sb8	RE-EXTRACT	JB 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 17:47
7M95182.D	AD06831-003	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 18:10
7M95183.D	AD06831-004	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 18:33
7M95184.D	AD06831-005	Sa8Sb8	RE-EXTRACT,OK	JB 10/09/18,AH 10/09/18,AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 18:56
7M95185.D	AD06832-001	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 19:20
7M95186.D	AD06832-002	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 19:43
7M95187.D	AD06832-003	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 20:06
7M95188.D	AD06832-004	Sa8	OK OMB71380	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 20:29
7M95189.D	AD06832-005	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 20:52
7M95190.D	06832-005		OK	AH 10/09/18		OIL/OTH	1	1	8270D	10/08 21:15
7M95191.D	AD06832-006	Sa8	OK	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 21:38
7M95192.D	AD06832-004(MS)	Sa8	OK OMB71380	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 22:01
7M95193.D	AD06832-004(MSD)	Sa8	OK OMB71380	AH 10/09/18	BNA15-8270	OIL/OTH	1	1	8270D	10/08 22:24

Area Not Checked
Area Out
Blank 600 series missing
Blank 8000 series missing
Blank Not Found/Assigned
Calibration Column 1 Out (600 Series)
Calibration Column 1 Out (8000 Series)
Calibration Column 2 Out (600 Series)
Calibration Column 2 Out (8000 Series)
600 series sample/blank did not have passing cal
8000 series sample/blank did not have passing cal
Endion Cal missing for sample (8000 series)
Calibration Not Checked for sample/blank/eval

Extraction Performed Past Hold
Solvent Extraction Date Missing/Not checked
Toln/Solvent Extraction Date Missing/Not checked
Toln Extraction Performed Outside of Hold
Eval Time Exceeded
Analysis Before Collection Date
Sample Analyzed outside of hold time
Initial cal 600 series failed Column 1 and or 2
Initial cal 8000 series failed Column 1 and or 2
Initial Cal Not Checked
Pmb with calmt csv for init calibration check rfs
Initial cal warning in cal file <> method
Initial Cal Files Not Updated Properly for a sample

Warning Possible Carry Over
Warning c30/c20 not checked
C30/C20 failed for enh
Eval Mix Failed
Eval Mix Not Checked
Eval Mix missing diff or endion
Rtd Out on MsMed (col1 and or col2) 600 series
Rtd Out on MsMed (col1 and or col2) 8000 series
Retention Time Out Or %Diff Out
Can't Calculate Dnff
600 series surrogate out
8000 series surrogate out
Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument GCMS-10Y Ver. 2018
8101505 0685
Analyst: AH/MB

1-1-10M71436

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M71436	CAL DFTPP	Ee1=3.3;Ed1=1.8;	OK, V-282441	JB 10/22/18		Aqueous	1	1		10/19 09:05
10M71437	CAL BNA@50PPM		OK, V-289384	JB 10/22/18		Aqueous	1	1	625\827	10/19 09:35
10M71438	WMB71471	Sa6Sa8	RR	AH 10/19/18		Aqueous	1	1	625\827	10/19 10:13
10M71439	WMB71471(MS)	M18	OK WMB71471	AH 10/19/18		Aqueous	1	1	625\827	10/19 10:35
10M71440	SMB71470		OK	AH 10/19/18		Soil	1	1	8270D	10/19 10:58
10M71441	AD07093-001(T)		OK WMB71471	AH 10/19/18	BNATCLP-82	Aqueous	1	1	625\827	10/19 11:20
10M71442	AD07093-001(T)(M	Sa6Sa8M16M18	OK WMB71471	AH 10/19/18	BNATCLP-82	Aqueous	1	1	625\827	10/19 11:42
10M71443	AD07093-001(T)(M	R16R18M16M18	OK WMB71471	AH 10/19/18	BNATCLP-82	Aqueous	1	1	625\827	10/19 12:04
10M71444	SMB71470		OK	AH 10/19/18		Soil	1	1	8270D	10/19 12:26
10M71445	AD07121-001		OK	AH 10/19/18	BN-8270	Aqueous	1	1	8270D	10/19 12:48
10M71446	WMB71471	Sa6Sa8	OK	AH 10/19/18		Aqueous	1	1	625\827	10/19 13:10
10M71447	AD07121-002		OK	AH 10/19/18	BN-8270	Aqueous	1	1	8270D	10/19 13:32
10M71448	AD07121-003		OK	AH 10/19/18	BN-8270	Aqueous	1	1	8270D	10/19 13:55
10M71449	AD07121-004		OK	AH 10/19/18	BN-8270	Aqueous	1	1	8270D	10/19 14:17
10M71450	WMB71479	Sa6Sa8	OK	AH 10/19/18		Aqueous	1	1	625\827	10/19 14:39
10M71451	AD07121-006		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/19 15:01
10M71452	AD07121-007		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/19 15:23
10M71453	AD07121-008		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/19 15:45
10M71454	AD07037-001(10X)(		OK	JB 10/22/18	BN-8270	Aqueous	10	10	8270D	10/19 16:08
10M71455	AD07037-002(20X)(Sd		OK	JB 10/22/18	BN-8270	Aqueous	20	20	8270D	10/19 16:30
10M71456	SMB71480		OK	JB 10/22/18		Soil	1	1	8270D	10/19 17:24
10M71457	SMB71481		OK	JB 10/22/18		Soil	1	1	8270D	10/19 17:46
10M71458	SMB71480(MS)		OK SMB71480	JB 10/22/18		Soil	1	1	8270D	10/19 18:08
10M71459	AD07136-003		OK SMB71480	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 18:30
10M71460	AD07136-003(MS)		OK SMB71480	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 18:52
10M71461	AD07136-003(MSD)		OK SMB71480	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 19:14
10M71462	AD07185-007		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/19 19:37

Area Not Checked	Ex	Extraction Performed Past Hold	Ca	Warning Possible Carry Over
Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
Blank 600 series missing	Ein	Tolu/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
Blank 8000 series missing	Eto	Tolu Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Blank Not Found/Assigned	Fv	Eval Time Exceeded	Evnc	Eval Mix Not Checked
Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collecting Date	Evrc	Eval Mix missing cdf or andrin
Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MSMSd (col1 and or col2) 600 series
Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MSMSd (col1 and or col2) 8000 series
Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
8000 series sample/blank did not have passing cal	Is	Prob with calmt.csv for init calibration check rfs	S6	600 series surrogate out
Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Calibration Not Checked for sample/blank/eval	Iw	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and/or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS 5 Year: 2018
8101509 0686

1-1-5M105870

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105870	CAL DFTPP	Ee1=3.9;Ed1=0.99;	OK, V-282441	JB 10/22/18		Aqueous	1	1		10/19 09:08
5M105871	CAL BNA@50PPM		OK, V-289384	JB 10/22/18		Aqueous	1	1	625\827	10/19 09:44
5M105872	WMB71471	Sa6Sa8	OK	AH 10/19/18		Aqueous	1	1	625\827	10/19 10:48
5M105873	AD07120-001		OK	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 11:12
5M105874	AD07120-002		OK	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 11:35
5M105875	AD07115-001		OK	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 11:58
5M105876	AD07115-002		OK	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 12:21
5M105877	AD07118-001		OK	AH 10/19/18	BNA-625.1	Aqueous	1	1	625	10/19 12:44
5M105878	AD07118-003	Sa6Sb6	REEXTRACT	AH 10/19/18	BNA-625.1	Aqueous	1	1	625	10/19 13:08
5M105879	AD07118-005	Sa6	OK	AH 10/19/18	BNA-625.1	Aqueous	1	1	625	10/19 13:31
5M105880	AD07118-007	Sa6	OK	AH 10/19/18	BNA-625.1	Aqueous	1	1	625	10/19 13:55
5M105881	WMB71479	Sa6Sa8	OK	AH 10/19/18		Aqueous	1	1	625\827	10/19 14:23
5M105882	AD07072-007(R)		OK	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 14:46
5M105883	AD07081-015(R)	Sb8	OK, USE THIS RUN	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 16:02
5M105884	AD07081-017(R)	Sb8	SURRO. CONFIRMED, USE FIRST RUN	AH 10/19/18	BN15-8270	Aqueous	1	1	8270D	10/19 16:25
5M105885	AD07113-001(R)	Sa6Ao	RR	AH 10/19/18	BNA-625.1	Aqueous	1	1	625	10/19 16:48
5M105886	AD07113-001(5X)(RSd		SURR CONFIRMED	JB 10/22/18	BNA-625.1	Aqueous	5	5	625	10/19 17:11
5M105887	SMB71481		OK	AH 10/19/18		Soil	1	1	8270D	10/19 17:34
5M105888	SMB71480		OK	JB 10/22/18		Soil	1	1	8270D	10/19 17:57
5M105889	SMB71481(MS)		OK SMB71481	JB 10/22/18		Soil	1	1	8270D	10/19 18:21
5M105890	AD07178-001		OK SMB71481	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/19 18:43
5M105891	AD07178-001(MS)		OK SMB71481	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/19 19:06
5M105892	AD07178-001(MSD)		OK SMB71481	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/19 19:29
5M105893	AD07178-002		OK	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/19 19:52
5M105894	AD07113-001(R)	Sa6Ao	AREA CONFIRMED	JB 10/22/18	BNA-625.1	Aqueous	1	1	625	10/19 20:15

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	EsM	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Flm	Trk/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Elm	Toto Extraction Performed Outside of Hold	Evf	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evnc	Eval Mix missing dft or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pinch with calmt csv for init calibration check rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (6000 series)	Iw	Initial cal warning. Init cal file <= method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Emmerly for a sample	Sa6 Sb6	Acid and LocBN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS Year: 2018
Analyst: AH/JB

1-1-7M95304

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M95304.D	CAL DFTPP	Ee1=2.8;Ed1=1.1;	OK, V-282441	JB 10/22/18		Aqueous	1	1		10/19 09:03
7M95305.D	CAL BNA@50PPM		OK, V-289384	JB 10/22/18		Aqueous	1	1	625\8270	10/19 09:41
7M95306.D	WMB71479(MS)	Sa6Sa8	OK WMB71479	JB 10/22/18		Aqueous	1	1	625\8270	10/19 14:26
7M95307.D	WMB71479	Sa6Sa8	RR	JB 10/22/18		Aqueous	1	1	625\8270	10/19 14:49

Anc	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	EsM	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
R6m	Blank 600 series missing	Fin	Teln/Solvent Extraction Date Missing/Not check'd	Crn	C30/C20 failed for enh
R8m	Blank 8000 series missing	Fin	Teln Extraction Performed Outside of Hold	Evd	Eval Mix Failed
Rof	Blank Not Found/Assigned	Fv	Eval Time Exceeded	EvdC	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	EvdC	Eval Mix missing diff or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Ret Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Ret Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmi csv for init calibration check rfs	S6	600 series surrogate out
Cme	Endinn Cal missing for sample (8000 series)	Iw	Initial cal warning for cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Isa6 Sb6	Acid and or BN Surrogate Out (600 series)



1-1-5M105895

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105895	CAL DFTPP	Ee1=5;Ed1=1, 1,	OK, V-290101	JB 10/22/18		Aqueous	1	1		10/22 07:18
5M105896	CAL BNA@50PPM		OK, V-289384	JB 10/22/18		Aqueous	1	1	625\827	10/22 07:52
5M105897	AD06939-001(T)	Eo	OK WMB71479	JB 10/22/18	BNPSPLP-82	Aqueous	1	1	625\827	10/22 08:35
5M105898	AD06939-001(T)(M	Eo	OK WMB71479	JB 10/22/18	BNPSPLP-82	Aqueous	1	1	625\827	10/22 08:58
5M105899	AD06939-001(T)(M	Eo	OK WMB71479	JB 10/22/18	BNPSPLP-82	Aqueous	1	1	625\827	10/22 09:21
5M105900	AD07133-001		OK	JB 10/22/18	BN15-8270	Aqueous	1	1	8270D	10/22 09:44
5M105901	AD07133-002		OK	JB 10/22/18	BN15-8270	Aqueous	1	1	8270D	10/22 10:07
5M105902	AD07131-001		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 10:31
5M105903	AD07131-002		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 10:54
5M105904	AD07142-001	Sb8	OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 11:17
5M105905	AD07137-001	Sa6Sb6	RE-EXTRACT	JB 10/22/18	BNA-625.1	Aqueous	1	1	625	10/22 11:41
5M105906	AD07137-003		OK	JB 10/22/18	BNA-625.1	Aqueous	1	1	625	10/22 12:04
5M105907	AD07137-005	Sa6	OK	JB 10/22/18	BNA-625.1	Aqueous	1	1	625	10/22 12:28
5M105908	AD06821-001(T)	Sb8Eo	OK	JB 10/22/18	BNPAH-8270	Aqueous	1	1	8270D	10/22 12:52
5M105909	AD06980-005(T)	Eo	OK	JB 10/22/18	BNPAH-8270	Aqueous	1	1	8270D	10/22 13:15
5M105910	EF-SPLP V-289066(		OK	JB 10/22/18		Aqueous	1	10	8270D	10/22 13:38
5M105911	WMB71496(MS)	Sb6Sb8M18	OK WMB71496	JB 10/22/18		Aqueous	1	1	625\827	10/22 14:01
5M105912	AD07157-001(T)	Sa6Sb6Sa8Sb 8	OK, SURR CONFIRMED BY MS& MSD WMB71496	JB 10/23/18	BNATCLP-82	Aqueous	1	1	625\827	10/22 14:25
5M105913	WMB71496		OK, DOUBLE SURR	JB 10/22/18		Aqueous	0.5	1	625\827	10/22 14:49
5M105914	EF-1 V-289820(10/1Sb8		OK	JB 10/22/18		Aqueous	1	10	8270D	10/22 15:12
5M105915	AD07157-001(T)(M	Sa6Sb6Sa8Sb 8	OK WMB71496	JB 10/23/18	BNATCLP-82	Aqueous	1	1	625\827	10/22 15:36
5M105916	AD07157-001(T)(M	Sa6Sb6Sa8Sb 8	OK WMB71496	JB 10/23/18	BNATCLP-82	Aqueous	1	1	625\827	10/22 15:59
5M105917	AD07132-001(T)	Sb8	OK	JB 10/23/18	BNATCLP-82	Aqueous	1	1	8270D	10/22 16:22
5M105918	AD06943-001(T)	Eto	OK, DOUBLE SURR	JB 10/23/18	BNATCLP-82	Aqueous	0.5	1	8270D	10/22 16:45
5M105919	EF-1 V-289820(10/1Sb8		OK	JB 10/23/18		Aqueous	1	10	8270D	10/22 17:08
5M105920	EF-1 V-289820(10/1Sb8		OK	JB 10/23/18		Aqueous	1	10	8270D	10/22 17:31
5M105921	EF-SPLP V-289066(		OK	JB 10/23/18		Aqueous	1	10	8270D	10/22 17:54
5M105922	EF-SPLP V-289066(		OK	JB 10/23/18		Aqueous	1	10	8270D	10/22 18:18

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Exm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Elm	Tolu/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Elm	Tolu Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMetd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMetd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rln	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calcd cvv for init calibration check rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <= method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS 10 Year 2018
8101509 0689
Analysis: AHND

1-1-10M71463

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M71463	CAL DFTPP	Ed1=0.72;	OK, V-290101	JB 10/22/18		Aqueous	1	1		10/22 07:18
10M71464	CAL BNA@50PPM C16		OK, V-289384	JB 10/22/18		Aqueous	1	1	625\827	10/22 07:45
10M71465	SMB71491(MS)		OK SMB71491	JB 10/22/18		Soil	1	1	8270D	10/22 08:30
10M71466	SMB71491		OK	JB 10/22/18		Soil	1	1	8270D	10/22 08:52
10M71467	AD07224-001		OK SMB71491	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 09:14
10M71468	AD07224-001(MS)		OK SMB71491	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 09:36
10M71469	AD07224-001(MSD)		OK SMB71491	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 09:59
10M71470	AD07224-002		OK	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 10:21
10M71471	AD07224-003		OK	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 10:43
10M71472	AD07224-004		OK	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/22 11:05
10M71473	AD07190-009		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/22 11:27
10M71474	AD07190-011		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/22 11:50
10M71475	AD07189-001		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/22 12:12
10M71476	AD07143-001		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 12:34
10M71477	AD07143-002		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 12:56
10M71478	AD07143-003		OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 13:18
10M71479	AD07143-004	Ao	RR	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 13:41
10M71480	AD07157-002(T)	Sa8	OK	JB 10/22/18	BNATCLP-82	Aqueous	1	1	8270D	10/22 14:03
10M71481	AD07157-003(T)	Sa8Sb8	OK	JB 10/22/18	BNATCLP-82	Aqueous	1	1	8270D	10/22 14:25
10M71482	AD07157-004(T)	Sa8	RE-EXTRACT	JB 10/22/18	BNATCLP-82	Aqueous	1	1	8270D	10/22 14:47
10M71483	AD07143-005	Sb8	OK	JB 10/22/18	BN-8270	Aqueous	1	1	8270D	10/22 15:09
10M71484	WMB71496	C6f	OK, DOUBLE SURR	JB 10/22/18		Aqueous	0.5	1	625\827	10/22 15:31
10M71485	AD07022-012	Sa8Esm	OK	JB 10/23/18	BNA15-8270	Aqueous	1	1	8270D	10/22 15:53
10M71486	AD07118-003(R)	C6fSa6	SURR CONFIRMED	JB 10/23/18	BNA-825.1	Aqueous	1	1	625	10/22 16:15
10M71487	AD07143-004	Ao	AREA CONFIRMED	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/22 16:38

Anc	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
Bfm	Blank 600 series missing	Ein	Tolu/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tolu Extraction Performed Outside of Hold	Evf	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Eync	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evr	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMed (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMed (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C6f	8000 series sample/blank did not have passing cal	Iv	Pmh with calmi csv for init calibration check rfs	S6	600 series surrogate not
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning: ini cal file > method	S8	8000 series surrogate not
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS-9 Year 2018
Analyst: AH/JB

1-1-9M88659

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
9M88659.D	CAL DFTPP	Ee1=7.1;Ed1=5.4;	OK, V-282441	JB 10/22/18		Aqueous	1	1		10/19 15:42
9M88660.D	CAL BNA@50PPM		OK, V-289384	JB 10/22/18		Aqueous	1	1	6251827	10/19 16:02
9M88661.D	AD07079-016		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 16:43
9M88662.D	AD07079-017		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 17:06
9M88663.D	AD07116-005		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 17:30
9M88664.D	AD07116-003		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 17:52
9M88665.D	SMB71480		OK	JB 10/22/18		Soil	1	1	8270D	10/19 18:17
9M88666.D	SMB71481		OK	JB 10/22/18		Soil	1	1	8270D	10/19 18:40
9M88667.D	AD07116-001		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 19:03
9M88668.D	AD07116-002		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 19:27
9M88669.D	AD07116-004		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 19:50
9M88670.D	AD07079-013(3X)		OK	JB 10/22/18	BNA15-8270	Soil	3	3	8270D	10/19 20:13
9M88671.D	AD07109-002		OK	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 20:37
9M88672.D	AD07079-004	Ocf	RR 30X	JB 10/22/18	BNA15-8270	Soil	1	1	8270D	10/19 21:00
9M88673.D	AD07079-002(3X)	Ocf	RR 10X	JB 10/22/18	BNA15-8270	Soil	3	3	8270D	10/19 21:24
9M88674.D	AD07079-003(3X)	Ocf	RR 10X	JB 10/22/18	BNA15-8270	Soil	3	3	8270D	10/19 21:47
9M88675.D	07131-001		OK	JB 10/22/18		Soil	1	1	8270D	10/19 22:10
9M88676.D	AD07136-001		OK	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 22:34
9M88677.D	AD07136-002		OK	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 22:57
9M88678.D	AD07136-004		OK	JB 10/22/18	BNA20-8270	Soil	1	1	8270D	10/19 23:20
9M88679.D	AD07159-001		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/19 23:44
9M88680.D	AD07161-002		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 00:07
9M88681.D	AD07161-004		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 00:31
9M88682.D	AD07161-006		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 00:54
9M88683.D	AD07161-009		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 01:17
9M88684.D	AD07177-001		OK	JB 10/22/18	BNPAH-8270	Soil	1	1	8270D	10/20 01:41
9M88685.D	AD07185-002		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 02:05
9M88686.D	AD07185-004		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 02:28
9M88687.D	AD07185-006		OK	JB 10/22/18	BNA-8270	Soil	1	1	8270D	10/20 02:51
9M88688.D	AD07185-001(3X)		OK	JB 10/22/18	BNA-8270	Soil	3	3	8270D	10/20 03:15
9M88689.D	AD07185-003(3X)		OK, DIRTY	JB 10/22/18	BNA-8270	Soil	3	3	8270D	10/20 03:38
9M88690.D	AD07185-005(3X)	Ti8	RR	JB 10/22/18	BNA-8270	Soil	3	3	8270D	10/20 04:02
9M88691.D	AD07185-011(3X)	Ti8	RR	JB 10/22/18	BNA-8270	Soil	3	3	8270D	10/20 04:25
9M88692.D	AD07152-001(10X)	Ti8	RR	JB 10/22/18	BNA15-8270	Soil	10	10	8270D	10/20 04:49

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Estm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 800 series missing	Ein	Trdn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Ev	Trdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing dft or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Ret Out on McMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	i16 i26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Ret Out on McMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	i18 i28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Print with calmt csv for init calibration check rts	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Int cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iv	Initial Cal Files Not Updated Properly for a sample	Is6 Sh6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS-7
8101509.0691
Date: 10/23/2018
Analyst: AH/JB

1-1-7M95310

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M95310.D	CAL DFTPP	Ee1=1.9;Ed1=0.68;	OK, V-290101	JB 10/23/18		Aqueous	1	1		10/23 08:10
7M95311.D	CAL BNA@50PPM		OK, V-289384	JB 10/23/18		Aqueous	1	1	625/827	10/23 08:34
7M95312.D	WMB71479	Sa6Sa8	OK	JB 10/23/18		Aqueous	1	1	625/827	10/23 11:31
7M95313.D	WMB71497	Sa6Sa8	OK	JB 10/23/18		Aqueous	1	1	625/827	10/23 11:54

Ans	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Fem	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
R6m	Blank 8000 series missing	Ein	ToluSolvent Extraction Date Missing/Not checked	Co	C30/C20 failed for eph
R8m	Blank 8000 series missing	Eln	Tolu Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (8000 Series)	Hb	Analysis Before Collection Date	Fvc	Eval Mix missing dil or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMst (col1 and or col2) 8000 series
C26	Calibration Column 2 Out (8000 Series)	t16 t26	Initial cal 8000 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMst (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	t18 t28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	8000 series sample/blank did not have passing cal	is	Initial Cal Not Checked	Rn	Can't Calculate Diff
C8f	8000 series sample/blank did not have passing cal	lv	Prob with cal file for init calibration check rfs	S6	8000 series surrogate out
Cma	Endrin Cal missing for sample (8000 series)	lw	Initial cal warning. ini cal file <= method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/aval	lx	Initial Cal Files Not Updated Properly for a sample	Sa6.Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS-5 Year 2018
8101509 0692
Analyst: AH/JB

1-1-5M105923

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105923	CAL DFTPP	Ed1=1.3;	OK, V-290101	JB 10/23/18		Aqueous	1	1		10/23 08:15
5M105924	CAL BNA@50PPM		OK, V-289384	JB 10/23/18		Aqueous	1	1	625\827	10/23 08:44
5M105925	WMB71497(MS)	Sa6Sa8M18	OK WMB71497	JB 10/23/18		Aqueous	1	1	625\827	10/23 09:35
5M105926	WMB71497	Sa6Sa8	RR	JB 10/23/18		Aqueous	1	1	625\827	10/23 09:58
5M105927	AD07161-001	Sa6Sb6Sa8Sb8	RE-EXTRACT WMB71497	JB 10/23/18	BNA-8270	Aqueous	1	1	625\827	10/23 10:21
5M105928	AD07161-001(MS)		OK WMB71497	JB 10/23/18	BNA-8270	Aqueous	1	1	625\827	10/23 10:45
5M105929	AD07161-001(MSD)	Sb6Sb8R16R18	OK WMB71497	JB 10/23/18	BNA-8270	Aqueous	1	1	625\827	10/23 11:08
5M105930	AD07150-001		OK	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/23 11:32
5M105931	AD07150-002		OK	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/23 11:55
5M105932	AD07150-003		OK	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/23 12:19
5M105933	AD07149-008		OK	JB 10/23/18	BNPAH-8270	Aqueous	1	1	8270D	10/23 12:42
5M105934	WMB71497		OK	JB 10/23/18		Aqueous	1	1	625\827	10/23 13:29
5M105935	AD07142-003	Sb8	RE-EXTRACT	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/23 13:53
5M105936	AD07142-004	Sb8	RE-EXTRACT	JB 10/23/18	BN-8270	Aqueous	1	1	8270D	10/23 14:17
5M105937	AD07249-006(T)		OK WMB71506	JB 10/23/18	BNPAH-8270	Aqueous	1	1	625\827	10/23 14:40
5M105938	AD07249-009(T)	Sb8	RE-EXTRACT	JB 10/23/18	BNPAH-8270	Aqueous	1	1	8270D	10/23 15:03
5M105939	AD07249-010(T)	Sb8	RE-EXTRACT	JB 10/23/18, JB 10/24/18	BNPAH-8270	Aqueous	1	1	8270D	10/23 15:27
5M105940	AD07142-005	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/23 15:50
5M105941	AD07142-006	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/23 16:14
5M105942	AD07142-007	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/23 16:37
5M105943	AD07142-008	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/23 17:00

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Exm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ein	Tdn/Solvent Extraction Date Missing/Not check'd	Cn	C30/C20 failed for enh
B8m	Blank 8000 series missing	Ein	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing dlt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have nassinn cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have nassinn cal	Iv	Pmb with calret csv for init calibration check rts	S6	600 series surrogate out
Cme	Endlin Cal mission for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iy	Initial Cal Files Not Labeled Property for a sample	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS Year: 2018
8101509 0693
Analyst: AH/JB

1-1-7M95314

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M95314.D	CAL DFTPP	Ee1=1.7;Ed1=0.78;	OK, V-290101	JB 10/24/18		Aqueous	1	1		10/24 08:10
7M95315.D	CAL BNA@50PPM		OK, V-289384	JB 10/24/18		Aqueous	1	1	625\827	10/24 08:33
7M95316.D	AD07142-009	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 09:09
7M95317.D	AD07161-003	Sa8Sb8	RE-EXTRACT	JB 10/24/18	BNA-8270	Aqueous	1	1	8270D	10/24 09:32
7M95318.D	AD07161-005	Sa8Sb8	RE-EXTRACT	JB 10/24/18	BNA-8270	Aqueous	1	1	8270D	10/24 09:55
7M95319.D	AD07161-007	Sa8Sb8	RE-EXTRACT	JB 10/24/18	BNA-8270	Aqueous	1	1	8270D	10/24 10:18
7M95320.D	AD07161-008	Sb8Sa8	RE-EXTRACT	JB 10/24/18	BNA-8270	Aqueous	1	1	8270D	10/24 10:41
7M95321.D	AD07165-002	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 11:04
7M95322.D	AD07165-003	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 11:27
7M95323.D	AD07165-004		OK	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 11:50
7M95324.D	AD07165-005	Sb8	OK	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 12:13
7M95325.D	AD07165-006	Sb8	OK	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 12:36
7M95326.D	AD07165-007	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 12:59
7M95327.D	AD07165-008	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 13:22
7M95328.D	SMB71506		OK	JB 10/24/18		Aqueous	1	1	625\827	10/24 13:45
7M95329.D	AD07165-009	Sb8Ao	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 14:08
7M95330.D	07165-015	AoRo	NOT USED	JB 10/24/18		Aqueous	1	1	625\827	10/24 14:31
7M95331.D	AD07165-010	Sb8	RE-EXTRACT	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 14:54
7M95332.D	AD07263-001		OK	JB 10/24/18	BNPAH-8270	Soil	1	1	8270D	10/24 15:17
7M95333.D	AD07165-011	Sb8	OK	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 15:40
7M95334.D	AD07165-012	Ao	RR	JB 10/24/18	BN-8270	Aqueous	1	1	8270D	10/24 16:03
7M95335.D	AD07165-013	Sb8	OK	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/24 16:26
7M95336.D	AD07165-014	Sb8	OK	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/24 16:49
7M95337.D	AD07165-015	Sb8	RE-EXTRACT	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/24 17:12
7M95338.D	AD07165-012	Ao	AREA CONFIRMED	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/24 17:35

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	EsM	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ein	Tolu/Solvent Extraction Date Missing/Not checked	Cn	C30/C20 failed for ash
B8m	Blank 8000 series missing	Ev	Tolu Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evnc	Eval Mix missing det or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MSMSd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MSMSd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Dfnt
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration check rts	S5	600 series surrogate out
Cme	Endion Cal missing for sample (8000 series)	Iw	Initial cal warning. In cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and/or BN Surrogate Out (600 series)



RUN LOG

Instrument: 8101509-0694
Date: 10/25/2018
Analyst: AH/JB

1-1-5M105966

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105966	CAL DFTPP	Ee1=11;Ed1=2.7;	OK, V-290101	JB 10/25/18		Aqueous	1	1		10/25 08:50
5M105967	CAL BNA@50PPM		OK, V-289384	JB 10/25/18		Aqueous	1	1	625\827	10/25 09:19
5M105968	WMB71518(MS)	M18	OK WMB71518	JB 10/25/18		Aqueous	1	1	625\827	10/25 10:04
5M105969	WMB71518		OK	JB 10/25/18		Aqueous	1	1	625\827	10/25 10:28
5M105970	AD07188-009		OK	JB 10/25/18	BNA-8270	Aqueous	1	1	8270D	10/25 10:59
5M105971	AD07185-008		OK	JB 10/25/18	BNA-8270	Aqueous	1	1	8270D	10/25 11:22
5M105972	AD07252-002(T)		OK WMB71518	JB 10/25/18	BNATCLP-82	Aqueous	1	1	625\827	10/25 11:45
5M105973	EF-1 V-289820(10/2		OK	JB 10/25/18		Aqueous	1	10	8270D	10/25 12:08
5M105974	AD07252-002(T)(M		OK WMB71518	JB 10/25/18	BNATCLP-82	Aqueous	1	1	625\827	10/25 12:32
5M105975	AD07252-002(T)(M		OK WMB71518	JB 10/25/18	BNATCLP-82	Aqueous	1	1	625\827	10/25 12:55
5M105976	AD07161-001(R)		OK	JB 10/25/18	BNA-8270	Aqueous	1	1	625\827	10/25 13:19
5M105977	AD07142-003(R)		OK	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/25 13:42
5M105978	AD07142-004(R)		OK	JB 10/25/18	BN-8270	Aqueous	1	1	8270D	10/25 14:05
5M105979	AD07294-001		OK WMB71532	JB 10/25/18	BN15-8270	Aqueous	1	1	625\827	10/25 14:29
5M105980	WMB71532		OK	JB 10/25/18		Aqueous	1	1	625\827	10/25 14:53
5M105981	AD07204-001	Sa6Sb6	RE-EXTRACT	JB 10/26/18	BNA-625.1	Aqueous	1	1	625	10/25 15:16
5M105982	AD07205-001	Sb8Sa8	RE-EXTRACT	JB 10/26/18	BNA-8270	Aqueous	1	1	8270D	10/25 15:39
5M105983	AD07180-001	Eo	OK	JB 10/26/18	BN15-8270	Aqueous	1	1	8270D	10/25 16:03
5M105984	AD07180-002	Eo	OK	JB 10/26/18	BN15-8270	Aqueous	1	1	8270D	10/25 16:26
5M105985	AD07186-009	Eo	OK	JB 10/26/18	BNPAH-8270	Aqueous	1	1	8270D	10/25 16:50
5M105986	AD07207-009		OK	JB 10/26/18	BNA25-8270	Aqueous	1	1	8270D	10/25 17:13
5M105987	AD07212-001		OK, DOUBLE SURR	JB 10/26/18	BN-8270	Aqueous	0.5	1	8270D	10/25 17:37

Ans	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Em	Solvent Extraction Date Missing/Not checked	CRN	Warning C30/C20 not checked
B6m	Blank 600 series missing	Ein	Td/Solvent Extraction Date Missing/Not checked	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Eln	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing dft or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MSMet (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MSMet (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	lx	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	lv	Prob with calnot.csv for init calibration check rfs	S6	600 series summate out
Cme	Ending Cal missing for sample (8000 series)	lw	Initial cal warning. ini cal file <> method	S8	8000 series summate out
Co	Calibration Not Checked for sample/blank/eval	lx	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and or BN Summate Out (600 series)



RUN LOG

Instrument: 8101509 0695
Date: 10/26/2018
Analyst: AH/JB

1-1-5M105988

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M105988	CAL DFTPP	Ee1=19;Ed1=1.1;	OK, V-290101	JB 10/26/18		Aqueous	1	1		10/26 08:09
5M105989	CAL BNA@50PPM		OK, V-289384	JB 10/26/18		Aqueous	1	1	625\827	10/26 08:35
5M105990	WMB71532(MS)	M16M18	OK WMB71532	JB 10/26/18		Aqueous	1	1	625\827	10/26 09:22
5M105991	AD07212-003		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 09:45
5M105992	AD07212-005		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 10:08
5M105993	AD07212-004		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 10:32
5M105994	AD07142-005(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 10:55
5M105995	AD07142-006(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 11:18
5M105996	AD07142-007(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 11:41
5M105997	AD07142-008(R)	Sb8	SURR CONFIRMED	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 12:05
5M105998	AD07142-009(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 12:28
5M105999	AD07294-001(MS)	Sb6Sb8	OK WMB71532	JB 10/29/18	BN15-8270	Aqueous	1	1	625\827	10/26 12:51
5M106000	AD07294-001(MSD)	Sb6Sb8	OK WMB71532	JB 10/29/18	BN15-8270	Aqueous	1	1	625\827	10/26 13:14
5M106001	WMB71537(MS)		OK FOR 8270 METHOD WMB71537	JB 10/26/18		Aqueous	1	1	625\827	10/26 13:37
5M106002	AD07212-006		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 14:00
5M106003	AD07204-001(R)	Sa6Sb6	SURR CONFIRMED	JB 10/26/18	BNA-625.1	Aqueous	1	1	625	10/26 14:24
5M106004	AD07205-001(R)	Sb8Sa8	SURR CONFIRMED	JB 10/26/18	BNA-8270	Aqueous	1	1	8270D	10/26 14:47
5M106005	WMB71537		OK	JB 10/29/18		Aqueous	1	1	625\827	10/26 15:10
5M106006	EF- SPLP V-289965		OK	JB 10/29/18		Aqueous	1	10	8270D	10/26 15:36
5M106007	AD07031-001(T)	Eo	OK WMB71537	JB 10/29/18	BN-SPLP-827	Aqueous	1	1	625\827	10/26 15:59
5M106008	AD07031-001(T)(M)	Sb6Sb8Eo	OK WMB71537	JB 10/29/18	BN-SPLP-827	Aqueous	1	1	625\827	10/26 16:22
5M106009	AD07031-001(T)(M)	Sb6Sb8Eo	OK WMB71537	JB 10/29/18	BN-SPLP-827	Aqueous	1	1	625\827	10/26 16:46
5M106010	AD07212-002		OK	JB 10/29/18	BN-8270	Aqueous	1	1	8270D	10/26 17:10
5M106011	AD07233-001		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 17:33
5M106012	AD07233-002		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 17:56
5M106013	AD07233-003		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 18:19
5M106014	AD07233-004		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 18:42

Anc	Area Not Checked	En	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Em	Solvent Extraction Date Missing/Not check'd	CRN	Warning C30/C20 not checked
B6m	Blank 600 series missing	Elm	Tcin/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for ash
B8m	Blank 8000 series missing	Elo	Tcin Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	H16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	H18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rin	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration check rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning: Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sample	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)



RUN LOG

Instrument: GCMS-7 Year: 2018
Analyst: AH/JB

1-1-7M95341

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M95341.D	CAL DFTPP	Ee1=1.6;Ed1=0.67;	OK, V-290101	JB 10/26/18		Aqueous	1	1		10/26 08:11
7M95342.D	CAL BNA@50PPM		OK, V-289384	JB 10/26/18		Aqueous	1	1	625\827	10/26 08:36
7M95343.D	SMB71534(MS)		OK SMB71534	JB 10/26/18		Soil	1	1	8270D	10/26 09:26
7M95344.D	SMB71534		OK	JB 10/26/18		Soil	1	1	8270D	10/26 09:48
7M95345.D	WMB71532		OK	JB 10/26/18		Aqueous	1	1	625\827	10/26 10:11
7M95346.D	AD07165-002(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 10:35
7M95347.D	AD07165-003(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 10:58
7M95348.D	AD07165-007(R)	Sb8	SURR CONFIRMED	JB 10/26/18,JB 10/29/18,JB 10/29/18	BN-8270	Aqueous	1	1	8270D	10/26 11:20
7M95349.D	AD07165-008(R)	Sb8	SURR CONFIRMED	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 11:43
7M95350.D	AD07165-009(R)	Sb8	OK, SURR CONFIRMED	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 12:06
7M95351.D	AD07165-010(R)	Sb8	OK, SURR CONFIRMED	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 12:30
7M95352.D	AD07165-015(R)		OK	JB 10/26/18	BN-8270	Aqueous	1	1	8270D	10/26 12:53
7M95353.D	AD07161-003(R)	Sa8	OK, SURR CONFIRMED	JB 10/29/18	BNA-8270	Aqueous	1	1	8270D	10/26 13:16
7M95354.D	AD07161-005(R)	Sa8	OK	JB 10/29/18	BNA-8270	Aqueous	1	1	8270D	10/26 13:38
7M95355.D	AD07161-007(R)		OK	JB 10/29/18	BNA-8270	Aqueous	1	1	8270D	10/26 14:01
7M95356.D	AD07161-008(R)	Sa8	OK, SURR CONFIRMED	JB 10/29/18	BNA-8270	Aqueous	1	1	8270D	10/26 14:25
7M95357.D	WMB71537		OK	JB 10/29/18		Aqueous	1	1	625\827	10/26 14:48
7M95358.D	AD07233-005		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 15:45
7M95359.D	AD07233-006		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 16:08
7M95360.D	AD07233-007		OK	JB 10/29/18	BN15-8270	Aqueous	1	1	8270D	10/26 16:31

Anc	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 ... not checked
R6m	Blank 800 series missing	Ein	Tdn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
R8m	Blank 8000 series missing	Ein	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing dft or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MSMSd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MSMSd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have missing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have missing cal	Iv	Pmb with calmt.csv for init calibration check rfs	S6	600 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iv	Initial Cal Files Not Updated Properly for a sample	Sa6,Sb6	Acid and or BN Surrogate Out (600 series)

Wet Chemistry Data

**Wet Chemistry Data
Sample Data**

VERITECH Wet Chem Form1 Analysis Summary
% Solids**TestGroupName: % Solids SM2540G****Project #: 8101509****TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD07161-002	SD-1-102018	Sediment/Encore	1	36	Percent			10/18/18	10/17/18	10/17/18
AD07161-004	SD-2-102018	Sediment/Encore	1	16	Percent			10/18/18	10/17/18	10/17/18
AD07161-006	SD-3-102018	Sediment/Encore	1	55	Percent			10/18/18	10/17/18	10/17/18
AD07161-009	SD-4-102018	Sediment/Encore	1	30	Percent			10/18/18	10/17/18	10/17/18

Wet Chemistry Data
QC Data

% Solids Report

Analysis Type: SOLIDS-SS

BatchID: SOLIDS-SS-8519

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analized By	QC RPD	Rpd Limit
DUP	AD07149-017	87	87.45098	Percent	1.34	8.99	8.03	10/18/18	jessica	1.2	5
Sample	AD07145-001	85	84.89362	Percent	1.37	10.77	9.35	10/18/18	jessica		
Sample	AD07149-017	86	86.42937	Percent	1.34	10.33	9.11	10/18/18	jessica		
Sample	AD07149-018	86	85.96908	Percent	1.35	9.76	8.58	10/18/18	jessica		
Sample	AD07149-019	89	89.36709	Percent	1.33	9.23	8.39	10/18/18	jessica		
Sample	AD07149-020	87	86.73469	Percent	1.35	9.19	8.15	10/18/18	jessica		
Sample	AD07149-021	87	86.98413	Percent	1.34	7.64	6.82	10/18/18	jessica		
Sample	AD07149-022	90	90.20979	Percent	1.37	11.38	10.41	10/18/18	jessica		
Sample	AD07149-023	79	79.06977	Percent	1.34	9.08	7.46	10/18/18	jessica		
Sample	AD07149-024	79	79.33579	Percent	1.37	6.79	5.67	10/18/18	jessica		
Sample	AD07149-025	88	87.81870	Percent	1.35	8.41	7.55	10/18/18	jessica		
Sample	AD07149-026	82	81.87050	Percent	1.37	8.32	7.06	10/18/18	jessica		
Sample	AD07149-027	87	86.78899	Percent	1.34	6.79	6.07	10/18/18	jessica		
Sample	AD07149-028	83	82.82078	Percent	1.36	10.79	9.17	10/18/18	jessica		
Sample	AD07149-029	91	90.83255	Percent	1.36	12.05	11.07	10/18/18	jessica		
Sample	AD07149-030	90	90.26889	Percent	1.37	9.18	8.42	10/18/18	jessica		
Sample	AD07149-031	91	91.29321	Percent	1.34	9.15	8.47	10/18/18	jessica		
Sample	AD07161-002	36	35.98410	Percent	1.35	6.38	3.16	10/18/18	jessica		
Sample	AD07161-004	16	15.75408	Percent	1.36	11.77	3.00	10/18/18	jessica		
Sample	AD07161-006	55	55.13414	Percent	1.36	12.17	7.33	10/18/18	jessica		
Sample	AD07161-009	30	29.76378	Percent	1.36	7.71	3.25	10/18/18	jessica		

* - Indicates Failed Rpd Criteria



Hampton-Clarke

Analytical & Field Services

Last Page of Report

Project: Harrison Sub Residency

Client PO: 128525

Report To: TRC Engineering
1430 Broadway
10th Floor
New York, NY 10018

Attn: James Robinson

Received Date: 10/17/2018

Report Date: 11/26/2018

Deliverables: NYDOH-CatA

Lab ID: AD07118 AD07137 AD07161 AD07325

Lab Project No: 8101509

REVISED
12/19/2018

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAP Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.


Robin Cousineau - Quality Assurance Director

OR

Jean Revolus - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)





THIS CATEGORY "A" REPORT
IS NUMBERED FROM
1 to 274

HC Case Narrative

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project: 8101509

Hampton-Clarke (HC) received the following samples on 10/15/18, 10/16/18, 10/17/18, 10/18/18 & 10/23/18:

<u>Client ID</u>	<u>HC Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
LMW-2-102018 U	AD07118-001	Aqueous	Volatiles (624.1), BNA Semi-Volatile (625.1)*, Chloride (300.0 rev2.1), Cyanide (335.4)
LMW-2-102018 F	AD07118-002	Aqueous	TAL Metals (200.7/200.8 and 245.1) Volatiles (624.1), BNA Semi-Volatile (625.1)*, Alkalinity-Total/Alkalinity-Bicarbonate/Alkalinity-Carbonate/p-Alkalinity (SM2320B-11), Chloride/Nitrate/Nitrite/Sulfate (300.0 rev2.1), Cyanide (335.4)
PC-1-10 2018 U	AD07118-003	Aqueous	TAL Metals (200.7/200.8 and 245.1)
PC-1-10 2018 F	AD07118-004	Aqueous	Volatiles (624.1), BNA Semi-Volatile (625.1)*, Chloride (300.0 rev2.1), Cyanide (335.4)
GW-DUP1-102018 U	AD07118-005	Aqueous	TAL Metals (200.7/200.8 and 245.1)
GW-DUP1-102018 F	AD07118-006	Aqueous	Volatile BTEX + MTBE (624.1), BNA Semi-Volatile (625.1)*, Alkalinity-Total/Alkalinity-Bicarbonate/Alkalinity-Carbonate/p-Alkalinity (SM2320B-11), Nitrate/Nitrite/Sulfate (300.0 rev2.1)
MW-11-102018 U	AD07118-007	Aqueous	Metals Pair (200.7)
MW-11-102018 F	AD07118-008	Aqueous	Volatiles (624.1)
TB-1	AD07118-009	Aqueous	Volatiles (624.1), BNA Semi-Volatile (625.1)*, Chloride (300.0 rev2.1), Cyanide (335.4)
LMW-4-102018 U	AD07137-001	Aqueous	TAL Metals (200.7/200.8 and 245.1)
LMW-4-102018 F	AD07137-002	Aqueous	Volatiles (624.1), BNA Semi-Volatile (625.1)*, Chloride (300.0 rev2.1), Cyanide (335.4)
PC-2-102018 U	AD07137-003	Aqueous	TAL Metals (200.7/200.8 and 245.1)
PC-2-102018 F	AD07137-004	Aqueous	Volatiles (624.1), BNA Semi-Volatile (625.1)*, Chloride (300.0 rev2.1), Cyanide (335.4)
PC-3-102018 U	AD07137-005	Aqueous	TAL Metals (200.7/200.8 and 245.1)
PC-3-102018 F	AD07137-006	Aqueous	Volatiles (624.1)
TB-2	AD07137-007	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Hardness (200.7), Chloride (9056A), Cyanide (9012B)
SW-1-102018	AD07161-001	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Chloride (9056A), Cyanide (9012B)
SD-1-102018	AD07161-002	Sediment/Encore	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Hardness (200.7), Chloride (9056A), Cyanide (9012B)
SW-2-102018	AD07161-003	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Chloride (9056A), Cyanide (9012B)
SD-2-102018	AD07161-004	Sediment/Encore	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Hardness (200.7), Chloride (9056A), Cyanide (9012B)
SW-3-102018	AD07161-005	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Chloride (9056A), Cyanide (9012B)
SD-3-102018	AD07161-006	Sediment/Encore	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Hardness (200.7), Chloride (9056A), Cyanide (9012B)
SW-DUP1-102018	AD07161-007	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Hardness (200.7), Chloride (9056A), Cyanide (9012B)
SW-4-102018	AD07161-008	Aqueous	Volatiles (624.1), BNA Semi-Volatile (8270D)*, TAL Metals (6010D/6020B/7470A), Chloride (9056A), Cyanide (9012B)
SD-4-102018	AD07161-009	Sediment/Encore	Volatiles (624.1)
TB-3	AD07161-010	Aqueous	Sulfide-Total (SM4500-S2F11)
PC-1-102018	AD07325-001	Aqueous	Sulfide-Total (SM4500-S2F11)
MW-11-102018	AD07325-002	Aqueous	Sulfide-Total (SM4500-S2F11)
GW-DUP1-102018	AD07325-003	Aqueous	Sulfide-Total (SM4500-S2F11)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

*Full Data deliverables were required for the BNA Semi-volatile parameters, the rest of the parameters are packaged under the Cat A deliverables, which are amended to the end of this report

Volatile Organic Analysis:

Sample AD07161-002, 004, 006 and 009 were analyzed 1 day past the analysis holding time.

The Method Blank Spike for batch 73519 (sample AD07118-009) had a few compounds (Cyclohexane, Toluene, Ethylbenzene, 1,2,4-Trimethylbenzene, and p-Diethyl benzene) with recoveries above QC limits. Since the compounds recovered high, and these compounds were not detected in the sample, no further action was performed. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73432 (samples AD07118-001, 003 and 005) had a compound (Bromoform) with a recovery below QC limits. Since the compound recovered within range for the MS and MSD and was not detected in the samples, no further action was required. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73436 (samples AD07137-001 and 003) had two compounds (1,2-Dichloroethane and Benzene) with recoveries above QC limits. Since the compound recovered within range for the MS and MSD and was not detected in the samples, no further action was required. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73438 (sample AD07118-007) had a compound (Bromoform) with a recovery below QC limits. Bromoform is not a compound of interest for the sample, therefore no further action was required. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73438 (samples AD07137-005 and 007) had a compound (Bromoform) with a recovery below QC limits. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73460 (sample AD07161-010) had a compound (Dichlorofluoromethane) with a recovery above QC limits. Since the compound recovered within range for the MS and MSD and was not detected in the samples, no further action was required. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for soil batch 73545 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The Method Blank Spike for batch 73499 (samples AD07161-001, 003, 005, 007, 008, 007MS and 007MSD) had two compounds (1,3-Dichloropropane and Tetrachloroethene) with recoveries above QC limits. Since the compound recovered within range for the MS and MSD and was not detected in the samples, no further action was required. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 73438, 73499 and 73545 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

2-Chloroethylvinylether did not recover in the Matrix Spike and Matrix Spike Duplicate in batches 73432, 73436 and 73499 due to preservation of sample. 2-Chloroethylvinylether readily decomposes under acidic conditions. The recovery of 2-Chloroethylvinylether is within QC limits in the Laboratory Control Sample. Please refer to the applicable Form 3 for the recoveries.

QC sample MBS73545 had one surrogate recovery outside QC limits. Since the blank and samples met acceptance criteria, no further action was performed.. Please refer to the applicable Form 2 for the recoveries.

Sample AD07161-010 was originally analyzed under method 8260C. Upon report assembly, the sample was switched to method 624.1 to match the other samples in the sample delivery group. Since the sample was originally logged in for Method 8260C, it was evaluated for this method during analysis, however when the check standard was evaluated against 624.1 criteria,

it failed to recover within acceptance QC limits for Chloromethane and Dichlorofluoromethane. Please refer to the Form 7 for the recoveries.

Base Neutral/Acid Extractable Analysis:

See Full Deliverable section in the beginning of the report for Base Neutral/Acid Extractable data.

Metals Analysis:

Sample AD07161-002 and 004 were reported at a dilution for Manganese due to concentrations above the linear range.

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batches 72824, 72842, 72844 and 72845 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 72844. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 72824, 72845 and 72844. Please refer to the applicable Form 6/9 for the recoveries.

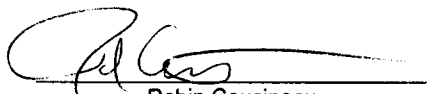
The serial dilution for batch 72844 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

Samples AD07118-003, 005, AD07137-005, AD07161-005 and 007 were analyzed at a dilution for Chloride due to high concentration.

The Matrix Spike and/or Matrix Spike Duplicate for Sulfate, batch W-2251, had recoveries outside QC limits. Please refer to the QC section for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.


Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

11/21/2018

Date

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gailther Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY
RECORD

Project # (Lab Use Only)

Page of

3) Reporting Requirements (Please Circle)

Customer Information		Project Information	
11a) Customer: <u>TC Enterprises</u>	10th Fl	2a) Project: <u>Harrison Sub-Residency</u>	Turnaround
Address: <u>New York, NY 10018</u>		2b) Project Mgr: <u>James Robinson</u>	When Available:
11b) Email/Call/Fax/Ph: <u>aprilwells@resolutions.com</u>		2c) Project Location (City/State): <u>Harrison, NJ</u>	1 Business Day (100%)*
11c) Send Invoice to: <u>James Robinson</u>		2d) Quote/PO # (If Applicable): <u>128525</u>	2 Business Days (75%)*
11d) Send Report to: <u>James Robinson</u>			3 Business Days (50%)*
			4 Business Days (35%)*
			5 Business Days (25%)*
			6 Business Days (Standard)
			Other: _____
		Report Type	Electronic Data Deliv.
		Summary	NJ HazSite
		Results + OC (Waste)	Excess Reg. NJ / NY / PA
		Reduced:	EnviroData
		X [] NJ [] NY	ECUIS:
		[] PA [] Other	[] 4-File [] EZ
		NJ Full (NY ASP Caib)	X [] NYDEC
		NJ ASP Caib	[] Region 2 or 5
		Other: _____	

FOR LAB USE ONLY		====> Check If Contingent =====				7) Analysis (specify methods & parameter lists)										===== Check If Contingent =====								
Batch #	Matrix Codes DW - Drinking Water GW - Ground Water WW - Waste Water OT - Other (please specify under item 9, Comments)	Sample Type	Composite (C)	Grab (G)	VOCs	SVOCs w/ low RL for 1,4-Dioxane	Chloride	TAL Metals (Dissolved)	Cyanide	Nitrate/Nitrite	VO BTEX & MTBE	Sulfate	Alkalinity & Bicarb Alkalinity	Fe & Mn (Dissolved)	Mn	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: Zn Ac	9) Comments
Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date Time																					
001/002	LMW-2-102018	GW	10/15/18		X	X	X	X	X	X							3		1	3	1	1		Low level BNA b
003/004	PC-1-102018				X	X	X	X	X	X							8		1	3	1	1		advises 0.05ppm
005/006	GW-DWR-102018				X	X	X	X	X	X							2		3	1	1	1		EL for 1,4-Diox
007/008	MW-11-102018				X	X											8		3	1	1	1		
	Advises/Advises																							

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY
RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NEIACNJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only)

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround

When Available:

1 Business Day (100%)*

2 Business Days (75%)*

3 Business Days (50%)*

4 Business Days (35%)*

5 Business Days (25%)*

8 Business Days (Standard)

Other:

Report Type

Summary

Results + QC (Waste)

Reduced:

1) NJ 2) NY

1) PA 1) Other

NY Full (NY ASP Cat)

NY ASP Cat

Other:

Electronic Data Deliv.

NJ HazSite

Excel Reg. NJ (NTPA)

EnviroData

EQUIS:

1) 4-File 1) EZ

1) NYDEC

1) Region 2 or 5

Other:

Customer Information

1a) Customer: TRC Engineers

Address: 1430 Broadway 10th Fl

New York, NY 10018

1b) Email/Call/Fax/Ph: James@trcengineers.com

1c) Send Invoice to: AT Invoice Approval @ the solution, do-

1d) Send Report to: "

Project Information

2a) Project: Hampton SWS - Broadway

2b) Project Mgr: James Harrison

2c) Project Location (City/State): Hampton, NY

2d) Quote/PO # (If Applicable): 108535

FOR LAB USE ONLY

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge SW - Surface
WW - Waste Water OL - Oil SP - Seepage
OT - Other (please specify under item 8, Comments)

Batch # AD07161

4) Customer Sample ID

5) Matrix

6) Sample Date Time

Composite (C)

Grab (G)

Sample Type

7) Analysis (specify methods & parameter lists)

8) # of Bottles

9) Comments

10) Relinquished by:

Accepted by:

Date Time

11) Sampler (print name): James Robinson

Date: 10/17/18

Additional Notes: Please batch all Harrison samples received from

10/15/18 thru 10/18/18 on same lab report. LBS for batch

samples to be included w/ tomorrow's pickup along with other batch

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):

BN or BNA (8270D SIM)

VOC (8260C SIM or 8011)

SPLP (BN, BNA, Metals)

1,4 Dioxane

Check if applicable:

Project-Specific Reporting Limits

High Contaminant Concentrations

NJ LSRP Project (also check boxes above/right)

Comments, Notes, Special Requirements, HAZARDS

For NJ LSRP projects, indicate which standards need to be met:

NJDEP GWQS

NJDEP SRS

NJDEP SPLP

Other (specify):

Cooler Temperature

3.4/2.6

Please note NUMBERED items. If not completed your analytical work may be delayed.

A fee of \$3/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [] or client [] FSP#

Customer Information
1a) Customer: TEC Engineers
Address: 1430 Broadway 10th Fl
New York, NY 10018
1b) Email/cell/Fax/PO: Jmohansar@tecsolutions.com
1c) Send Invoice to: APRINQUE APPROVED TESSOLUTIONS.COM
1d) Send Report to: " "

Project Information
2a) Project: Harrison Sub-Residency
2b) Project Mgr: Jones Robinson
2c) Project Location (City/State): Harrison, NY
2d) Quote/PO # (If Applicable): 138525

When Available:
1 Business Day (100%)*
2 Business Days (75%)*
3 Business Days (50%)*
4 Business Days (35%)*
5 Business Days (25%)*
8 Business Days (Stand)
Other: NY ASP CalA

Report Type
Summary
Results + QC (Waste)
Reduced:
[] NJ [] NY
[] PA [] Other
NJ Full / NY ASP CalA
NY ASP CalA

Electronic Data Deliv.
NJ HazSite
Excel Reg. NJ (NY) PA
EnviroData
ECUS:
[] 4-File [] EZ
[] NYDEC
[] Region 2 or 5
Other:

Turnaround
Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓		7) Analysis (specify methods & parameter lists)																		
Batch #	Matrix Codes DW - Drinking Water GW - Ground Water WW - Waste Water OT - Other (please specify under item 9, Comments)	Sample Type		Grab (G)																
Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample		Composite (C)											9) Comments				
			Date	Time																
-001	SW-1-102018	SW	10/17/18	1100	X	X														
-002	SD-1-102018	SD																		
-003	SW-2-102018	SW		1035																
-004	SD-2-102018	SD		1035																
-005	SW-3-102018	SW		1010																
-006	SD-3-102018	SD		1010																
-007	SW-NY1-102018	SW		1010																
-008	SW-4-102018	SW		0935																
-009	SD-4-102018	SD		0935																
-010	TS-3	TS	V	1000																

10) Relinquished by: Accepted by: Date: 10/18/18 Time: 14:00

11) Sampler (print name): Jones Robinson Date: 10/18/18

Additional Notes
Please watch auto style report with der tharrison
Sub-Residency samples received on 10/15-10/17/2018

Comments, Notes, Special Requirements, HAZARDS
Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
BN or BNA (8270D SIM) ☐ VOC (8260C SIM or 8011) ☐ SPLP (BN, BNA, Metals) ☐ 1,4 Dioxane ☐
Check if applicable:
Project-Specific Reporting Limits ☐
High Contaminant Concentrations ☐
NJ LSRP Project (also check boxes above/right) ☐
Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.
Internal use: sampling plan (check box) HC [] or client [] FSP#

Project-Specific Reporting Limits
Cooler Temperature 33

Page <u>802513</u> of <u>801509</u>	
3) Reporting Requirements (Please Circle)	
Turnaround	Report Type Electronic Data Deliv.

When Available:	Summary	N.J. Hazsle

1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. No NY JPA

2 Business Days (75%)*	Reduced:	EnviroData

3 Business Days (50%)*	[] NJ [] NY	EQUIS:

4 Business Days (35%)*	☐ PA ☐ Other _____	☐ 4-File ☐ EZ

5 Business Days (75%)	NJ ENH / NY ASP CatB
	~~NY DEC~~

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Special Reports

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1. General Information	
1.1. Demographics	
1.1.1. Age Group	
1.1.1.1. 18-24	
1.1.1.2. 25-34	
1.1.1.3. 35-44	
1.1.1.4. 45-54	
1.1.1.5. 55-64	
1.1.1.6. 65+	
1.1.2. Gender	
1.1.2.1. Male	
1.1.2.2. Female	
1.1.3. Ethnicity	
1.1.3.1. White	
1.1.3.2. Black	
1.1.3.3. Hispanic	
1.1.3.4. Asian	
1.1.3.5. Other	
1.1.4. Education Level	
1.1.4.1. High School	
1.1.4.2. College	
1.1.4.3. Postgraduate	
1.1.5. Income Level	
1.1.5.1. Low	
1.1.5.2. Medium	
1.1.5.3. High	
1.2. Interests	
1.2.1. Technology	
1.2.1.1. Smartphones	
1.2.1.2. Tablets	
1.2.1.3. Wearable Devices	
1.2.2. Health & Fitness	
1.2.2.1. Yoga	
1.2.2.2. Running	
1.2.2.3. Gym	
1.2.3. Travel	
1.2.3.1. Domestic	
1.2.3.2. International	
1.2.4. Food & Beverage	
1.2.4.1. Fast Food	
1.2.4.2. Restaurants	
1.2.4.3. Coffee Shops	
1.2.5. Shopping	
1.2.5.1. Online	
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1.2.6. Entertainment	
1.2.6.1. TV Shows	
1.2.6.2. Movies	
1.2.6.3. Video Games	
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1.2.8.2. Environment	
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1.2.9.2. Medieval	
1.2.10. Art	
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1.2.10.2. Classical	
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1.2.12. Sports	
1.2.12.1. Football	
1.2.12.2. Basketball	
1.2.12.3. Baseball	
1.2.12.4. Hockey	
1.2.13. Politics	
1.2.13.1. Conservative	
1.2.13.2. Liberal	
1.2.14. Environment	
1.2.14.1. Climate Change	
1.2.14.2. Renewable Energy	
1.2.15. Education	
1.2.15.1. Online Learning	
1.2.15.2. Traditional Education	
1.2.16. Health & Wellness	
1.2.16.1. Mental Health	
1.2.16.2. Physical Health	
1.2.17. Finance	
1.2.17.1. Investing	
1.2.17.2. Retirement	
1.2.18. Real Estate	
1.2.18.1. Home Buying	
1.2.18.2. Property Management	
1.2.19. Automotive	
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1.2.23.2. Movies	
1.2.23.3. Video Games	
1.2.23.4. Music	
1.2.24. Books	
1.2.24.1. Fiction	
1.2.24.2. Non-Fiction	
1.2.25. Science	
1.2.25.1. Space	
1.2.25.2. Environment	
1.2.26. History	
1.2.26.1. World War II	
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1.2.27.2. Classical	
1.2.28. Music	
1.2.28.1. Pop	
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Nothing I imite

Concentrations

Also check boxes above/

ED items. If not completed

back box) HCT 1 or cell

10

PROJECT MODIFICATIONS

Client: TRC-NYC

HC Project #: 8101509

Project: Harrison Sub Residency

maureen192.168.1.71
11/7/2018 2:47:27 PM

Per James Robinson all Harrison COC's from 10/15/18 through 10/23/18 should be batched together in one report. (AD07118, AD07137, AD07161 & AD07325)
MS 11/7/18

CONDITION UPON RECEIPT

Batch Number AD07118

Entered By: Ricardo

Date Entered 10/15/2018 4:36:00 PM

- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T0054 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.7
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify
The collection time on the bottle for LMW-2-102018 is 12:00.
- 14 NA Corrective actions (Specify item number and corrective action taken).

CONDITION UPON RECEIPT

Batch Number AD07137

Entered By: Frantz

Date Entered 10/16/2018 4:11:00 PM

-
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T0056 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.0
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify
Two TB's were received. COC has TB-1 and TB-2 listed but TB-1 is crossed out. Per James Robinson via email dated 10/17/18 the COC received on 10/15/18 should have TB-1 listed on it. One of the TB's received with this COC will be labeled AD07118-009 as TB-1. MS 10/17/18
- 14 NA Corrective actions (Specify item number and corrective action taken).

CONDITION UPON RECEIPT

Batch Number AD07161

Entered By: Frantz

Date Entered 10/17/2018 4:49:00 PM

-
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 No Are the COC seals intact?
- 4 T0056 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
3.4,2.6
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? If no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 No Do the contents match the COC? If no, specify
Two sets of samples received for SD-3-102018. One of the sets have a collection date/time of 10/17/18/ at 10:35.
SD-2-102018 was not received.
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 Yes Other comments ...Specify
Samples for voc received on 10/18/18 at 15:30 cooler temp=3.5
- 14 Yes Corrective actions (Specify item number and corrective action taken).
9-Per James Robinson via email dated 10/19/18 the set of samples labeled SD-3-102018 with the collection date/time of 10/17/18/ at 10:35 should be labeled SD-2-102018. MS 10/19/18

CONDITION UPON RECEIPT

Batch Number AD07325

Entered By: ricardo

Date Entered 10/25/2018 12:26:00 PM

-
1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or ice chest?
3	No	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 3.4
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AD07118

Entered By: Ricardo

Date Entered 10/15/2018 4:20:00 PM

Lab#	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07118-001	40ML	G	VO	HCL	189699	1	HC849161
AD07118-001	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-001	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-002	NA	NA	NA	NA	NA	NA	NA
AD07118-003	40ML	G	VO	HCL	189699	1	HC849161
AD07118-003	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-003	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-004	NA	NA	NA	NA	NA	NA	NA
AD07118-005	40ML	G	VO	HCL	189699	1	HC849161
AD07118-005	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-005	120ML	G	CN	NAOH	V272229	14	HC849161
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-006	NA	NA	NA	NA	NA	NA	NA
AD07118-007	40ML	G	VO	HCL	189699	1	HC849161
AD07118-007	1L	P	METALS	HNO3	192717	1	HC849161
AD07118-007	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA
AD07118-008	NA	NA	NA	NA	NA	NA	NA

PRESERVATION DOCUMENT

Batch Number AD07137

Entered By: Frantz

Date Entered 10/16/2018 4:11:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07137-001	40ml	G	VO	HCL	189699	1	HC849161
AD07137-001	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-002	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-003	40ml	G	VO	HCL	189699	1	HC849161
AD07137-003	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-004	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-005	40ml	G	VO	HCL	189699	1	HC849161
AD07137-005	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07137-006	1L	P	METALS	HNO3	192717	1	HC849161
AD07137-007	40ml	G	VO	HCL	189699	1	HC849161

PRESERVATION DOCUMENT

Batch Number AD07161

Entered By: Frantz

Date Entered 10/17/2018 4:51:00 PM

Lab#:	Container	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07161-001	40ML	g	VO	HCL	189699	1	HC849161
AD07161-001	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-002	NA	NA	NA	NA	NA	NA	NA
AD07161-003	40ml	G	VO	HCL	189699	1	HC849161
AD07161-003	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-004	NA	NA	NA	NA	NA	NA	NA
AD07161-005	40ml	G	VO	HCL	189699	1	HC849161
AD07161-005	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-006	NA	NA	NA	NA	NA	NA	NA
AD07161-007	40ml	G	VO	HCL	189699	1	HC849161
AD07161-008	40ml	G	VO	HCL	189699	1	HC849161
AD07161-008	120ml	G	CN	NaOH	V-272229	14	HC849161
AD07161-009	NA	NA	NA	NA	NA	NA	NA
AD07161-010	NA	NA	NA	NA	NA	NA	NA

PRESERVATION DOCUMENT

Batch Number AD07325

Entered By: ricardo

Date Entered 10/25/2018 12:30:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD07325-001	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161
AD07325-002	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161
AD07325-003	500ML	P	SULFIDE	NAOH/ZNAC	V272229\V277672	14	HC849161

Internal Chain of Custody

8101509 0018

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD07118-001	10/15/18 16:01	RICAR	0	M	Received	AD07118-007	10/16/18 08:34	R31	1	A	PH/CHECK
AD07118-001	10/15/18 16:15	RICAR	0	M	Login	AD07118-007	10/16/18 08:36	R31	2	A	NONE
AD07118-001	10/16/18 08:34	R31	1	A	PH/CHECK	AD07118-007	10/16/18 08:36	R31	3	A	NONE
AD07118-001	10/16/18 08:36	R31	2	A	NONE	AD07118-007	10/22/18 08:45	WP	3	A	VOA
AD07118-001	10/16/18 08:36	R31	3	A	NONE	AD07118-007	10/16/18 13:18	BCT	6	A	ALKALINITY
AD07118-001	10/22/18 08:45	WP	3	A	VOA	AD07118-007	10/15/18 16:48	R12	7	A	NONE
AD07118-001	10/15/18 16:48	R12	4	A	NONE	AD07118-007	10/15/18 16:48	R12	8	A	NONE
AD07118-001	10/22/18 10:37	JW	4	A	IC	AD07118-007	10/18/18 11:34	JN	8	A	BN/BNA
AD07118-001	10/22/18 17:14	R12	4	A	NONE	AD07118-007	10/15/18 16:48	R12	9	A	NONE
AD07118-001	10/15/18 16:48	R12	5	A	NONE	AD07118-007	10/15/18 16:59	JW	9	A	IC
AD07118-001	10/17/18 08:47	JMP	5	A	CN	AD07118-007	10/15/18 17:02	R12	9	A	NONE
AD07118-001	10/17/18 12:23	R12	5	A	NONE	AD07118-007	10/22/18 10:37	JW	9	A	IC
AD07118-001	10/15/18 16:48	R12	6	A	NONE	AD07118-007	10/22/18 17:14	R12	9	A	NONE
AD07118-001	10/18/18 11:34	JN	6	A	BN/BNA	AD07118-007	10/15/18 16:48	R12	10	A	NONE
AD07118-001	10/15/18 16:48	R12	7	A	NONE	AD07118-007	10/15/18 16:48	R12	11	A	NONE
AD07118-002	10/15/18 16:01	RICAR	0	M	Received	AD07118-008	10/15/18 16:01	RICAR	0	M	Received
AD07118-002	10/15/18 16:15	RICAR	0	M	Login	AD07118-008	10/15/18 16:15	RICAR	0	M	Login
AD07118-002	10/15/18 16:48	R12	1	A	NONE	AD07118-008	10/15/18 16:48	R12	1	A	NONE
AD07118-002	10/18/18 09:32	AM	1	M	TDWI/HG	AD07118-008	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-002	10/18/18 10:33	R12	1	A	NONE	AD07118-008	10/18/18 10:33	R12	1	A	NONE
AD07118-002	10/23/18 10:18	AM	1	A	tdwi	AD07118-008	10/23/18 10:18	AM	1	A	tdwi
AD07118-002	10/23/18 10:19	R12	1	A	NONE	AD07118-008	10/23/18 10:19	R12	1	A	NONE
AD07118-003	10/15/18 16:01	RICAR	0	M	Received	AD07118-009	10/15/18 16:01	RICAR	0	M	Received
AD07118-003	10/15/18 16:15	RICAR	0	M	Login	AD07118-009	10/22/18 15:33	RICAR	0	M	Login
AD07118-003	10/16/18 08:36	R31	1	A	NONE	AD07118-009	10/29/18 14:35	SG	1	A	VOA
AD07118-003	10/22/18 08:45	WP	1	A	VOA	AD07137-001	10/16/18 16:05	FRAN	0	M	Received
AD07118-003	10/16/18 08:36	R31	2	A	NONE	AD07137-001	10/16/18 16:11	FRAN	0	M	Login
AD07118-003	10/16/18 08:36	R31	3	A	NONE	AD07137-001	10/16/18 17:24	R12	1	A	NONE
AD07118-003	10/15/18 16:48	R12	4	A	NONE	AD07137-001	10/19/18 10:39	JN	1	A	BN/BNA
AD07118-003	10/22/18 10:37	JW	4	A	IC	AD07137-001	10/16/18 17:24	R12	2	A	NONE
AD07118-003	10/22/18 17:14	R12	4	A	NONE	AD07137-001	10/23/18 11:29	JN	2	A	BN/BNA
AD07118-003	10/15/18 16:48	R12	5	A	NONE	AD07137-001	10/16/18 17:24	R12	3	A	NONE
AD07118-003	10/15/18 16:59	JW	5	A	IC	AD07137-001	10/26/18 12:13	JW	3	A	IC
AD07118-003	10/15/18 17:02	R12	5	A	NONE	AD07137-001	10/26/18 17:18	R12	3	A	NONE
AD07118-003	10/15/18 16:48	R12	6	A	NONE	AD07137-001	10/16/18 17:24	R12	4	A	NONE
AD07118-003	10/22/18 08:35	JIR	6	A	BN	AD07137-001	10/17/18 08:47	JMP	4	A	CN
AD07118-003	10/15/18 16:48	R12	7	A	NONE	AD07137-001	10/17/18 12:23	R12	4	A	NONE
AD07118-003	10/18/18 11:34	JN	7	A	BN/BNA	AD07137-001	10/16/18 17:58	R31	5	A	NONE
AD07118-003	10/16/18 13:18	BCT	10	A	ALKALINITY	AD07137-001	10/16/18 17:58	R31	6	A	NONE
AD07118-003	10/15/18 16:48	R12	11	A	NONE	AD07137-001	10/22/18 08:45	WP	6	A	VOA
AD07118-003	10/17/18 08:47	JMP	11	A	CN	AD07137-001	10/16/18 17:58	R31	7	A	NONE
AD07118-003	10/17/18 12:23	R12	11	A	NONE	AD07137-002	10/16/18 16:05	FRAN	0	M	Received
AD07118-003	10/15/18 16:48	R12	12	A	NONE	AD07137-002	10/16/18 16:11	FRAN	0	M	Login
AD07118-003	10/15/18 16:48	R12	13	A	NONE	AD07137-002	10/16/18 17:24	R12	1	A	NONE
AD07118-004	10/15/18 16:01	RICAR	0	M	Received	AD07137-002	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-004	10/15/18 16:15	RICAR	0	M	Login	AD07137-002	10/18/18 10:33	R12	1	A	NONE
AD07118-004	10/15/18 16:48	R12	1	A	NONE	AD07137-002	10/23/18 10:18	AM	1	A	tdwi
AD07118-004	10/18/18 09:32	AM	1	M	TDWI/HG	AD07137-002	10/23/18 10:19	R12	1	A	NONE
AD07118-004	10/18/18 10:33	R12	1	A	NONE	AD07137-003	10/16/18 16:05	FRAN	0	M	Received
AD07118-004	10/23/18 10:18	AM	1	A	tdwi	AD07137-003	10/16/18 16:11	FRAN	0	M	Login
AD07118-004	10/23/18 10:19	R12	1	A	NONE	AD07137-003	10/16/18 17:58	R31	1	A	NONE
AD07118-005	10/15/18 16:01	RICAR	0	M	Received	AD07137-003	10/22/18 08:45	WP	1	A	VOA
AD07118-005	10/15/18 16:15	RICAR	0	M	Login	AD07137-003	10/16/18 17:58	R31	2	A	NONE
AD07118-005	10/16/18 08:36	R31	1	A	NONE	AD07137-003	10/16/18 17:58	R31	3	A	NONE
AD07118-005	10/22/18 08:45	WP	1	A	VOA	AD07137-003	10/16/18 17:24	R12	4	A	NONE
AD07118-005	10/16/18 08:36	R31	2	A	NONE	AD07137-003	10/16/18 17:24	R12	5	A	NONE
AD07118-005	10/16/18 08:34	R31	3	A	PH/CHECK	AD07137-003	10/19/18 10:39	JN	5	A	BN/BNA
AD07118-005	10/15/18 16:48	R12	4	A	NONE	AD07137-003	10/16/18 17:24	R12	6	A	NONE
AD07118-005	10/18/18 11:34	JN	4	A	BN/BNA	AD07137-003	10/26/18 12:13	JW	6	A	IC
AD07118-005	10/15/18 16:48	R12	5	A	NONE	AD07137-003	10/26/18 17:18	R12	6	A	NONE
AD07118-005	10/22/18 10:37	JW	5	A	IC	AD07137-003	10/17/18 08:47	JMP	7	A	CN
AD07118-005	10/22/18 10:38	JW	5	A	IC	AD07137-003	10/17/18 12:23	R12	7	A	NONE
AD07118-005	10/22/18 17:14	R12	5	A	NONE	AD07137-004	10/16/18 16:05	FRAN	0	M	Received
AD07118-005	10/15/18 16:48	R12	6	A	NONE	AD07137-004	10/16/18 16:11	FRAN	0	M	Login
AD07118-005	10/17/18 08:47	JMP	6	A	CN	AD07137-004	10/16/18 17:24	R12	1	A	NONE
AD07118-005	10/17/18 12:23	R12	6	A	NONE	AD07137-004	10/18/18 09:32	AM	1	M	TDWI/HG
AD07118-006	10/15/18 16:01	RICAR	0	M	Received	AD07137-004	10/18/18 10:33	R12	1	A	NONE
AD07118-006	10/15/18 16:15	RICAR	0	M	Login	AD07137-004	10/23/18 10:18	AM	1	A	tdwi
AD07118-006	10/15/18 16:48	R12	1	A	NONE	AD07137-004	10/23/18 10:19	R12	1	A	NONE
AD07118-006	10/18/18 09:32	AM	1	M	TDWI/HG	AD07137-005	10/16/18 16:05	FRAN	0	M	Received
AD07118-006	10/18/18 10:33	R12	1	A	NONE	AD07137-005	10/16/18 16:11	FRAN	0	M	Login
AD07118-006	10/23/18 10:18	AM	1	A	tdwi	AD07137-005	10/16/18 17:24	R12	1	A	NONE
AD07118-006	10/23/18 10:19	R12	1	A	NONE	AD07137-005	10/16/18 17:24	R12	2	A	NONE
AD07118-007	10/15/18 16:01	RICAR	0	M	Received	AD07137-005	10/19/18 10:39	JN	2	A	BN/BNA
AD07118-007	10/15/18 16:15	RICAR	0	M	Login	AD07137-005	10/16/18 17:24	R12	3	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

8101509 0019

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD07137-005	10/26/18 12:13	JW	3	A	IC	AD07161-003	10/19/18 09:10	AM	3	M	TDWI/HG
AD07137-005	10/26/18 17:18	R12	3	A	NONE	AD07161-003	10/19/18 10:46	R12	3	A	NONE
AD07137-005	10/16/18 17:24	R12	4	A	NONE	AD07161-003	10/26/18 17:18	R12	4	A	NONE
AD07137-005	10/17/18 08:47	JMP	4	A	CN	AD07161-003	10/17/18 17:18	R12	5	A	NONE
AD07137-005	10/17/18 12:23	R12	4	A	NONE	AD07161-003	10/26/18 13:48	JW	5	A	IC
AD07137-005	10/16/18 17:58	R31	5	A	NONE	AD07161-003	10/19/18 09:13	R31	6	A	NONE
AD07137-005	10/16/18 17:58	R31	6	A	NONE	AD07161-003	10/19/18 09:10	R31	7	A	PH/CHECK
AD07137-005	10/22/18 08:45	WP	6	A	VOA	AD07161-003	10/19/18 09:13	R31	8	A	NONE
AD07137-005	10/16/18 17:58	R31	7	A	NONE	AD07161-003	10/27/18 15:55	SG	8	A	VOA
AD07137-006	10/16/18 16:05	FRAN	0	M	Received	AD07161-004	10/17/18 16:15	FRAN	0	M	Received
AD07137-006	10/16/18 16:11	FRAN	0	M	Login	AD07161-004	10/17/18 16:42	FRAN	0	M	Login
AD07137-006	10/16/18 17:24	R12	1	A	NONE	AD07161-004	10/17/18 17:18	R12	1	A	NONE
AD07137-006	10/18/18 09:32	AM	1	M	TDWI/HG	AD07161-004	10/17/18 21:39	PA	1	A	mix
AD07137-006	10/18/18 10:33	R12	1	A	NONE	AD07161-004	10/17/18 21:39	R12	1	A	NONE
AD07137-006	10/23/18 10:18	AM	1	A	tdwi	AD07161-004	10/18/18 07:50	JMP	1	M	solids
AD07137-006	10/23/18 10:19	R12	1	A	NONE	AD07161-004	10/18/18 09:20	R12	1	A	NONE
AD07137-007	10/16/18 16:05	FRAN	0	M	Received	AD07161-004	10/18/18 10:17	BA	1	A	TDSI/HG
AD07137-007	10/16/18 16:11	FRAN	0	M	Login	AD07161-004	10/18/18 12:57	BA	1	A	R12
AD07137-007	10/16/18 17:58	R31	1	A	NONE	AD07161-004	10/18/18 14:51	JW	1	A	ic
AD07137-007	10/16/18 17:58	R31	2	A	NONE	AD07161-004	10/19/18 11:08	LV	1	A	BN/BNA
AD07137-007	10/22/18 08:45	WP	2	A	VOA	AD07161-004	10/19/18 11:08	R12	1	A	NONE
AD07137-007	10/23/18 10:53	WP	2	A	VOA	AD07161-004	10/22/18 08:49	JMP	1	A	cn
AD07137-007	10/16/18 17:58	R31	3	A	NONE	AD07161-004	10/23/18 10:17	AM	1	A	tdsi/hg
AD07161-001	10/17/18 16:15	FRAN	0	M	Received	AD07161-004	10/23/18 10:19	R12	1	A	NONE
AD07161-001	10/17/18 16:42	FRAN	0	M	Login	AD07161-004	10/18/18 16:11	F19	3	A	NONE
AD07161-001	10/17/18 17:18	R12	1	A	NONE	AD07161-004	10/30/18 16:48	SG	3	A	VOA
AD07161-001	10/22/18 12:14	JN	1	A	BN/BNA	AD07161-004	10/18/18 16:10	R21	4	A	NONE
AD07161-001	10/22/18 13:56	R12	1	A	NONE	AD07161-004	10/19/18 11:42	WP	4	A	VOA
AD07161-001	10/24/18 12:51	JN	1	A	BN/BNA	AD07161-004	10/19/18 12:47	R31	4	A	NONE
AD07161-001	10/17/18 17:18	R12	2	A	NONE	AD07161-004	10/18/18 16:11	F19	5	A	NONE
AD07161-001	10/22/18 12:14	JN	2	A	BN/BNA	AD07161-004	10/26/18 12:51	WP	5	A	VOA
AD07161-001	10/17/18 17:18	R12	3	A	NONE	AD07161-005	10/17/18 16:15	FRAN	0	M	Received
AD07161-001	10/18/18 09:32	AM	3	M	TDWI/HG	AD07161-005	10/17/18 16:42	FRAN	0	M	Login
AD07161-001	10/18/18 10:33	R12	3	A	NONE	AD07161-005	10/17/18 17:18	R12	1	A	NONE
AD07161-001	10/19/18 09:10	AM	3	M	TDWI/HG	AD07161-005	10/25/18 12:36	JN	1	A	BN/BNA
AD07161-001	10/19/18 10:46	R12	3	A	NONE	AD07161-005	10/17/18 17:18	R12	2	A	NONE
AD07161-001	10/17/18 17:18	R12	4	A	NONE	AD07161-005	10/22/18 12:14	JN	2	A	BN/BNA
AD07161-001	10/26/18 13:48	JW	4	A	IC	AD07161-005	10/17/18 17:18	R12	3	A	NONE
AD07161-001	10/26/18 17:18	R12	4	A	NONE	AD07161-005	10/26/18 13:48	JW	3	A	IC
AD07161-001	10/17/18 17:18	R12	5	A	NONE	AD07161-005	10/26/18 17:18	R12	3	A	NONE
AD07161-001	10/19/18 09:10	R31	6	A	PH/CHECK	AD07161-005	10/17/18 17:18	R12	4	A	NONE
AD07161-001	10/19/18 09:13	R31	7	A	NONE	AD07161-005	10/18/18 09:32	AM	4	M	TDWI/HG
AD07161-001	10/27/18 15:55	SG	7	A	VOA	AD07161-005	10/18/18 10:33	R12	4	A	NONE
AD07161-001	10/19/18 09:13	R31	8	A	NONE	AD07161-005	10/19/18 09:10	AM	4	M	TDWI/HG
AD07161-002	10/17/18 16:15	FRAN	0	M	Received	AD07161-005	10/19/18 10:46	R12	4	A	NONE
AD07161-002	10/17/18 16:42	FRAN	0	M	Login	AD07161-005	10/17/18 17:18	R12	5	A	NONE
AD07161-002	10/17/18 17:18	R12	2	A	NONE	AD07161-005	10/19/18 09:13	R31	6	A	NONE
AD07161-002	10/17/18 21:39	R12	2	A	NONE	AD07161-005	10/27/18 15:55	SG	6	A	VOA
AD07161-002	10/17/18 21:39	PA	2	A	mix	AD07161-005	10/19/18 09:13	R31	7	A	NONE
AD07161-002	10/18/18 07:50	JMP	2	M	solids	AD07161-005	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-002	10/18/18 09:20	R12	2	A	NONE	AD07161-006	10/17/18 16:15	FRAN	0	M	Received
AD07161-002	10/18/18 10:17	BA	2	A	TDSI/HG	AD07161-006	10/17/18 16:42	FRAN	0	M	Login
AD07161-002	10/18/18 12:57	BA	2	A	R12	AD07161-006	10/17/18 17:18	R12	1	A	NONE
AD07161-002	10/18/18 14:51	JW	2	A	ic	AD07161-006	10/23/18 10:17	AM	1	A	tdsi/hg
AD07161-002	10/19/18 11:08	R12	2	A	NONE	AD07161-006	10/23/18 10:19	R12	1	A	NONE
AD07161-002	10/19/18 11:08	LV	2	A	BN/BNA	AD07161-006	10/17/18 17:18	R12	2	A	NONE
AD07161-002	10/22/18 08:49	JMP	2	A	cn	AD07161-006	10/17/18 21:39	R12	2	A	NONE
AD07161-002	10/23/18 10:17	AM	2	A	tdsi/hg	AD07161-006	10/17/18 21:39	PA	2	A	mix
AD07161-002	10/23/18 10:19	R12	2	A	NONE	AD07161-006	10/18/18 07:50	JMP	2	M	solids
AD07161-002	10/18/18 16:10	R21	3	A	NONE	AD07161-006	10/18/18 09:20	R12	2	A	NONE
AD07161-002	10/19/18 11:42	WP	3	A	VOA	AD07161-006	10/18/18 10:17	BA	2	A	TDSI/HG
AD07161-002	10/19/18 12:47	R31	3	A	NONE	AD07161-006	10/18/18 12:57	BA	2	A	R12
AD07161-002	10/18/18 16:11	F19	4	A	NONE	AD07161-006	10/18/18 14:51	JW	2	A	ic
AD07161-002	10/26/18 12:51	WP	4	A	VOA	AD07161-006	10/19/18 11:08	R12	2	A	NONE
AD07161-002	10/30/18 16:48	SG	4	A	VOA	AD07161-006	10/19/18 11:08	LV	2	A	BN/BNA
AD07161-002	10/18/18 16:11	F19	5	A	NONE	AD07161-006	10/22/18 08:49	JMP	2	A	cn
AD07161-003	10/17/18 16:15	FRAN	0	M	Received	AD07161-006	10/18/18 16:11	F19	3	A	NONE
AD07161-003	10/17/18 16:42	FRAN	0	M	Login	AD07161-006	10/30/18 16:48	SG	3	A	VOA
AD07161-003	10/17/18 17:18	R12	1	A	NONE	AD07161-006	10/18/18 16:10	R21	4	A	NONE
AD07161-003	10/22/18 12:14	JN	1	A	BN/BNA	AD07161-006	10/19/18 11:42	WP	4	A	VOA
AD07161-003	10/17/18 17:18	R12	2	A	NONE	AD07161-006	10/19/18 12:47	R31	4	A	NONE
AD07161-003	10/25/18 12:36	JN	2	A	BN/BNA	AD07161-006	10/18/18 16:11	F19	5	A	NONE
AD07161-003	10/17/18 17:18	R12	3	A	NONE	AD07161-006	10/26/18 12:51	WP	5	A	VOA
AD07161-003	10/18/18 09:32	AM	3	M	TDWI/HG	AD07161-007	10/17/18 16:15	FRAN	0	M	Received
AD07161-003	10/18/18 10:33	R12	3	A	NONE	AD07161-007	10/17/18 16:42	FRAN	0	M	Login

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

8101509 0020

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07161-007	10/17/18 17:18	R12	1	A	NONE
AD07161-007	10/22/18 12:14	JN	1	A	BN/BNA
AD07161-007	10/17/18 17:18	R12	2	A	NONE
AD07161-007	10/25/18 12:36	JN	2	A	BN/BNA
AD07161-007	10/17/18 17:18	R12	3	A	NONE
AD07161-007	10/18/18 09:32	AM	3	M	TDWI/HG
AD07161-007	10/18/18 10:33	R12	3	A	NONE
AD07161-007	10/19/18 09:10	AM	3	M	TDWI/HG
AD07161-007	10/19/18 10:46	R12	3	A	NONE
AD07161-007	10/17/18 17:18	R12	4	A	NONE
AD07161-007	10/26/18 13:48	JW	4	A	IC
AD07161-007	10/26/18 17:18	R12	4	A	NONE
AD07161-007	10/17/18 17:18	R12	5	A	NONE
AD07161-007	10/19/18 09:13	R31	6	A	NONE
AD07161-007	10/27/18 15:55	SG	6	A	VOA
AD07161-007	10/19/18 09:13	R31	7	A	NONE
AD07161-007	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-008	10/17/18 16:15	FRAN	0	M	Received
AD07161-008	10/17/18 16:42	FRAN	0	M	Login
AD07161-008	10/17/18 17:18	R12	1	A	NONE
AD07161-008	10/26/18 13:48	JW	1	A	IC
AD07161-008	10/26/18 17:18	R12	1	A	NONE
AD07161-008	10/17/18 17:18	R12	2	A	NONE
AD07161-008	10/17/18 17:18	R12	3	A	NONE
AD07161-008	10/22/18 12:14	JN	3	A	BN/BNA
AD07161-008	10/17/18 17:18	R12	4	A	NONE
AD07161-008	10/25/18 12:36	JN	4	A	BN/BNA
AD07161-008	10/17/18 17:18	R12	5	A	NONE
AD07161-008	10/18/18 09:32	AM	5	M	TDWI/HG
AD07161-008	10/18/18 10:33	R12	5	A	NONE
AD07161-008	10/19/18 09:10	AM	5	M	TDWI/HG
AD07161-008	10/19/18 10:46	R12	5	A	NONE
AD07161-008	10/19/18 09:13	R31	6	A	NONE
AD07161-008	10/27/18 15:55	SG	6	A	VOA
AD07161-008	10/19/18 09:13	R31	7	A	NONE
AD07161-008	10/19/18 09:10	R31	8	A	PH/CHECK
AD07161-009	10/17/18 16:15	FRAN	0	M	Received
AD07161-009	10/17/18 16:42	FRAN	0	M	Login
AD07161-009	10/17/18 17:18	R12	4	A	NONE
AD07161-009	10/17/18 17:18	R12	5	A	NONE
AD07161-009	10/17/18 21:39	PA	5	A	mix
AD07161-009	10/17/18 21:39	R12	5	A	NONE
AD07161-009	10/18/18 07:50	JMP	5	M	solids
AD07161-009	10/18/18 09:20	R12	5	A	NONE
AD07161-009	10/18/18 10:17	BA	5	A	TDSI/HG
AD07161-009	10/18/18 12:57	BA	5	A	R12
AD07161-009	10/18/18 14:51	JW	5	A	ic
AD07161-009	10/19/18 11:08	LV	5	A	BN/BNA
AD07161-009	10/19/18 11:08	R12	5	A	NONE
AD07161-009	10/22/18 08:49	JMP	5	A	cn
AD07161-009	10/23/18 10:17	AM	5	A	tdsi/hg
AD07161-009	10/23/18 10:19	R12	5	A	NONE
AD07161-009	10/18/18 16:10	R21	6	A	NONE
AD07161-009	10/19/18 11:42	WP	6	A	VOA
AD07161-009	10/19/18 12:47	R31	6	A	NONE
AD07161-009	10/18/18 16:11	F19	7	A	NONE
AD07161-009	10/26/18 12:51	WP	7	A	VOA
AD07161-009	10/18/18 16:11	F19	8	A	NONE
AD07161-009	10/30/18 16:48	SG	8	A	VOA
AD07161-010	10/17/18 16:15	RICAR	0	M	Received
AD07161-010	10/18/18 15:55	RICAR	0	M	Login
AD07161-010	10/19/18 09:13	R31	1	A	NONE
AD07161-010	10/24/18 13:24	WP	1	A	VOA
AD07161-010	10/19/18 09:13	R31	2	A	NONE
AD07161-010	10/19/18 09:10	R31	3	A	PH/CHECK
AD07325-001	10/24/18 21:04	RICAR	0	M	Received
AD07325-001	10/25/18 12:26	RICAR	0	M	Login
AD07325-001	10/29/18 08:29	JMP	1	A	sulfide
AD07325-001	10/29/18 11:39	R12	1	M	NONE
AD07325-002	10/24/18 21:04	RICAR	0	M	Received
AD07325-002	10/25/18 12:26	RICAR	0	M	Login
AD07325-002	10/29/18 08:29	JMP	1	A	sulfide
AD07325-002	10/29/18 11:39	R12	1	M	NONE
AD07325-003	10/24/18 21:04	RICAR	0	M	Received
AD07325-003	10/25/18 12:26	RICAR	0	M	Login

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD07325-003	10/29/18 08:29	JMP	1	A	sulfide
AD07325-003	10/29/18 11:39	R12	1	M	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Laboratory Chronicle

8101509 0021

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07118-001

Sample ID: LMW-2-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/22/18	Janee	300.0 rev2.1	10/22/18 13:51	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:29	JMP
Semivolatile Organics (no search) 625.1	EPA 625.1	10/18/18 11:34	JN	EPA 625.1	10/19/18 12:44	AH/JB
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/22/18 16:12	WP

Lab#: AD07118-002

Sample ID: LMW-2-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:27	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 02:56	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:34	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:30	PC

Lab#: AD07118-003

Sample ID: PC-1-10 2018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Alkalinity-Bicarbonate (SM2320B-11)		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
Alkalinity-Total (SM2320B-11)		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
Chloride (Water) 300.0		10/22/18	Janee	300.0 rev2.1	10/22/18 19:46	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:38	JMP
Nitrate-N (Water) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:26	Janee
Nitrite-N (Aqueous) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:26	Janee
p-Alkalinity		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
Semivolatile Organics (no search) 625.1	EPA 625.1	10/18/18 11:34	JN	EPA 625.1	10/19/18 13:08	AH/JB
Sulfate (Water) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:26	Janee
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/22/18 16:29	WP

Lab#: AD07118-004

Sample ID: PC-1-10 2018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:28	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:06	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 02:59	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:33	PC

Laboratory Chronicle

8101509 0022

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07118-005

Sample ID: GW-DUP1-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/22/18	Janee	300.0 rev2.1	10/22/18 16:36	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:41	JMP
Semivolatile Organics (no search) 625.1	EPA 625.1	10/18/18 11:34	JN	EPA 625.1	10/19/18 13:31	AH/JB
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/22/18 16:46	WP

Lab#: AD07118-006

Sample ID: GW-DUP1-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:29	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:03	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:37	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:37	PC

Lab#: AD07118-007

Sample ID: MW-11-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Alkalinity-Bicarbonate (SM2320B-11)		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
Alkalinity-Total (SM2320B-11)		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
BTEX (624.1)	EPA 624.1			EPA 624.1	10/23/18 08:55	WP
Nitrate-N (Water) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:53	Janee
Nitrite-N (Aqueous) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:53	Janee
p-Alkalinity		10/18/18	BCT	SM2320B-11	10/18/18 00:00	BCT
Semivolatile Organics (no search) 625.1	EPA 625.1	10/18/18 11:34	JN	EPA 625.1	10/19/18 13:55	AH/JB
Sulfate (Water) 300.0		10/15/18	Janee	300.0 rev2.1	10/15/18 19:53	Janee

Lab#: AD07118-008

Sample ID: MW-11-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Metals Pair 200.7	EPA 200.2	10/18/18 09:30	aadewusi	200.7	10/20/18 03:07	SRB

Laboratory Chronicle

8101509 0023

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07118-009

Sample ID: TB-1

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/29/18 14:50	SG

Lab#: AD07137-001

Sample ID: LMW-4-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 13:00	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:43	JMP
Semivolatile Organics (no search) 625.1	EPA 625.1	10/19/18 10:39	JN	EPA 625.1	10/22/18 11:41	AH/JB
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/22/18 17:04	WP

Lab#: AD07137-002

Sample ID: LMW-4-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:36	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:41	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:38	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:43	PC

Lab#: AD07137-003

Sample ID: PC-2-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 15:01	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:49	JMP
Semivolatile Organics (no search) 625.1	EPA 625.1	10/19/18 10:39	JN	EPA 625.1	10/22/18 12:04	AH/JB
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/22/18 17:16	WP

Laboratory Chronicle

8101509 0024

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07137-004

Sample ID: PC-2-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:38	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:44	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:44	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:46	PC

Lab#: AD07137-005

Sample ID: PC-3-102018 U

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 15:57	Janee
Cyanide-Water (EPA 335.4)	EPA 335.4	10/17/18	jessica	EPA 335.4	10/17/18 14:51	JMP
Semivolatile Organics (no search) 625.1	EPA 625.1	10/19/18 10:39	JN	EPA 625.1	10/22/18 12:28	AH/JB
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/23/18 08:21	WP

Lab#: AD07137-006

Sample ID: PC-3-102018 F

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 245.1	245.1 rev3.0	10/18/18 09:30	aadewusi	245.1 rev3.0	10/23/18 17:39	CJA
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:49	SRB
TAL Metals 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/24/18 12:48	SRB
TAL Metals 200.8	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.8	10/24/18 09:59	PC

Lab#: AD07137-007

Sample ID: TB-2

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/23/18 13:32	WP

Laboratory Chronicle

8101509 0025

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07161-001

Sample ID: SW-1-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 16:25	Janee
Cyanide (Water) 9012B		10/22/18	disham	EPA 9012B	10/23/18 08:14	JMP
Hardness 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:53	SRB
Mercury (Water) 7470A	EPA 7470A	10/19/18 09:10	aadewusi	EPA 7470A	10/20/18 17:30	CJA
Semivolatile Organics (no search) 625.1	EPA 625.1	10/24/18	JN	EPA 625.1	10/25/18 13:19	AH/JB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 16:04	SRB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 19:40	SRB
TAL Metals 6020B	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6020B	10/23/18 16:08	PC
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/27/18 19:17	SG

Lab#: AD07161-002

Sample ID: SD-1-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/18/18 00:00	jessica
Chloride (Soil) 9056A		10/18/18	Janee	EPA 9056A	10/19/18 06:37	Janee
Cyanide (Soil/Waste) 9012B		10/22/18	jessica	EPA 9012B	10/22/18 12:10	JMP
Mercury (Soil/Waste) 7471B	EPA 7471B	10/18/18 10:00	BAdeola	EPA 7471B	10/20/18 14:36	CJA
Semivolatile Organics (no search) 8270	3510C/3550C	10/19/18 11:08	lynda	EPA 8270D	10/20/18 00:07	AH/JB
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 01:24	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 13:13	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/21/18 04:22	OA
TAL Metals 6020B	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6020B	10/20/18 02:16	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	11/1/18 03:43	SG

Lab#: AD07161-003

Sample ID: SW-2-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 17:46	Janee
Cyanide (Water) 9012B		10/22/18	disham	EPA 9012B	10/23/18 08:23	JMP
Hardness 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 03:57	SRB
Mercury (Water) 7470A	EPA 7470A	10/19/18 09:10	aadewusi	EPA 7470A	10/20/18 17:31	CJA
Semivolatile Organics (no search) 625.1	EPA 625.1	10/25/18	JN	EPA 625.1	10/26/18 13:16	AH/JB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 16:17	SRB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 19:52	SRB
TAL Metals 6020B	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6020B	10/23/18 16:13	PC
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/27/18 19:35	SG

Laboratory Chronicle

8101509 0026

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07161-004

Sample ID: SD-2-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/18/18 00:00	jessica
Chloride (Soil) 9056A		10/18/18	Janee	EPA 9056A	10/19/18 07:04	Janee
Cyanide (Soil/Waste) 9012B		10/22/18	jessica	EPA 9012B	10/22/18 12:12	JMP
Mercury (Soil/Waste) 7471B	EPA 7471B	10/18/18 10:00	BAdeola	EPA 7471B	10/20/18 14:42	CJA
Semivolatile Organics (no search) 8270	3510C/3550C	10/19/18 11:08	lynda	EPA 8270D	10/20/18 00:31	AH/JB
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 01:56	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 13:36	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/21/18 04:46	OA
TAL Metals 6020B	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6020B	10/20/18 02:59	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	11/1/18 04:05	SG

Lab#: AD07161-005

Sample ID: SW-3-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/27/18 11:33	Janee
Cyanide (Water) 9012B		10/22/18	disham	EPA 9012B	10/23/18 08:26	JMP
Hardness 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 02:07	SRB
Mercury (Water) 7470A	EPA 7470A	10/19/18 09:10	aadewusi	EPA 7470A	10/20/18 17:33	CJA
Semivolatile Organics (no search) 625.1	EPA 625.1	10/25/18	JN	EPA 625.1	10/26/18 13:38	AH/JB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 16:21	SRB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 19:56	SRB
TAL Metals 6020B	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6020B	10/23/18 16:17	PC
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/27/18 19:52	SG

Lab#: AD07161-006

Sample ID: SD-3-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/18/18 00:00	jessica
Chloride (Soil) 9056A		10/18/18	Janee	EPA 9056A	10/19/18 07:31	Janee
Cyanide (Soil/Waste) 9012B		10/22/18	jessica	EPA 9012B	10/22/18 12:14	JMP
Mercury (Soil/Waste) 7471B	EPA 7471B	10/18/18 10:00	BAdeola	EPA 7471B	10/20/18 14:47	CJA
Semivolatile Organics (no search) 8270	3510C/3550C	10/19/18 11:08	lynda	EPA 8270D	10/20/18 00:54	AH/JB
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 03:53	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/21/18 04:59	OA
TAL Metals 6020B	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6020B	10/20/18 03:03	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	11/1/18 04:26	SG

Laboratory Chronicle

8101509 0027

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07161-007

Sample ID: SW-DUP1-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/27/18 12:00	Janee
Cyanide (Water) 9012B		10/22/18	disham	EPA 9012B	10/23/18 08:28	JMP
Hardness 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 04:01	SRB
Mercury (Water) 7470A	EPA 7470A	10/19/18 09:10	aadewusi	EPA 7470A	10/20/18 17:37	CJA
Semivolatile Organics (no search) 625.1	EPA 625.1	10/25/18	JN	EPA 625.1	10/26/18 14:01	AH/JB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 16:26	SRB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 20:00	SRB
TAL Metals 6020B	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6020B	10/23/18 16:22	PC
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/27/18 20:09	SG

Lab#: AD07161-008

Sample ID: SW-4-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Chloride (Water) 300.0		10/26/18	Janee	300.0 rev2.1	10/26/18 20:57	Janee
Cyanide (Water) 9012B		10/22/18	disham	EPA 9012B	10/23/18 08:34	JMP
Hardness 200.7	EPA 200.2	10/18/18 09:30	aadewusi	EPA 200.7	10/20/18 04:04	SRB
Mercury (Water) 7470A	EPA 7470A	10/19/18 09:10	aadewusi	EPA 7470A	10/20/18 17:39	CJA
Semivolatile Organics (no search) 625.1	EPA 625.1	10/25/18	JN	EPA 625.1	10/26/18 14:25	AH/JB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 16:30	SRB
TAL Metals 6010D	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6010D	10/22/18 20:04	SRB
TAL Metals 6020B	3005&10/3050	10/19/18 09:10	aadewusi	EPA 6020B	10/23/18 16:27	PC
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/27/18 20:26	SG

Lab#: AD07161-009

Sample ID: SD-4-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	10/18/18 00:00	jessica
Chloride (Soil) 9056A		10/18/18	Janee	EPA 9056A	10/19/18 07:59	Janee
Cyanide (Soil/Waste) 9012B		10/22/18	jessica	EPA 9012B	10/22/18 12:16	JMP
Mercury (Soil/Waste) 7471B	EPA 7471B	10/18/18 10:00	BAdeola	EPA 7471B	10/20/18 14:48	CJA
Semivolatile Organics (no search) 8270	3510C/3550C	10/19/18 11:08	lynda	EPA 8270D	10/20/18 01:17	AH/JB
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/19/18 03:59	OA
TAL Metals 6010D	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6010D	10/21/18 05:03	OA
TAL Metals 6020B	3005&10/3050	10/18/18 10:00	BAdeola	EPA 6020B	10/20/18 03:08	PC
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	11/1/18 04:48	SG

Laboratory Chronicle

8101509 0028

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Lab#: AD07161-010

Sample ID: TB-3

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics (no search) 624.1	EPA 624.1			EPA 624.1	10/24/18 14:16	WP

Lab#: AD07325-001

Sample ID: PC-1-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Sulfide-Total (SM4500-S2F-11)	SM4500-S2F11	10/29/18	JMP	SM4500-S2F11	10/29/18 00:00	JMP

Lab#: AD07325-002

Sample ID: MW-11-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Sulfide-Total (SM4500-S2F-11)	SM4500-S2F11	10/29/18	JMP	SM4500-S2F11	10/29/18 00:00	JMP

Lab#: AD07325-003

Sample ID: GW-DUP1-102018

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Sulfide-Total (SM4500-S2F-11)	SM4500-S2F11	10/29/18	JMP	SM4500-S2F11	10/29/18 00:00	JMP

HC Report of Analysis

Client: TRC Engineering
Project: Harrison Sub Residency

HC Project #: 8101509

Sample ID: LMW-2-102018 U
Lab#: AD07118-001
Matrix: Aqueous

Collection Date: 10/15/2018
Receipt Date: 10/15/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	15

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.26	ND

Sample ID: LMW-2-102018 U

Lab#: AD07118-001

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND

Sample ID: LMW-2-102018 U

Lab#: AD07118-001

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-2-102018 F
 Lab#: AD07118-002
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	120
Calcium	1	ug/l	1000	78000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	170
Magnesium	1	ug/l	1000	28000
Manganese	1	ug/l	25	170
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3900
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	25000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-1-10 2018 U
 Lab#: AD07118-003
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Alkalinity-Bicarbonate (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	450

Alkalinity-Total (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	450
pH Endpoint	1	ph		4.5

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	230

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Nitrite-N (Aqueous) 300.0

Analyte	DF	Units	RL	Result
Nitrite	1	mg/l	1.0	ND

p-Alkalinity

Analyte	DF	Units	RL	Result
p-Alkalinity	1	mg caco3/l	10	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 U

Lab#: AD07118-003

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	1	mg/l	2.0	8.1

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 U

Lab#: AD07118-003

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-1-10 2018 F
 Lab#: AD07118-004
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	120
Barium	1	ug/l	25	140
Calcium	1	ug/l	1000	170000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	240
Magnesium	1	ug/l	1000	27000
Manganese	1	ug/l	25	2000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	4900
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	100000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	220

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 U

Lab#: AD07118-005

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: GW-DUP1-102018 F

Lab#: AD07118-006

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	130
Calcium	1	ug/l	1000	170000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	230
Magnesium	1	ug/l	1000	26000
Manganese	1	ug/l	25	2000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	5000
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	100000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: MW-11-102018 U
 Lab#: AD07118-007
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Alkalinity-Bicarbonate (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg cac03/l	10	270

Alkalinity-Total (SM2320B-11)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg cac03/l	10	270
pH Endpoint	1	ph		4.5

BTEX (624.1)

Analyte	DF	Units	RL	Result
Benzene	1	ug/l	0.50	ND
Ethylbenzene	1	ug/l	1.0	17
m&p-Xylenes	1	ug/l	1.0	2.0
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	2.0

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Nitrite-N (Aqueous) 300.0

Analyte	DF	Units	RL	Result
Nitrite	1	mg/l	1.0	ND

p-Alkalinity

Analyte	DF	Units	RL	Result
p-Alkalinity	1	mg cac03/l	10	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND

Sample ID: MW-11-102018 U

Lab#: AD07118-007

Matrix: Aqueous

Collection Date: 10/15/2018

Receipt Date: 10/15/2018

4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	0.56
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	1	mg/l	2.0	7.5

Sample ID: MW-11-102018 F
Lab#: AD07118-008
Matrix: Aqueous

Collection Date: 10/15/2018
Receipt Date: 10/15/2018

Metals Pair 200.7

Analyte	DF	Units	RL	Result
Iron	1	ug/l	150	1600
Manganese	1	ug/l	25	1600

Sample ID: TB-1
 Lab#: AD07118-009
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/15/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Collection Date: 10/16/2018

Lab#: AD07137-001

Receipt Date: 10/16/2018

Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	32

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Lab#: AD07137-001

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 U

Lab#: AD07137-001

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-4-102018 F
 Lab#: AD07137-002
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	150
Calcium	1	ug/l	1000	40000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	60000
Magnesium	1	ug/l	1000	17000
Manganese	1	ug/l	25	9700
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3500
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	29000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	2.0
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	11
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-2-102018 U
 Lab#: AD07137-003
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	21

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: PC-2-102018 U

Lab#: AD07137-003

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: PC-2-102018 U

Lab#: AD07137-003

Matrix: Aqueous

Collection Date: 10/16/2018

Receipt Date: 10/16/2018

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-2-102018 F
 Lab#: AD07137-004
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	170
Calcium	1	ug/l	1000	81000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	61000
Magnesium	1	ug/l	1000	19000
Manganese	1	ug/l	25	11000
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	3700
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	39000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	1.8
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	1.6
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: PC-3-102018 U
 Lab#: AD07137-005
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	10	mg/l	20	230

Cyanide-Water (EPA 335.4)

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.25	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.25	ND
2,4-Dimethylphenol	1	ug/l	0.25	ND
2,4-Dinitrophenol	1	ug/l	5.0	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.25	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.25	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.0	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.25	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.25	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND

Sample ID: PC-3-102018 U

Collection Date: 10/16/2018

Lab#: AD07137-005

Receipt Date: 10/16/2018

Matrix: Aqueous

Dibenzofuran	1	ug/l	0.25	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.25	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.25	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.25	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.0	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND

Sample ID: PC-3-102018 U

Collection Date: 10/16/2018

Lab#: AD07137-005

Receipt Date: 10/16/2018

Matrix: Aqueous

Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-3-102018 F
 Lab#: AD07137-006
 Matrix: Aqueous

Collection Date: 10/16/2018
 Receipt Date: 10/16/2018

Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	ND

TAL Metals 200.7

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	100	ND
Barium	1	ug/l	25	160
Calcium	1	ug/l	1000	74000
Chromium	1	ug/l	25	ND
Copper	1	ug/l	25	ND
Iron	1	ug/l	150	1800
Magnesium	1	ug/l	1000	21000
Manganese	1	ug/l	25	570
Nickel	1	ug/l	10	ND
Potassium	1	ug/l	2500	7300
Silver	1	ug/l	10	ND
Sodium	1	ug/l	2500	120000
Vanadium	1	ug/l	25	ND
Zinc	1	ug/l	25	ND

TAL Metals 200.8

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.5	ND
Arsenic	1	ug/l	1.0	ND
Beryllium	1	ug/l	0.75	ND
Cadmium	1	ug/l	1.0	ND
Cobalt	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	ND
Selenium	1	ug/l	5.0	ND
Thallium	1	ug/l	1.5	ND

Sample ID: TB-2
 Lab#: AD07137-007
 Matrix: Aqueous

Collection Date: 10/15/2018
 Receipt Date: 10/16/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SW-1-102018

Lab#: AD07161-001

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	5.5

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cacO ₃ /l	6.6	150

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.5	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.5	ND
1,4-Dioxane	1	ug/l	0.62	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.5	ND
2,4,5-Trichlorophenol	1	ug/l	2.5	ND
2,4,6-Trichlorophenol	1	ug/l	2.5	ND
2,4-Dichlorophenol	1	ug/l	0.62	ND
2,4-Dimethylphenol	1	ug/l	0.62	ND
2,4-Dinitrophenol	1	ug/l	12	ND
2,4-Dinitrotoluene	1	ug/l	2.5	ND
2,6-Dinitrotoluene	1	ug/l	2.5	ND
2-Chloronaphthalene	1	ug/l	2.5	ND
2-Chlorophenol	1	ug/l	2.5	ND
2-Methylnaphthalene	1	ug/l	2.5	ND
2-Methylphenol	1	ug/l	0.62	ND
2-Nitroaniline	1	ug/l	2.5	ND
2-Nitrophenol	1	ug/l	2.5	ND
3&4-Methylphenol	1	ug/l	0.62	ND
3,3'-Dichlorobenzidine	1	ug/l	2.5	ND
3-Nitroaniline	1	ug/l	2.5	ND
4,6-Dinitro-2-methylphenol	1	ug/l	12	ND
4-Bromophenyl-phenylether	1	ug/l	2.5	ND
4-Chloro-3-methylphenol	1	ug/l	2.5	ND
4-Chloroaniline	1	ug/l	0.62	ND
4-Chlorophenyl-phenylether	1	ug/l	2.5	ND
4-Nitroaniline	1	ug/l	2.5	ND
4-Nitrophenol	1	ug/l	2.5	ND
Acenaphthene	1	ug/l	2.5	ND
Acenaphthylene	1	ug/l	2.5	ND
Acetophenone	1	ug/l	2.5	ND
Anthracene	1	ug/l	2.5	ND
Atrazine	1	ug/l	2.5	ND
Benzaldehyde	1	ug/l	2.5	ND
Benzo[a]anthracene	1	ug/l	2.5	ND
Benzo[a]pyrene	1	ug/l	2.5	ND
Benzo[b]fluoranthene	1	ug/l	2.5	ND
Benzo[g,h,i]perylene	1	ug/l	2.5	ND
Benzo[k]fluoranthene	1	ug/l	2.5	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.5	ND

Sample ID: SW-1-102018

Lab#: AD07161-001

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.62	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.5	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.5	ND
Butylbenzylphthalate	1	ug/l	2.5	ND
Caprolactam	1	ug/l	2.5	ND
Carbazole	1	ug/l	2.5	ND
Chrysene	1	ug/l	2.5	ND
Dibenzo[a,h]anthracene	1	ug/l	2.5	ND
Dibenzofuran	1	ug/l	0.62	ND
Diethylphthalate	1	ug/l	2.5	ND
Dimethylphthalate	1	ug/l	2.5	ND
Di-n-butylphthalate	1	ug/l	0.62	ND
Di-n-octylphthalate	1	ug/l	2.5	ND
Fluoranthene	1	ug/l	2.5	ND
Fluorene	1	ug/l	2.5	ND
Hexachlorobenzene	1	ug/l	2.5	ND
Hexachlorobutadiene	1	ug/l	2.5	ND
Hexachlorocyclopentadiene	1	ug/l	2.5	ND
Hexachloroethane	1	ug/l	2.5	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.5	ND
Isophorone	1	ug/l	2.5	ND
Naphthalene	1	ug/l	0.62	ND
Nitrobenzene	1	ug/l	2.5	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.62	ND
N-Nitrosodiphenylamine	1	ug/l	2.5	ND
Pentachlorophenol	1	ug/l	12	ND
Phenanthrene	1	ug/l	2.5	ND
Phenol	1	ug/l	2.5	ND
Pyrene	1	ug/l	2.5	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	390
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	43000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1800
Magnesium	1	ug/l	5000	12000
Manganese	1	ug/l	40	1500
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	9300
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-1-102018
 Lab#: AD07161-001
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-1-102018
 Lab#: AD07161-002
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		36

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	56	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.67	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.23	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.093	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.093	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.093	ND
2,4,5-Trichlorophenol	1	mg/kg	0.093	ND
2,4,6-Trichlorophenol	1	mg/kg	0.093	ND
2,4-Dichlorophenol	1	mg/kg	0.023	ND
2,4-Dimethylphenol	1	mg/kg	0.023	ND
2,4-Dinitrophenol	1	mg/kg	0.46	ND
2,4-Dinitrotoluene	1	mg/kg	0.093	ND
2,6-Dinitrotoluene	1	mg/kg	0.093	ND
2-Chloronaphthalene	1	mg/kg	0.093	ND
2-Chlorophenol	1	mg/kg	0.093	ND
2-Methylnaphthalene	1	mg/kg	0.093	ND
2-Methylphenol	1	mg/kg	0.023	ND
2-Nitroaniline	1	mg/kg	0.093	ND
2-Nitrophenol	1	mg/kg	0.093	ND
3&4-Methylphenol	1	mg/kg	0.023	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.093	ND
3-Nitroaniline	1	mg/kg	0.093	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.46	ND
4-Bromophenyl-phenylether	1	mg/kg	0.093	ND
4-Chloro-3-methylphenol	1	mg/kg	0.093	ND
4-Chloroaniline	1	mg/kg	0.023	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.093	ND
4-Nitroaniline	1	mg/kg	0.093	ND
4-Nitrophenol	1	mg/kg	0.093	ND
Acenaphthene	1	mg/kg	0.093	ND
Acenaphthylene	1	mg/kg	0.093	ND
Acetophenone	1	mg/kg	0.093	ND
Anthracene	1	mg/kg	0.093	ND
Atrazine	1	mg/kg	0.093	ND
Benzaldehyde	1	mg/kg	0.093	ND
Benzo[a]anthracene	1	mg/kg	0.093	0.16
Benzo[a]pyrene	1	mg/kg	0.093	0.21
Benzo[b]fluoranthene	1	mg/kg	0.093	0.31
Benzo[g,h,i]perylene	1	mg/kg	0.093	0.14
Benzo[k]fluoranthene	1	mg/kg	0.093	0.10
bis(2-Chloroethoxy)methane	1	mg/kg	0.093	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.023	ND

Sample ID: SD-1-102018
 Lab#: AD07161-002
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.093	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.093	ND
Butylbenzylphthalate	1	mg/kg	0.093	ND
Caprolactam	1	mg/kg	0.093	ND
Carbazole	1	mg/kg	0.093	ND
Chrysene	1	mg/kg	0.093	0.23
Dibenzo[a,h]anthracene	1	mg/kg	0.093	ND
Dibenzofuran	1	mg/kg	0.023	ND
Diethylphthalate	1	mg/kg	0.093	ND
Dimethylphthalate	1	mg/kg	0.093	ND
Di-n-butylphthalate	1	mg/kg	0.023	ND
Di-n-octylphthalate	1	mg/kg	0.093	ND
Fluoranthene	1	mg/kg	0.093	0.35
Fluorene	1	mg/kg	0.093	ND
Hexachlorobenzene	1	mg/kg	0.093	ND
Hexachlorobutadiene	1	mg/kg	0.093	ND
Hexachlorocyclopentadiene	1	mg/kg	0.093	ND
Hexachloroethane	1	mg/kg	0.093	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.093	0.12
Isophorone	1	mg/kg	0.093	ND
Naphthalene	1	mg/kg	0.023	ND
Nitrobenzene	1	mg/kg	0.093	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.023	ND
N-Nitrosodiphenylamine	1	mg/kg	0.093	ND
Pentachlorophenol	1	mg/kg	0.46	ND
Phenanthrene	1	mg/kg	0.093	0.16
Phenol	1	mg/kg	0.093	ND
Pyrene	1	mg/kg	0.093	0.35

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	560	6500
Barium	1	mg/kg	28	330
Calcium	1	mg/kg	2800	5700
Chromium	1	mg/kg	14	19
Cobalt	1	mg/kg	6.9	11
Copper	1	mg/kg	14	15
Iron	1	mg/kg	560	31000
Lead	1	mg/kg	14	21
Magnesium	1	mg/kg	1400	2600
Manganese	10	mg/kg	280	17000
Nickel	1	mg/kg	14	ND
Potassium	1	mg/kg	1400	1500
Sodium	1	mg/kg	690	ND
Vanadium	1	mg/kg	28	ND
Zinc	1	mg/kg	28	69

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	0.56	1.9
Beryllium	1	mg/kg	0.56	ND
Cadmium	1	mg/kg	1.1	ND
Selenium	1	mg/kg	5.6	ND
Silver	1	mg/kg	0.56	ND
Thallium	1	mg/kg	1.1	ND

Sample ID: SD-1-102018
 Lab#: AD07161-002
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.982	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	0.982	mg/kg	0.0044	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.982	mg/kg	0.0027	ND
1,1,2-Trichloroethane	0.982	mg/kg	0.0045	ND
1,1-Dichloroethane	0.982	mg/kg	0.0027	ND
1,1-Dichloroethene	0.982	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	0.982	mg/kg	0.0034	ND
1,2,4-Trichlorobenzene	0.982	mg/kg	0.0044	ND
1,2-Dibromo-3-chloropropane	0.982	mg/kg	0.0045	ND
1,2-Dibromoethane	0.982	mg/kg	0.0027	ND
1,2-Dichlorobenzene	0.982	mg/kg	0.0053	ND
1,2-Dichloroethane	0.982	mg/kg	0.0042	ND
1,2-Dichloropropane	0.982	mg/kg	0.0036	ND
1,3-Dichlorobenzene	0.982	mg/kg	0.0041	ND
1,4-Dichlorobenzene	0.982	mg/kg	0.0030	ND
1,4-Dioxane	0.982	mg/kg	0.21	ND
2-Butanone	0.982	mg/kg	0.0054	ND
2-Hexanone	0.982	mg/kg	0.0049	ND
4-Methyl-2-pentanone	0.982	mg/kg	0.0054	ND
Acetone	0.982	mg/kg	0.027	ND
Benzene	0.982	mg/kg	0.0027	ND
Bromochloromethane	0.982	mg/kg	0.0047	ND
Bromodichloromethane	0.982	mg/kg	0.0033	ND
Bromoform	0.982	mg/kg	0.0048	ND
Bromomethane	0.982	mg/kg	0.0035	ND
Carbon disulfide	0.982	mg/kg	0.0027	ND
Carbon tetrachloride	0.982	mg/kg	0.0027	ND
Chlorobenzene	0.982	mg/kg	0.0027	ND
Chloroethane	0.982	mg/kg	0.0051	ND
Chloroform	0.982	mg/kg	0.0044	ND
Chloromethane	0.982	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	0.982	mg/kg	0.0029	ND
cis-1,3-Dichloropropene	0.982	mg/kg	0.0027	ND
Cyclohexane	0.982	mg/kg	0.0027	ND
Dibromochloromethane	0.982	mg/kg	0.0033	ND
Dichlorodifluoromethane	0.982	mg/kg	0.0027	ND
Ethylbenzene	0.982	mg/kg	0.0027	ND
Isopropylbenzene	0.982	mg/kg	0.0027	ND
m&p-Xylenes	0.982	mg/kg	0.0027	ND
Methyl Acetate	0.982	mg/kg	0.0046	ND
Methylcyclohexane	0.982	mg/kg	0.0027	ND
Methylene chloride	0.982	mg/kg	0.0049	ND
Methyl-t-butyl ether	0.982	mg/kg	0.0027	ND
o-Xylene	0.982	mg/kg	0.0027	ND
Styrene	0.982	mg/kg	0.0027	ND
Tetrachloroethene	0.982	mg/kg	0.0030	ND
Toluene	0.982	mg/kg	0.0027	ND
trans-1,2-Dichloroethene	0.982	mg/kg	0.0028	ND
trans-1,3-Dichloropropene	0.982	mg/kg	0.0043	ND
Trichloroethene	0.982	mg/kg	0.0032	ND
Trichlorofluoromethane	0.982	mg/kg	0.0027	ND
Vinyl chloride	0.982	mg/kg	0.0027	ND
Xylenes (Total)	0.982	mg/kg	0.0027	ND

Sample ID: SW-2-102018
 Lab#: AD07161-003
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	7.8

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cac03/l	6.6	160

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	0.58	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	0.58	ND
1,4-Dioxane	1	ug/l	0.14	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	0.58	ND
2,4,5-Trichlorophenol	1	ug/l	0.58	ND
2,4,6-Trichlorophenol	1	ug/l	0.58	ND
2,4-Dichlorophenol	1	ug/l	0.14	ND
2,4-Dimethylphenol	1	ug/l	0.14	ND
2,4-Dinitrophenol	1	ug/l	2.9	ND
2,4-Dinitrotoluene	1	ug/l	0.58	ND
2,6-Dinitrotoluene	1	ug/l	0.58	ND
2-Chloronaphthalene	1	ug/l	0.58	ND
2-Chlorophenol	1	ug/l	0.58	ND
2-Methylnaphthalene	1	ug/l	0.58	ND
2-Methylphenol	1	ug/l	0.14	ND
2-Nitroaniline	1	ug/l	0.58	ND
2-Nitrophenol	1	ug/l	0.58	ND
3&4-Methylphenol	1	ug/l	0.14	ND
3,3'-Dichlorobenzidine	1	ug/l	0.58	ND
3-Nitroaniline	1	ug/l	0.58	ND
4,6-Dinitro-2-methylphenol	1	ug/l	2.9	ND
4-Bromophenyl-phenylether	1	ug/l	0.58	ND
4-Chloro-3-methylphenol	1	ug/l	0.58	ND
4-Chloroaniline	1	ug/l	0.14	ND
4-Chlorophenyl-phenylether	1	ug/l	0.58	ND
4-Nitroaniline	1	ug/l	0.58	ND
4-Nitrophenol	1	ug/l	0.58	ND
Acenaphthene	1	ug/l	0.58	ND
Acenaphthylene	1	ug/l	0.58	ND
Acetophenone	1	ug/l	0.58	ND
Anthracene	1	ug/l	0.58	ND
Atrazine	1	ug/l	0.58	ND
Benzaldehyde	1	ug/l	0.58	ND
Benzo[a]anthracene	1	ug/l	0.58	ND
Benzo[a]pyrene	1	ug/l	0.58	ND
Benzo[b]fluoranthene	1	ug/l	0.58	ND
Benzo[g,h,i]perylene	1	ug/l	0.58	ND
Benzo[k]fluoranthene	1	ug/l	0.58	ND
bis(2-Chloroethoxy)methane	1	ug/l	0.58	ND

Sample ID: SW-2-102018

Lab#: AD07161-003

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.14	ND
bis(2-Chloroisopropyl)ether	1	ug/l	0.58	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	0.58	ND
Butylbenzylphthalate	1	ug/l	0.58	ND
Caprolactam	1	ug/l	0.58	ND
Carbazole	1	ug/l	0.58	ND
Chrysene	1	ug/l	0.58	ND
Dibenzo[a,h]anthracene	1	ug/l	0.58	ND
Dibenzofuran	1	ug/l	0.14	ND
Diethylphthalate	1	ug/l	0.58	ND
Dimethylphthalate	1	ug/l	0.58	ND
Di-n-butylphthalate	1	ug/l	0.14	ND
Di-n-octylphthalate	1	ug/l	0.58	ND
Fluoranthene	1	ug/l	0.58	ND
Fluorene	1	ug/l	0.58	ND
Hexachlorobenzene	1	ug/l	0.58	ND
Hexachlorobutadiene	1	ug/l	0.58	ND
Hexachlorocyclopentadiene	1	ug/l	0.58	ND
Hexachloroethane	1	ug/l	0.58	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	0.58	ND
Isophorone	1	ug/l	0.58	ND
Naphthalene	1	ug/l	0.14	ND
Nitrobenzene	1	ug/l	0.58	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.14	ND
N-Nitrosodiphenylamine	1	ug/l	0.58	ND
Pentachlorophenol	1	ug/l	2.9	ND
Phenanthrene	1	ug/l	0.58	ND
Phenol	1	ug/l	0.58	ND
Pyrene	1	ug/l	0.58	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	44000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	330
Magnesium	1	ug/l	5000	12000
Manganese	1	ug/l	40	280
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	14000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-2-102018
 Lab#: AD07161-003
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-2-102018
 Lab#: AD07161-004
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		16

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	120	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	1.5	1.9

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.52	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.21	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.21	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.21	ND
2,4,5-Trichlorophenol	1	mg/kg	0.21	ND
2,4,6-Trichlorophenol	1	mg/kg	0.21	ND
2,4-Dichlorophenol	1	mg/kg	0.052	ND
2,4-Dimethylphenol	1	mg/kg	0.052	ND
2,4-Dinitrophenol	1	mg/kg	1.0	ND
2,4-Dinitrotoluene	1	mg/kg	0.21	ND
2,6-Dinitrotoluene	1	mg/kg	0.21	ND
2-Chloronaphthalene	1	mg/kg	0.21	ND
2-Chlorophenol	1	mg/kg	0.21	ND
2-Methylnaphthalene	1	mg/kg	0.21	ND
2-Methylphenol	1	mg/kg	0.052	ND
2-Nitroaniline	1	mg/kg	0.21	ND
2-Nitrophenol	1	mg/kg	0.21	ND
3&4-Methylphenol	1	mg/kg	0.052	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.21	ND
3-Nitroaniline	1	mg/kg	0.21	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	1.0	ND
4-Bromophenyl-phenylether	1	mg/kg	0.21	ND
4-Chloro-3-methylphenol	1	mg/kg	0.21	ND
4-Chloroaniline	1	mg/kg	0.052	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.21	ND
4-Nitroaniline	1	mg/kg	0.21	ND
4-Nitrophenol	1	mg/kg	0.21	ND
Acenaphthene	1	mg/kg	0.21	ND
Acenaphthylene	1	mg/kg	0.21	ND
Acetophenone	1	mg/kg	0.21	ND
Anthracene	1	mg/kg	0.21	ND
Atrazine	1	mg/kg	0.21	ND
Benzaldehyde	1	mg/kg	0.21	ND
Benzo[a]anthracene	1	mg/kg	0.21	0.29
Benzo[a]pyrene	1	mg/kg	0.21	0.36
Benzo[b]fluoranthene	1	mg/kg	0.21	0.58
Benzo[g,h,i]perylene	1	mg/kg	0.21	0.30
Benzo[k]fluoranthene	1	mg/kg	0.21	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.21	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.052	ND

Sample ID: SD-2-102018
 Lab#: AD07161-004
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.21	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.21	ND
Butylbenzylphthalate	1	mg/kg	0.21	ND
Caprolactam	1	mg/kg	0.21	ND
Carbazole	1	mg/kg	0.21	ND
Chrysene	1	mg/kg	0.21	0.41
Dibenzo[a,h]anthracene	1	mg/kg	0.21	ND
Dibenzofuran	1	mg/kg	0.052	ND
Diethylphthalate	1	mg/kg	0.21	ND
Dimethylphthalate	1	mg/kg	0.21	ND
Di-n-butylphthalate	1	mg/kg	0.052	ND
Di-n-octylphthalate	1	mg/kg	0.21	ND
Fluoranthene	1	mg/kg	0.21	0.50
Fluorene	1	mg/kg	0.21	ND
Hexachlorobenzene	1	mg/kg	0.21	ND
Hexachlorobutadiene	1	mg/kg	0.21	ND
Hexachlorocyclopentadiene	1	mg/kg	0.21	ND
Hexachloroethane	1	mg/kg	0.21	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.21	0.22
Isophorone	1	mg/kg	0.21	ND
Naphthalene	1	mg/kg	0.052	ND
Nitrobenzene	1	mg/kg	0.21	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.052	ND
N-Nitrosodiphenylamine	1	mg/kg	0.21	ND
Pentachlorophenol	1	mg/kg	1.0	ND
Phenanthrene	1	mg/kg	0.21	ND
Phenol	1	mg/kg	0.21	ND
Pyrene	1	mg/kg	0.21	0.56

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	1200	8900
Barium	1	mg/kg	62	420
Calcium	1	mg/kg	6200	13000
Chromium	1	mg/kg	31	ND
Cobalt	1	mg/kg	16	ND
Copper	1	mg/kg	31	45
Iron	1	mg/kg	1200	34000
Lead	1	mg/kg	31	51
Magnesium	1	mg/kg	3100	5200
Manganese	4	mg/kg	250	18000
Nickel	1	mg/kg	31	ND
Potassium	1	mg/kg	3100	ND
Sodium	1	mg/kg	1600	ND
Vanadium	1	mg/kg	62	ND
Zinc	1	mg/kg	62	260

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	5.0	ND
Arsenic	1	mg/kg	1.2	5.5
Beryllium	1	mg/kg	1.2	ND
Cadmium	1	mg/kg	2.5	ND
Selenium	1	mg/kg	13	ND
Silver	1	mg/kg	1.2	ND
Thallium	1	mg/kg	2.5	ND

Sample ID: SD-2-102018
 Lab#: AD07161-004
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.818	mg/kg	0.0051	ND
1,1,2,2-Tetrachloroethane	0.818	mg/kg	0.0083	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.818	mg/kg	0.0051	ND
1,1,2-Trichloroethane	0.818	mg/kg	0.0085	ND
1,1-Dichloroethane	0.818	mg/kg	0.0051	ND
1,1-Dichloroethene	0.818	mg/kg	0.0051	ND
1,2,3-Trichlorobenzene	0.818	mg/kg	0.0063	ND
1,2,4-Trichlorobenzene	0.818	mg/kg	0.0082	ND
1,2-Dibromo-3-chloropropane	0.818	mg/kg	0.0084	ND
1,2-Dibromoethane	0.818	mg/kg	0.0051	ND
1,2-Dichlorobenzene	0.818	mg/kg	0.0099	ND
1,2-Dichloroethane	0.818	mg/kg	0.0079	ND
1,2-Dichloropropane	0.818	mg/kg	0.0068	ND
1,3-Dichlorobenzene	0.818	mg/kg	0.0077	ND
1,4-Dichlorobenzene	0.818	mg/kg	0.0057	ND
1,4-Dioxane	0.818	mg/kg	0.39	ND
2-Butanone	0.818	mg/kg	0.010	ND
2-Hexanone	0.818	mg/kg	0.0093	ND
4-Methyl-2-pentanone	0.818	mg/kg	0.010	ND
Acetone	0.818	mg/kg	0.051	ND
Benzene	0.818	mg/kg	0.0051	ND
Bromochloromethane	0.818	mg/kg	0.0087	ND
Bromodichloromethane	0.818	mg/kg	0.0061	ND
Bromoform	0.818	mg/kg	0.0090	ND
Bromomethane	0.818	mg/kg	0.0066	ND
Carbon disulfide	0.818	mg/kg	0.0051	ND
Carbon tetrachloride	0.818	mg/kg	0.0051	ND
Chlorobenzene	0.818	mg/kg	0.0051	ND
Chloroethane	0.818	mg/kg	0.0095	ND
Chloroform	0.818	mg/kg	0.0083	ND
Chloromethane	0.818	mg/kg	0.0051	ND
cis-1,2-Dichloroethene	0.818	mg/kg	0.0055	ND
cis-1,3-Dichloropropene	0.818	mg/kg	0.0051	ND
Cyclohexane	0.818	mg/kg	0.0051	ND
Dibromochloromethane	0.818	mg/kg	0.0061	ND
Dichlorodifluoromethane	0.818	mg/kg	0.0051	ND
Ethylbenzene	0.818	mg/kg	0.0051	ND
Isopropylbenzene	0.818	mg/kg	0.0051	ND
m&p-Xylenes	0.818	mg/kg	0.0051	ND
Methyl Acetate	0.818	mg/kg	0.0087	ND
Methylcyclohexane	0.818	mg/kg	0.0051	ND
Methylene chloride	0.818	mg/kg	0.0092	ND
Methyl-t-butyl ether	0.818	mg/kg	0.0051	ND
o-Xylene	0.818	mg/kg	0.0051	ND
Styrene	0.818	mg/kg	0.0051	ND
Tetrachloroethene	0.818	mg/kg	0.0056	ND
Toluene	0.818	mg/kg	0.0051	ND
trans-1,2-Dichloroethene	0.818	mg/kg	0.0052	ND
trans-1,3-Dichloropropene	0.818	mg/kg	0.0061	ND
Trichloroethene	0.818	mg/kg	0.0060	ND
Trichlorofluoromethane	0.818	mg/kg	0.0051	ND
Vinyl chloride	0.818	mg/kg	0.0051	ND
Xylenes (Total)	0.818	mg/kg	0.0051	ND

Sample ID: SW-3-102018
 Lab#: AD07161-005
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	5	mg/l	10	170

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cac03/l	6.6	500

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	0.58	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	0.58	ND
1,4-Dioxane	1	ug/l	0.14	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	0.58	ND
2,4,5-Trichlorophenol	1	ug/l	0.58	ND
2,4,6-Trichlorophenol	1	ug/l	0.58	ND
2,4-Dichlorophenol	1	ug/l	0.14	ND
2,4-Dimethylphenol	1	ug/l	0.14	ND
2,4-Dinitrophenol	1	ug/l	2.9	ND
2,4-Dinitrotoluene	1	ug/l	0.58	ND
2,6-Dinitrotoluene	1	ug/l	0.58	ND
2-Chloronaphthalene	1	ug/l	0.58	ND
2-Chlorophenol	1	ug/l	0.58	ND
2-Methylnaphthalene	1	ug/l	0.58	ND
2-Methylphenol	1	ug/l	0.14	ND
2-Nitroaniline	1	ug/l	0.58	ND
2-Nitrophenol	1	ug/l	0.58	ND
3&4-Methylphenol	1	ug/l	0.14	ND
3,3'-Dichlorobenzidine	1	ug/l	0.58	ND
3-Nitroaniline	1	ug/l	0.58	ND
4,6-Dinitro-2-methylphenol	1	ug/l	2.9	ND
4-Bromophenyl-phenylether	1	ug/l	0.58	ND
4-Chloro-3-methylphenol	1	ug/l	0.58	ND
4-Chloroaniline	1	ug/l	0.14	ND
4-Chlorophenyl-phenylether	1	ug/l	0.58	ND
4-Nitroaniline	1	ug/l	0.58	ND
4-Nitrophenol	1	ug/l	0.58	ND
Acenaphthene	1	ug/l	0.58	ND
Acenaphthylene	1	ug/l	0.58	ND
Acetophenone	1	ug/l	0.58	ND
Anthracene	1	ug/l	0.58	ND
Atrazine	1	ug/l	0.58	ND
Benzaldehyde	1	ug/l	0.58	ND
Benzo[a]anthracene	1	ug/l	0.58	ND
Benzo[a]pyrene	1	ug/l	0.58	ND
Benzo[b]fluoranthene	1	ug/l	0.58	ND
Benzo[g,h,i]perylene	1	ug/l	0.58	ND
Benzo[k]fluoranthene	1	ug/l	0.58	ND
bis(2-Chloroethoxy)methane	1	ug/l	0.58	ND

Sample ID: SW-3-102018

Lab#: AD07161-005

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.14	ND
bis(2-Chloroisopropyl)ether	1	ug/l	0.58	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	0.58	ND
Butylbenzylphthalate	1	ug/l	0.58	ND
Caprolactam	1	ug/l	0.58	ND
Carbazole	1	ug/l	0.58	ND
Chrysene	1	ug/l	0.58	ND
Dibenzo[a,h]anthracene	1	ug/l	0.58	ND
Dibenzofuran	1	ug/l	0.14	ND
Diethylphthalate	1	ug/l	0.58	ND
Dimethylphthalate	1	ug/l	0.58	ND
Di-n-butylphthalate	1	ug/l	0.14	ND
Di-n-octylphthalate	1	ug/l	0.58	ND
Fluoranthene	1	ug/l	0.58	ND
Fluorene	1	ug/l	0.58	ND
Hexachlorobenzene	1	ug/l	0.58	ND
Hexachlorobutadiene	1	ug/l	0.58	ND
Hexachlorocyclopentadiene	1	ug/l	0.58	ND
Hexachloroethane	1	ug/l	0.58	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	0.58	ND
Isophorone	1	ug/l	0.58	ND
Naphthalene	1	ug/l	0.14	ND
Nitrobenzene	1	ug/l	0.58	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.14	ND
N-Nitrosodiphenylamine	1	ug/l	0.58	ND
Pentachlorophenol	1	ug/l	2.9	ND
Phenanthrene	1	ug/l	0.58	ND
Phenol	1	ug/l	0.58	ND
Pyrene	1	ug/l	0.58	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	92
Calcium	1	ug/l	5000	170000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1000
Magnesium	1	ug/l	5000	24000
Manganese	1	ug/l	40	980
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	8100
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	99000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-3-102018

Lab#: AD07161-005

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		55

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	36	200

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.44	1.3

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.15	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.061	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.061	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.061	ND
2,4,5-Trichlorophenol	1	mg/kg	0.061	ND
2,4,6-Trichlorophenol	1	mg/kg	0.061	ND
2,4-Dichlorophenol	1	mg/kg	0.015	ND
2,4-Dimethylphenol	1	mg/kg	0.015	ND
2,4-Dinitrophenol	1	mg/kg	0.30	ND
2,4-Dinitrotoluene	1	mg/kg	0.061	ND
2,6-Dinitrotoluene	1	mg/kg	0.061	ND
2-Chloronaphthalene	1	mg/kg	0.061	ND
2-Chlorophenol	1	mg/kg	0.061	ND
2-Methylnaphthalene	1	mg/kg	0.061	ND
2-Methylphenol	1	mg/kg	0.015	ND
2-Nitroaniline	1	mg/kg	0.061	ND
2-Nitrophenol	1	mg/kg	0.061	ND
3&4-Methylphenol	1	mg/kg	0.015	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.061	ND
3-Nitroaniline	1	mg/kg	0.061	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.30	ND
4-Bromophenyl-phenylether	1	mg/kg	0.061	ND
4-Chloro-3-methylphenol	1	mg/kg	0.061	ND
4-Chloroaniline	1	mg/kg	0.015	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.061	ND
4-Nitroaniline	1	mg/kg	0.061	ND
4-Nitrophenol	1	mg/kg	0.061	ND
Acenaphthene	1	mg/kg	0.061	ND
Acenaphthylene	1	mg/kg	0.061	ND
Acetophenone	1	mg/kg	0.061	ND
Anthracene	1	mg/kg	0.061	ND
Atrazine	1	mg/kg	0.061	ND
Benzaldehyde	1	mg/kg	0.061	ND
Benzo[a]anthracene	1	mg/kg	0.061	0.075
Benzo[a]pyrene	1	mg/kg	0.061	0.075
Benzo[b]fluoranthene	1	mg/kg	0.061	0.11
Benzo[g,h,i]perylene	1	mg/kg	0.061	ND
Benzo[k]fluoranthene	1	mg/kg	0.061	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.061	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.015	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.061	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.061	ND
Butylbenzylphthalate	1	mg/kg	0.061	ND
Caprolactam	1	mg/kg	0.061	ND
Carbazole	1	mg/kg	0.061	ND
Chrysene	1	mg/kg	0.061	0.071
Dibenzo[a,h]anthracene	1	mg/kg	0.061	ND
Dibenzofuran	1	mg/kg	0.015	ND
Diethylphthalate	1	mg/kg	0.061	ND
Dimethylphthalate	1	mg/kg	0.061	ND
Di-n-butylphthalate	1	mg/kg	0.015	ND
Di-n-octylphthalate	1	mg/kg	0.061	ND
Fluoranthene	1	mg/kg	0.061	0.13
Fluorene	1	mg/kg	0.061	ND
Hexachlorobenzene	1	mg/kg	0.061	ND
Hexachlorobutadiene	1	mg/kg	0.061	ND
Hexachlorocyclopentadiene	1	mg/kg	0.061	ND
Hexachloroethane	1	mg/kg	0.061	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.061	ND
Isophorone	1	mg/kg	0.061	ND
Naphthalene	1	mg/kg	0.015	ND
Nitrobenzene	1	mg/kg	0.061	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	ND
N-Nitrosodiphenylamine	1	mg/kg	0.061	ND
Pentachlorophenol	1	mg/kg	0.30	ND
Phenanthrene	1	mg/kg	0.061	ND
Phenol	1	mg/kg	0.061	ND
Pyrene	1	mg/kg	0.061	0.13

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	360	27000
Barium	1	mg/kg	18	160
Calcium	1	mg/kg	1800	49000
Chromium	1	mg/kg	9.1	42
Cobalt	1	mg/kg	4.5	15
Copper	1	mg/kg	9.1	45
Iron	1	mg/kg	360	35000
Lead	1	mg/kg	9.1	150
Magnesium	1	mg/kg	910	30000
Manganese	1	mg/kg	18	430
Nickel	1	mg/kg	9.1	35
Potassium	1	mg/kg	910	2800
Sodium	1	mg/kg	450	650
Vanadium	1	mg/kg	18	68
Zinc	1	mg/kg	18	200

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.5	ND
Arsenic	1	mg/kg	0.36	4.2
Beryllium	1	mg/kg	0.36	0.56
Cadmium	1	mg/kg	0.73	1.2
Selenium	1	mg/kg	3.6	ND
Silver	1	mg/kg	0.36	ND
Thallium	1	mg/kg	0.73	ND

Sample ID: SD-3-102018
 Lab#: AD07161-006
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.826	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.826	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.826	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.826	mg/kg	0.0025	ND
1,1-Dichloroethane	0.826	mg/kg	0.0015	ND
1,1-Dichloroethene	0.826	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.826	mg/kg	0.0019	ND
1,2,4-Trichlorobenzene	0.826	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.826	mg/kg	0.0025	ND
1,2-Dibromoethane	0.826	mg/kg	0.0015	ND
1,2-Dichlorobenzene	0.826	mg/kg	0.0029	ND
1,2-Dichloroethane	0.826	mg/kg	0.0023	ND
1,2-Dichloropropane	0.826	mg/kg	0.0020	ND
1,3-Dichlorobenzene	0.826	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.826	mg/kg	0.0017	ND
1,4-Dioxane	0.826	mg/kg	0.12	ND
2-Butanone	0.826	mg/kg	0.0030	ND
2-Hexanone	0.826	mg/kg	0.0027	ND
4-Methyl-2-pentanone	0.826	mg/kg	0.0030	ND
Acetone	0.826	mg/kg	0.015	ND
Benzene	0.826	mg/kg	0.0015	ND
Bromochloromethane	0.826	mg/kg	0.0026	ND
Bromodichloromethane	0.826	mg/kg	0.0018	ND
Bromoform	0.826	mg/kg	0.0026	ND
Bromomethane	0.826	mg/kg	0.0020	ND
Carbon disulfide	0.826	mg/kg	0.0015	ND
Carbon tetrachloride	0.826	mg/kg	0.0015	ND
Chlorobenzene	0.826	mg/kg	0.0015	ND
Chloroethane	0.826	mg/kg	0.0028	ND
Chloroform	0.826	mg/kg	0.0024	ND
Chloromethane	0.826	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.826	mg/kg	0.0016	ND
cis-1,3-Dichloropropene	0.826	mg/kg	0.0015	ND
Cyclohexane	0.826	mg/kg	0.0015	ND
Dibromochloromethane	0.826	mg/kg	0.0018	ND
Dichlorodifluoromethane	0.826	mg/kg	0.0015	ND
Ethylbenzene	0.826	mg/kg	0.0015	ND
Isopropylbenzene	0.826	mg/kg	0.0015	ND
m&p-Xylenes	0.826	mg/kg	0.0015	ND
Methyl Acetate	0.826	mg/kg	0.0026	ND
Methylcyclohexane	0.826	mg/kg	0.0015	ND
Methylene chloride	0.826	mg/kg	0.0027	ND
Methyl-t-butyl ether	0.826	mg/kg	0.0015	ND
o-Xylene	0.826	mg/kg	0.0015	ND
Styrene	0.826	mg/kg	0.0015	ND
Tetrachloroethene	0.826	mg/kg	0.0016	ND
Toluene	0.826	mg/kg	0.0015	ND
trans-1,2-Dichloroethene	0.826	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.826	mg/kg	0.0024	ND
Trichloroethene	0.826	mg/kg	0.0018	ND
Trichlorofluoromethane	0.826	mg/kg	0.0015	ND
Vinyl chloride	0.826	mg/kg	0.0015	ND
Xylenes (Total)	0.826	mg/kg	0.0015	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	5	mg/l	10	150

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg cac03/l	6.6	500

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3&4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.26	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	110
Calcium	1	ug/l	5000	190000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1200
Magnesium	1	ug/l	5000	27000
Manganese	1	ug/l	40	1100
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	9500
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	120000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-DUP1-102018

Lab#: AD07161-007

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	1	mg/l	2.0	41

Cyanide (Water) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	1	mg caco3/l	6.6	310

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	1.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	0.26	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	1.0	ND
2,4,5-Trichlorophenol	1	ug/l	1.0	ND
2,4,6-Trichlorophenol	1	ug/l	1.0	ND
2,4-Dichlorophenol	1	ug/l	0.26	ND
2,4-Dimethylphenol	1	ug/l	0.26	ND
2,4-Dinitrophenol	1	ug/l	5.2	ND
2,4-Dinitrotoluene	1	ug/l	1.0	ND
2,6-Dinitrotoluene	1	ug/l	1.0	ND
2-Chloronaphthalene	1	ug/l	1.0	ND
2-Chlorophenol	1	ug/l	1.0	ND
2-Methylnaphthalene	1	ug/l	1.0	ND
2-Methylphenol	1	ug/l	0.26	ND
2-Nitroaniline	1	ug/l	1.0	ND
2-Nitrophenol	1	ug/l	1.0	ND
3,4-Methylphenol	1	ug/l	0.26	ND
3,3'-Dichlorobenzidine	1	ug/l	1.0	ND
3-Nitroaniline	1	ug/l	1.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	5.2	ND
4-Bromophenyl-phenylether	1	ug/l	1.0	ND
4-Chloro-3-methylphenol	1	ug/l	1.0	ND
4-Chloroaniline	1	ug/l	0.26	ND
4-Chlorophenyl-phenylether	1	ug/l	1.0	ND
4-Nitroaniline	1	ug/l	1.0	ND
4-Nitrophenol	1	ug/l	1.0	ND
Acenaphthene	1	ug/l	1.0	ND
Acenaphthylene	1	ug/l	1.0	ND
Acetophenone	1	ug/l	1.0	ND
Anthracene	1	ug/l	1.0	ND
Atrazine	1	ug/l	1.0	ND
Benzaldehyde	1	ug/l	1.0	ND
Benzo[a]anthracene	1	ug/l	1.0	ND
Benzo[a]pyrene	1	ug/l	1.0	ND
Benzo[b]fluoranthene	1	ug/l	1.0	ND
Benzo[g,h,i]perylene	1	ug/l	1.0	ND
Benzo[k]fluoranthene	1	ug/l	1.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	1.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

bis(2-Chloroethyl)ether	1	ug/l	0.26	ND
bis(2-Chloroisopropyl)ether	1	ug/l	1.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	1.0	ND
Butylbenzylphthalate	1	ug/l	1.0	ND
Caprolactam	1	ug/l	1.0	ND
Carbazole	1	ug/l	1.0	ND
Chrysene	1	ug/l	1.0	ND
Dibenzo[a,h]anthracene	1	ug/l	1.0	ND
Dibenzofuran	1	ug/l	0.26	ND
Diethylphthalate	1	ug/l	1.0	ND
Dimethylphthalate	1	ug/l	1.0	ND
Di-n-butylphthalate	1	ug/l	0.26	ND
Di-n-octylphthalate	1	ug/l	1.0	ND
Fluoranthene	1	ug/l	1.0	ND
Fluorene	1	ug/l	1.0	ND
Hexachlorobenzene	1	ug/l	1.0	ND
Hexachlorobutadiene	1	ug/l	1.0	ND
Hexachlorocyclopentadiene	1	ug/l	1.0	ND
Hexachloroethane	1	ug/l	1.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	1.0	ND
Isophorone	1	ug/l	1.0	ND
Naphthalene	1	ug/l	0.26	ND
Nitrobenzene	1	ug/l	1.0	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.26	ND
N-Nitrosodiphenylamine	1	ug/l	1.0	ND
Pentachlorophenol	1	ug/l	5.2	ND
Phenanthrene	1	ug/l	1.0	ND
Phenol	1	ug/l	1.0	ND
Pyrene	1	ug/l	1.0	ND

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	9000
Barium	1	ug/l	50	160
Calcium	1	ug/l	5000	76000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	20000
Magnesium	1	ug/l	5000	23000
Manganese	1	ug/l	40	4600
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	6200
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	31000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	110

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	2.6
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	5.8
Lead	1	ug/l	3.0	24
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-4-102018

Lab#: AD07161-008

Matrix: Aqueous

Collection Date: 10/17/2018

Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: SD-4-102018
 Lab#: AD07161-009
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		30

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	67	100

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.80	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.28	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.11	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.11	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.11	ND
2,4,5-Trichlorophenol	1	mg/kg	0.11	ND
2,4,6-Trichlorophenol	1	mg/kg	0.11	ND
2,4-Dichlorophenol	1	mg/kg	0.028	ND
2,4-Dimethylphenol	1	mg/kg	0.028	ND
2,4-Dinitrophenol	1	mg/kg	0.56	ND
2,4-Dinitrotoluene	1	mg/kg	0.11	ND
2,6-Dinitrotoluene	1	mg/kg	0.11	ND
2-Chloronaphthalene	1	mg/kg	0.11	ND
2-Chlorophenol	1	mg/kg	0.11	ND
2-Methylnaphthalene	1	mg/kg	0.11	ND
2-Methylphenol	1	mg/kg	0.028	ND
2-Nitroaniline	1	mg/kg	0.11	ND
2-Nitrophenol	1	mg/kg	0.11	ND
3,4-Methylphenol	1	mg/kg	0.028	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.11	ND
3-Nitroaniline	1	mg/kg	0.11	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.56	ND
4-Bromophenyl-phenylether	1	mg/kg	0.11	ND
4-Chloro-3-methylphenol	1	mg/kg	0.11	ND
4-Chloroaniline	1	mg/kg	0.028	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.11	ND
4-Nitroaniline	1	mg/kg	0.11	ND
4-Nitrophenol	1	mg/kg	0.11	ND
Acenaphthene	1	mg/kg	0.11	ND
Acenaphthylene	1	mg/kg	0.11	ND
Acetophenone	1	mg/kg	0.11	ND
Anthracene	1	mg/kg	0.11	ND
Atrazine	1	mg/kg	0.11	ND
Benzaldehyde	1	mg/kg	0.11	0.60
Benzo[a]anthracene	1	mg/kg	0.11	0.14
Benzo[a]pyrene	1	mg/kg	0.11	0.17
Benzo[b]fluoranthene	1	mg/kg	0.11	0.26
Benzo[g,h,i]perylene	1	mg/kg	0.11	0.14
Benzo[k]fluoranthene	1	mg/kg	0.11	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.11	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.028	ND

Sample ID: SD-4-102018
 Lab#: AD07161-009
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

bis(2-Chloroisopropyl)ether	1	mg/kg	0.11	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.11	ND
Butylbenzylphthalate	1	mg/kg	0.11	ND
Caprolactam	1	mg/kg	0.11	ND
Carbazole	1	mg/kg	0.11	ND
Chrysene	1	mg/kg	0.11	0.18
Dibenzo[a,h]anthracene	1	mg/kg	0.11	ND
Dibenzofuran	1	mg/kg	0.028	ND
Diethylphthalate	1	mg/kg	0.11	ND
Dimethylphthalate	1	mg/kg	0.11	ND
Di-n-butylphthalate	1	mg/kg	0.028	ND
Di-n-octylphthalate	1	mg/kg	0.11	ND
Fluoranthene	1	mg/kg	0.11	0.27
Fluorene	1	mg/kg	0.11	ND
Hexachlorobenzene	1	mg/kg	0.11	ND
Hexachlorobutadiene	1	mg/kg	0.11	ND
Hexachlorocyclopentadiene	1	mg/kg	0.11	ND
Hexachloroethane	1	mg/kg	0.11	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.11	ND
Isophorone	1	mg/kg	0.11	ND
Naphthalene	1	mg/kg	0.028	ND
Nitrobenzene	1	mg/kg	0.11	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.028	ND
N-Nitrosodiphenylamine	1	mg/kg	0.11	ND
Pentachlorophenol	1	mg/kg	0.56	ND
Phenanthrene	1	mg/kg	0.11	0.12
Phenol	1	mg/kg	0.11	ND
Pyrene	1	mg/kg	0.11	0.27

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	670	16000
Barium	1	mg/kg	33	210
Calcium	1	mg/kg	3300	10000
Chromium	1	mg/kg	17	40
Cobalt	1	mg/kg	8.3	13
Copper	1	mg/kg	17	45
Iron	1	mg/kg	670	44000
Lead	1	mg/kg	17	73
Magnesium	1	mg/kg	1700	7300
Manganese	1	mg/kg	33	1300
Nickel	1	mg/kg	17	30
Potassium	1	mg/kg	1700	3400
Sodium	1	mg/kg	830	ND
Vanadium	1	mg/kg	33	52
Zinc	1	mg/kg	33	260

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	2.7	ND
Arsenic	1	mg/kg	0.67	4.5
Beryllium	1	mg/kg	0.67	ND
Cadmium	1	mg/kg	1.3	1.9
Selenium	1	mg/kg	6.7	ND
Silver	1	mg/kg	0.67	ND
Thallium	1	mg/kg	1.3	ND

Sample ID: SD-4-102018
 Lab#: AD07161-009
 Matrix: Sediment/Encore

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.72	mg/kg	0.0057	ND
1,1,2,2-Tetrachloroethane	1.72	mg/kg	0.0094	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.72	mg/kg	0.0057	ND
1,1,2-Trichloroethane	1.72	mg/kg	0.0095	ND
1,1-Dichloroethane	1.72	mg/kg	0.0057	ND
1,1-Dichloroethene	1.72	mg/kg	0.0057	ND
1,2,3-Trichlorobenzene	1.72	mg/kg	0.0071	ND
1,2,4-Trichlorobenzene	1.72	mg/kg	0.0093	ND
1,2-Dibromo-3-chloropropane	1.72	mg/kg	0.0094	ND
1,2-Dibromoethane	1.72	mg/kg	0.0057	ND
1,2-Dichlorobenzene	1.72	mg/kg	0.011	ND
1,2-Dichloroethane	1.72	mg/kg	0.0089	ND
1,2-Dichloropropane	1.72	mg/kg	0.0076	ND
1,3-Dichlorobenzene	1.72	mg/kg	0.0087	ND
1,4-Dichlorobenzene	1.72	mg/kg	0.0064	ND
1,4-Dioxane	1.72	mg/kg	0.44	ND
2-Butanone	1.72	mg/kg	0.011	ND
2-Hexanone	1.72	mg/kg	0.010	ND
4-Methyl-2-pentanone	1.72	mg/kg	0.011	ND
Acetone	1.72	mg/kg	0.057	ND
Benzene	1.72	mg/kg	0.0057	ND
Bromochloromethane	1.72	mg/kg	0.0098	ND
Bromodichloromethane	1.72	mg/kg	0.0069	ND
Bromoform	1.72	mg/kg	0.010	ND
Bromomethane	1.72	mg/kg	0.0075	ND
Carbon disulfide	1.72	mg/kg	0.0057	ND
Carbon tetrachloride	1.72	mg/kg	0.0057	ND
Chlorobenzene	1.72	mg/kg	0.0057	ND
Chloroethane	1.72	mg/kg	0.011	ND
Chloroform	1.72	mg/kg	0.0094	ND
Chloromethane	1.72	mg/kg	0.0057	ND
cis-1,2-Dichloroethene	1.72	mg/kg	0.0062	ND
cis-1,3-Dichloropropene	1.72	mg/kg	0.0057	ND
Cyclohexane	1.72	mg/kg	0.0057	ND
Dibromochloromethane	1.72	mg/kg	0.0069	ND
Dichlorodifluoromethane	1.72	mg/kg	0.0057	ND
Ethylbenzene	1.72	mg/kg	0.0057	ND
Isopropylbenzene	1.72	mg/kg	0.0057	ND
m&p-Xylenes	1.72	mg/kg	0.0057	ND
Methyl Acetate	1.72	mg/kg	0.0098	ND
Methylcyclohexane	1.72	mg/kg	0.0057	ND
Methylene chloride	1.72	mg/kg	0.010	ND
Methyl-t-butyl ether	1.72	mg/kg	0.0057	ND
o-Xylene	1.72	mg/kg	0.0057	ND
Styrene	1.72	mg/kg	0.0057	ND
Tetrachloroethene	1.72	mg/kg	0.0063	ND
Toluene	1.72	mg/kg	0.0057	ND
trans-1,2-Dichloroethene	1.72	mg/kg	0.0058	ND
trans-1,3-Dichloropropene	1.72	mg/kg	0.0091	ND
Trichloroethene	1.72	mg/kg	0.0067	ND
Trichlorofluoromethane	1.72	mg/kg	0.0057	ND
Vinyl chloride	1.72	mg/kg	0.0057	ND
Xylenes (Total)	1.72	mg/kg	0.0057	ND

Sample ID: TB-3
 Lab#: AD07161-010
 Matrix: Aqueous

Collection Date: 10/17/2018
 Receipt Date: 10/17/2018

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-1-102018
Lab#: AD07325-001
Matrix: Aqueous

Collection Date: 10/23/2018
Receipt Date: 10/24/2018

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Sample ID: MW-11-102018

Lab#: AD07325-002

Matrix: Aqueous

Collection Date: 10/23/2018

Receipt Date: 10/24/2018

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Sample ID: GW-DUP1-102018

Lab#: AD07325-003

Matrix: Aqueous

Collection Date: 10/23/2018

Receipt Date: 10/24/2018

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M138677.D

Analysis Date: 10/22/18 07:03

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 485419

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M138721.D

Analysis Date: 10/23/18 08:03

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 485474

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M138721.D

Analysis Date: 10/23/18 08:03

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-43-2	Benzene	0.50	U	1634-04-4	Methyl-t-butyl ether	0.50	U
100-41-4	Ethylbenzene	1.0	U	95-47-6	o-Xylene	1.0	U
79601-23-1	m&p-Xylenes	1.0	U	108-88-3	Toluene	1.0	U

Worksheet #: 489339

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a**Chlordane (Total) is sum of a-Chlordane and y-Chlordane.*

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 1M112523.D

Analysis Date: 10/24/18 09:59

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α-Chlordane and γ-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M139070.D

Analysis Date: 10/27/18 13:17

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M139227.D

Analysis Date: 10/29/18 09:23

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 485858

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 1M113019.D

Analysis Date: 11/01/18 01:13

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0010	U	56-23-5	Carbon Tetrachloride	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0016	U	108-90-7	Chlorobenzene	0.0010	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0010	U	75-00-3	Chloroethane	0.0019	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0016	U
75-34-3	1,1-Dichloroethane	0.0010	U	74-87-3	Chloromethane	0.0010	U
75-35-4	1,1-Dichloroethene	0.0010	U	156-59-2	cis-1,2-Dichloroethene	0.0011	U
87-61-6	1,2,3-Trichlorobenzene	0.0012	U	10061-01-5	cis-1,3-Dichloropropene	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	0.0016	U	110-82-7	Cyclohexane	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0016	U	124-48-1	Dibromochloromethane	0.0012	U
106-93-4	1,2-Dibromoethane	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0010	U
95-50-1	1,2-Dichlorobenzene	0.0019	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0016	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0013	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0015	U	79-20-9	Methyl Acetate	0.0017	U
106-46-7	1,4-Dichlorobenzene	0.0011	U	108-87-2	Methylcyclohexane	0.0010	U
123-91-1	1,4-Dioxane	0.077	U	75-09-2	Methylene Chloride	0.0018	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0018	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0010	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0011	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0010	U
75-27-4	Bromodichloromethane	0.0012	U	10061-02-6	trans-1,3-Dichloropropene	0.0016	U
75-25-2	Bromoform	0.0018	U	79-01-6	Trichloroethene	0.0012	U
74-83-9	Bromomethane	0.0013	U	75-69-4	Trichlorofluoromethane	0.0010	U
75-15-0	Carbon Disulfide	0.0010	U	75-01-4	Vinyl Chloride	0.0010	U

Worksheet #: 486412

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and γ-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07118-001

Client Id: LMW-2-102018 U

Data File: 3M138709.D

Analysis Date: 10/22/18 16:12

Date Rec/Extracted: 10/15/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485419

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07118-003

Client Id: PC-1-10 2018 U

Data File: 3M138710.D

Analysis Date: 10/22/18 16:29

Date Rec/Extracted: 10/15/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485419

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07118-005

Client Id: GW-DUP1-102018 U

Data File: 3M138711.D

Analysis Date: 10/22/18 16:46

Date Rec/Extracted: 10/15/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485419

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07118-007

Client Id: MW-11-102018 U

Data File: 3M138724.D

Analysis Date: 10/23/18 08:55

Date Rec/Extracted: 10/15/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-43-2	Benzene	0.50	U	1634-04-4	Methyl-t-butyl ether	0.50	U
100-41-4	Ethylbenzene	1.0	17	95-47-6	o-Xylene	1.0	U
79601-23-1	m&p-Xylenes	1.0	2.0	108-88-3	Toluene	1.0	U
1330-20-7	Xylenes (Total)	1.0	2.0				

Worksheet #: 489339

Total Target Concentration 19

ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a Chlordane (Total) is sum of a-Chlordane and y-Chlordane.*

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07118-009

Client Id: TB-1

Data File: 3M139246.D

Analysis Date: 10/29/18 14:50

Date Rec/Extracted: 10/15/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485858

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07137-001

Client Id: LMW-4-102018 U

Data File: 3M138712.D

Analysis Date: 10/22/18 17:04

Date Rec/Extracted: 10/16/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485475

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and γ-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07137-003

Client Id: PC-2-102018 U

Data File: 3M138713.D

Analysis Date: 10/22/18 17:16

Date Rec/Extracted: 10/16/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485474

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07137-005

Client Id: PC-3-102018 U

Data File: 3M138722.D

Analysis Date: 10/23/18 08:21

Date Rec/Extracted: 10/16/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485474

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07137-007

Client Id: TB-2

Data File: 3M138740.D

Analysis Date: 10/23/18 13:32

Date Rec/Extracted: 10/16/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 485474

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-001

Client Id: SW-1-102018

Data File: 3M139091.D

Analysis Date: 10/27/18 19:17

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-002

Client Id: SD-1-102018

Data File: 1M113026.D

Analysis Date: 11/01/18 03:43

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 5.09g

Final Vol: NA

Dilution: 0.982

Solids: 36

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0027	U	56-23-5	Carbon Tetrachloride	0.0027	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0044	U	108-90-7	Chlorobenzene	0.0027	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0027	U	75-00-3	Chloroethane	0.0051	U
79-00-5	1,1,2-Trichloroethane	0.0045	U	67-66-3	Chloroform	0.0044	U
75-34-3	1,1-Dichloroethane	0.0027	U	74-87-3	Chloromethane	0.0027	U
75-35-4	1,1-Dichloroethene	0.0027	U	156-59-2	cis-1,2-Dichloroethene	0.0029	U
87-61-6	1,2,3-Trichlorobenzene	0.0034	U	10061-01-5	cis-1,3-Dichloropropene	0.0027	U
120-82-1	1,2,4-Trichlorobenzene	0.0044	U	110-82-7	Cyclohexane	0.0027	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0045	U	124-48-1	Dibromochloromethane	0.0033	U
106-93-4	1,2-Dibromoethane	0.0027	U	75-71-8	Dichlorodifluoromethane	0.0027	U
95-50-1	1,2-Dichlorobenzene	0.0053	U	100-41-4	Ethylbenzene	0.0027	U
107-06-2	1,2-Dichloroethane	0.0042	U	98-82-8	Isopropylbenzene	0.0027	U
78-87-5	1,2-Dichloropropane	0.0036	U	79601-23-1	m&p-Xylenes	0.0027	U
541-73-1	1,3-Dichlorobenzene	0.0041	U	79-20-9	Methyl Acetate	0.0046	U
106-46-7	1,4-Dichlorobenzene	0.0030	U	108-87-2	Methylcyclohexane	0.0027	U
123-91-1	1,4-Dioxane	0.21	U	75-09-2	Methylene Chloride	0.0049	U
78-93-3	2-Butanone	0.0054	U	1634-04-4	Methyl-t-butyl ether	0.0027	U
591-78-6	2-Hexanone	0.0049	U	95-47-6	o-Xylene	0.0027	U
108-10-1	4-Methyl-2-Pentanone	0.0054	U	100-42-5	Styrene	0.0027	U
67-64-1	Acetone	0.027	U	127-18-4	Tetrachloroethene	0.0030	U
71-43-2	Benzene	0.0027	U	108-88-3	Toluene	0.0027	U
74-97-5	Bromochloromethane	0.0047	U	156-60-5	trans-1,2-Dichloroethene	0.0028	U
75-27-4	Bromodichloromethane	0.0033	U	10061-02-6	trans-1,3-Dichloropropene	0.0043	U
75-25-2	Bromoform	0.0048	U	79-01-6	Trichloroethene	0.0032	U
74-83-9	Bromomethane	0.0035	U	75-69-4	Trichlorofluoromethane	0.0027	U
75-15-0	Carbon Disulfide	0.0027	U	75-01-4	Vinyl Chloride	0.0027	U
1330-20-7	Xylenes (Total)	0.0027	U				

Worksheet #: 486412

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-003

Client Id: SW-2-102018

Data File: 3M139092.D

Analysis Date: 10/27/18 19:35

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-004

Client Id: SD-2-102018

Data File: 1M113027.D

Analysis Date: 11/01/18 04:05

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 6.11g

Final Vol: NA

Dilution: 0.818

Solids: 16

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0051	U	56-23-5	Carbon Tetrachloride	0.0051	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0083	U	108-90-7	Chlorobenzene	0.0051	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0051	U	75-00-3	Chloroethane	0.0095	U
79-00-5	1,1,2-Trichloroethane	0.0085	U	67-66-3	Chloroform	0.0083	U
75-34-3	1,1-Dichloroethane	0.0051	U	74-87-3	Chloromethane	0.0051	U
75-35-4	1,1-Dichloroethene	0.0051	U	156-59-2	cis-1,2-Dichloroethene	0.0055	U
87-61-6	1,2,3-Trichlorobenzene	0.0063	U	10061-01-5	cis-1,3-Dichloropropene	0.0051	U
120-82-1	1,2,4-Trichlorobenzene	0.0082	U	110-82-7	Cyclohexane	0.0051	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0084	U	124-48-1	Dibromochloromethane	0.0061	U
106-93-4	1,2-Dibromoethane	0.0051	U	75-71-8	Dichlorodifluoromethane	0.0051	U
95-50-1	1,2-Dichlorobenzene	0.0099	U	100-41-4	Ethylbenzene	0.0051	U
107-06-2	1,2-Dichloroethane	0.0079	U	98-82-8	Isopropylbenzene	0.0051	U
78-87-5	1,2-Dichloropropane	0.0068	U	79601-23-1	m&p-Xylenes	0.0051	U
541-73-1	1,3-Dichlorobenzene	0.0077	U	79-20-9	Methyl Acetate	0.0087	U
106-46-7	1,4-Dichlorobenzene	0.0057	U	108-87-2	Methylcyclohexane	0.0051	U
123-91-1	1,4-Dioxane	0.39	U	75-09-2	Methylene Chloride	0.0092	U
78-93-3	2-Butanone	0.010	U	1634-04-4	Methyl-t-butyl ether	0.0051	U
591-78-6	2-Hexanone	0.0093	U	95-47-6	o-Xylene	0.0051	U
108-10-1	4-Methyl-2-Pentanone	0.010	U	100-42-5	Styrene	0.0051	U
67-64-1	Acetone	0.051	U	127-18-4	Tetrachloroethene	0.0056	U
71-43-2	Benzene	0.0051	U	108-88-3	Toluene	0.0051	U
74-97-5	Bromochloromethane	0.0087	U	156-60-5	trans-1,2-Dichloroethene	0.0052	U
75-27-4	Bromodichloromethane	0.0061	U	10061-02-6	trans-1,3-Dichloropropene	0.0081	U
75-25-2	Bromoform	0.0090	U	79-01-6	Trichloroethene	0.0060	U
74-83-9	Bromomethane	0.0066	U	75-69-4	Trichlorofluoromethane	0.0051	U
75-15-0	Carbon Disulfide	0.0051	U	75-01-4	Vinyl Chloride	0.0051	U
1330-20-7	Xylenes (Total)	0.0051	U				

Worksheet #: 486412

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-005

Client Id: SW-3-102018

Data File: 3M139093.D

Analysis Date: 10/27/18 19:52

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-006

Client Id: SD-3-102018

Data File: 1M113028.D

Analysis Date: 11/01/18 04:26

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 6.05g

Final Vol: NA

Dilution: 0.826

Solids: 55

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0015	U	56-23-5	Carbon Tetrachloride	0.0015	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0024	U	108-90-7	Chlorobenzene	0.0015	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0015	U	75-00-3	Chloroethane	0.0028	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0024	U
75-34-3	1,1-Dichloroethane	0.0015	U	74-87-3	Chloromethane	0.0015	U
75-35-4	1,1-Dichloroethene	0.0015	U	156-59-2	cis-1,2-Dichloroethene	0.0016	U
87-61-6	1,2,3-Trichlorobenzene	0.0019	U	10061-01-5	cis-1,3-Dichloropropene	0.0015	U
120-82-1	1,2,4-Trichlorobenzene	0.0024	U	110-82-7	Cyclohexane	0.0015	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0025	U	124-48-1	Dibromochloromethane	0.0018	U
106-93-4	1,2-Dibromoethane	0.0015	U	75-71-8	Dichlorodifluoromethane	0.0015	U
95-50-1	1,2-Dichlorobenzene	0.0029	U	100-41-4	Ethylbenzene	0.0015	U
107-06-2	1,2-Dichloroethane	0.0023	U	98-82-8	Isopropylbenzene	0.0015	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0015	U
541-73-1	1,3-Dichlorobenzene	0.0023	U	79-20-9	Methyl Acetate	0.0026	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	108-87-2	Methylcyclohexane	0.0015	U
123-91-1	1,4-Dioxane	0.12	U	75-09-2	Methylene Chloride	0.0027	U
78-93-3	2-Butanone	0.0030	U	1634-04-4	Methyl-t-butyl ether	0.0015	U
591-78-6	2-Hexanone	0.0027	U	95-47-6	o-Xylene	0.0015	U
108-10-1	4-Methyl-2-Pentanone	0.0030	U	100-42-5	Styrene	0.0015	U
67-64-1	Acetone	0.015	U	127-18-4	Tetrachloroethene	0.0016	U
71-43-2	Benzene	0.0015	U	108-88-3	Toluene	0.0015	U
74-97-5	Bromochloromethane	0.0026	U	156-60-5	trans-1,2-Dichloroethene	0.0015	U
75-27-4	Bromodichloromethane	0.0018	U	10061-02-6	trans-1,3-Dichloropropene	0.0024	U
75-25-2	Bromoform	0.0026	U	79-01-6	Trichloroethene	0.0018	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0015	U
75-15-0	Carbon Disulfide	0.0015	U	75-01-4	Vinyl Chloride	0.0015	U
1330-20-7	Xylenes (Total)	0.0015	U				

Worksheet #: 486412

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-007

Client Id: SW-DUP1-102018

Data File: 3M139094.D

Analysis Date: 10/27/18 20:09

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) Is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-008

Client Id: SW-4-102018

Data File: 3M139095.D

Analysis Date: 10/27/18 20:26

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of α -Chlordane and γ -Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-009

Client Id: SD-4-102018

Data File: 1M113029.D

Analysis Date: 11/01/18 04:48

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 2.9g

Final Vol: NA

Dilution: 1.72

Solids: 30

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0057	U	56-23-5	Carbon Tetrachloride	0.0057	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0094	U	108-90-7	Chlorobenzene	0.0057	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0057	U	75-00-3	Chloroethane	0.011	U
79-00-5	1,1,2-Trichloroethane	0.0095	U	67-66-3	Chloroform	0.0094	U
75-34-3	1,1-Dichloroethane	0.0057	U	74-87-3	Chloromethane	0.0057	U
75-35-4	1,1-Dichloroethene	0.0057	U	156-59-2	cis-1,2-Dichloroethene	0.0062	U
87-61-6	1,2,3-Trichlorobenzene	0.0071	U	10061-01-5	cis-1,3-Dichloropropene	0.0057	U
120-82-1	1,2,4-Trichlorobenzene	0.0093	U	110-82-7	Cyclohexane	0.0057	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0094	U	124-48-1	Dibromochloromethane	0.0069	U
106-93-4	1,2-Dibromoethane	0.0057	U	75-71-8	Dichlorodifluoromethane	0.0057	U
95-50-1	1,2-Dichlorobenzene	0.011	U	100-41-4	Ethylbenzene	0.0057	U
107-06-2	1,2-Dichloroethane	0.0089	U	98-82-8	Isopropylbenzene	0.0057	U
78-87-5	1,2-Dichloropropane	0.0076	U	79601-23-1	m&p-Xylenes	0.0057	U
541-73-1	1,3-Dichlorobenzene	0.0087	U	79-20-9	Methyl Acetate	0.0098	U
106-46-7	1,4-Dichlorobenzene	0.0064	U	108-87-2	Methylcyclohexane	0.0057	U
123-91-1	1,4-Dioxane	0.44	U	75-09-2	Methylene Chloride	0.010	U
78-93-3	2-Butanone	0.011	U	1634-04-4	Methyl-t-butyl ether	0.0057	U
591-78-6	2-Hexanone	0.010	U	95-47-6	o-Xylene	0.0057	U
108-10-1	4-Methyl-2-Pentanone	0.011	U	100-42-5	Styrene	0.0057	U
67-64-1	Acetone	0.057	U	127-18-4	Tetrachloroethene	0.0063	U
71-43-2	Benzene	0.0057	U	108-88-3	Toluene	0.0057	U
74-97-5	Bromochloromethane	0.0098	U	156-60-5	trans-1,2-Dichloroethene	0.0058	U
75-27-4	Bromodichloromethane	0.0069	U	10061-02-6	trans-1,3-Dichloropropene	0.0091	U
75-25-2	Bromoform	0.010	U	79-01-6	Trichloroethene	0.0067	U
74-83-9	Bromomethane	0.0075	U	75-69-4	Trichlorofluoromethane	0.0057	U
75-15-0	Carbon Disulfide	0.0057	U	75-01-4	Vinyl Chloride	0.0057	U
1330-20-7	Xylenes (Total)	0.0057	U				

Worksheet #: 486412

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD07161-010

Client Id: TB-3

Data File: 1M112535.D

Analysis Date: 10/24/18 14:16

Date Rec/Extracted: 10/17/18-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 624.1

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 489216

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
1M113019.D	DAILY BLANK	S	11/01/18 01:13	1		109	110	82	108		
1M113026.D	AD07161-002	S	11/01/18 03:43	1		90	98	85	107		
1M113027.D	AD07161-004	S	11/01/18 04:05	1		101	95	94	110		
1M113028.D	AD07161-006	S	11/01/18 04:26	1		112	112	79	109		
1M113029.D	AD07161-009	S	11/01/18 04:48	1		108	106	87	82		
1M113022.D	MBS73545	S	11/01/18 02:18	1		99	99	65*	93		
1M113043.D	AD07338-001(MS)	S	11/01/18 09:48	1		89	109	87	118		
1M113045.D	AD07338-001(MSD)	S	11/01/18 10:30	1		96	96	87	90		
1M113048.D	AD07338-001	S	11/01/18 11:35	1		97	116	92	101		

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73519

8101509 0116

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M139233.D		MBS73519		10/29/2018 11:06:00 A			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	33.0148	0	20	165	0	300
Dichlorodifluoromethane	1	25.5881	0	20	128	1	300
Chloromethane	1	27.6977	0	20	138	1	205
Bromomethane	1	22.039	0	20	110	15	185
Vinyl Chloride	1	19.0292	0	20	95	5	195
Chloroethane	1	23.6058	0	20	118	40	160
Trichlorofluoromethane	1	18.0751	0	20	90	50	150
Ethyl ether	1	17.7488	0	20	89	10	160
Furan	1	17.8747	0	20	89	20	200
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.8828	0	20	94	20	200
Methylene Chloride	1	22.6976	0	20	113	60	140
Acrolein	1	84.7701	0	100	85	60	140
Acrylonitrile	1	20.7434	0	20	104	60	140
Iodomethane	1	15.7847	0	20	79	1	200
Acetone	1	105.657	0	100	106	10	200
Carbon Disulfide	1	18.0536	0	20	90	10	160
t-Butyl Alcohol	1	84.9266	0	100	85	1	200
n-Hexane	1	29.325	0	20	147	0	300
Di-isopropyl-ether	1	23.1333	0	20	116	20	200
1,1-Dichloroethene	1	19.3273	0	20	97	50	150
Methyl Acetate	1	19.3743	0	20	97	20	150
Methyl-t-butyl ether	1	18.9828	0	20	95	20	200
1,1-Dichloroethane	1	19.7245	0	20	99	70	130
trans-1,2-Dichloroethene	1	16.9502	0	20	85	70	130
Ethyl-t-butyl ether	1	21.6079	0	20	108	20	160
cis-1,2-Dichloroethene	1	20.6934	0	20	103	30	160
Bromochloromethane	1	22.3681	0	20	112	30	160
2,2-Dichloropropane	1	22.0845	0	20	110	10	200
Ethyl acetate	1	20.808	0	20	104	10	200
1,4-Dioxane	1	901.4514	0	1000	90	0	250
1,1-Dichloropropene	1	21.2336	0	20	106	40	150
Chloroform	1	18.0866	0	20	90	70	135
Cyclohexane	1	116.3247	0	20	582 *	20	200
1,2-Dichloroethane	1	22.041	0	20	110	70	130
2-Butanone	1	24.2256	0	20	121	0	220
1,1,1-Trichloroethane	1	16.6562	0	20	83	70	130
Carbon Tetrachloride	1	17.0884	0	20	85	70	130
Vinyl Acetate	1	21.4041	0	20	107	20	200
Bromodichloromethane	1	18.8436	0	20	94	65	135
Methylcyclohexane	1	28.4928	0	20	142	10	200
Dibromomethane	1	19.1978	0	20	96	20	160
1,2-Dichloropropane	1	22.1443	0	20	111	35	135
Trichloroethene	1	17.2095	0	20	86	65	135
Benzene	1	22.8892	0	20	114	65	135
tert-Amyl methyl ether	1	19.5938	0	20	98	20	150
Iso-propylacetate	1	25.6906	0	20	128	10	200
Methyl methacrylate	1	26.659	0	20	133	10	200
Dibromochloromethane	1	16.7435	0	20	84	70	135
2-Chloroethylvinylether	1	25.1888	0	20	126	1	225
cis-1,3-Dichloropropene	1	20.0696	0	20	100	25	175
trans-1,3-Dichloropropene	1	18.4804	0	20	92	50	150
Ethyl methacrylate	1	23.3186	0	20	117	10	200
1,1,2-Trichloroethane	1	23.22	0	20	116	70	130
1,2-Dibromoethane	1	17.3738	0	20	87	20	150
1,3-Dichloropropane	1	23.0564	0	20	115	20	200
4-Methyl-2-Pentanone	1	32.6288	0	20	163	10	200
2-Hexanone	1	29.7317	0	20	149	10	200
Tetrachloroethene	1	22.4335	0	20	112	70	130
Toluene	1	34.5038	0	20	173 *	70	130
1,1,1,2-Tetrachloroethane	1	21.0425	0	20	105	40	160
Chlorobenzene	1	17.6718	0	20	88	65	135

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73519

n-Butyl acrylate	1	26.5257	0	20	133	10	200
n-Amyl acetate	1	28.1864	0	20	141	20	150
Bromoform	1	17.2121	0	20	86	70	130
Ethylbenzene	1	29.1574	0	20	146*	60	140
1,1,2,2-Tetrachloroethane	1	22.9019	0	20	115	60	140
Styrene	1	23.4459	0	20	117	20	160
m&p-Xylenes	1	76.8077	0	40	192	20	200
o-Xylene	1	34.3057	0	20	172	20	200
trans-1,4-Dichloro-2-butene	1	21.0367	0	20	105	10	200
1,3-Dichlorobenzene	1	19.2558	0	20	96	70	130
1,4-Dichlorobenzene	1	17.4636	0	20	87	65	135
1,2-Dichlorobenzene	1	17.965	0	20	90	65	135
Isopropylbenzene	1	24.7811	0	20	124	20	160
Cyclohexanone	1	172.1431	0	100	172	0	300
Camphene	1	19.9976	0	20	100	10	200
1,2,3-Trichloropropane	1	22.1199	0	20	111	30	150
2-Chlorotoluene	1	24.6279	0	20	123	30	160
p-Ethyltoluene	1	46.831	0	20	234	10	250
4-Chlorotoluene	1	20.8057	0	20	104	30	150
n-Propylbenzene	1	28.6275	0	20	143	20	160
Bromobenzene	1	21.3593	0	20	107	30	150
1,3,5-Trimethylbenzene	1	39.086	0	20	195	30	200
Butyl methacrylate	1	28.6141	0	20	143	10	200
t-Butylbenzene	1	28.1974	0	20	141	20	160
1,2,4-Trimethylbenzene	1	61.9418	0	20	310*	30	200
sec-Butylbenzene	1	24.6986	0	20	123	20	160
4-Isopropyltoluene	1	24.7156	0	20	124	30	150
n-Butylbenzene	1	32.9559	0	20	165	20	200
p-Diethylbenzene	1	64.5285	0	20	323*	10	250
1,2,4,5-Tetramethylbenzene	1	35.9983	0	20	180	10	200
1,2-Dibromo-3-Chloropropane	1	18.6766	0	20	93	0	200
Camphor	1	109.6548	0	200	55	0	200
Hexachlorobutadiene	1	16.1399	0	20	81	20	170
1,2,4-Trichlorobenzene	1	18.9818	0	20	95	5	200
1,2,3-Trichlorobenzene	1	18.2076	0	20	91	0	200
Naphthalene	1	42.2336	0	20	211	0	250

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: MBS73432

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138681.D		MBS73432		10/22/2018 8:11:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	0	0	20	0	0	300
Dichlorodifluoromethane	1	36.9189	0	20	185	1	300
Chloromethane	1	30.9548	0	20	155	1	205
Bromomethane	1	26.3488	0	20	132	15	185
Vinyl Chloride	1	22.0482	0	20	110	5	195
Chloroethane	1	22.5816	0	20	113	40	160
Trichlorofluoromethane	1	18.6777	0	20	93	50	150
Ethyl ether	1	17.2511	0	20	86	10	160
Furan	1	16.4338	0	20	82	20	200
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.9656	0	20	120	20	200
Methylene Chloride	1	22.5274	0	20	113	60	140
Acrolein	1	82.8261	0	100	83	60	140
Acrylonitrile	1	18.3742	0	20	92	60	140
Iodomethane	1	20.4485	0	20	102	1	200
Acetone	1	90.2276	0	100	90	10	200
Carbon Disulfide	1	19.2684	0	20	96	10	160
t-Butyl Alcohol	1	67.2232	0	100	67	1	200
n-Hexane	1	22.687	0	20	113	0	300
Di-isopropyl-ether	1	19.715	0	20	99	20	200
1,1-Dichloroethene	1	20.1395	0	20	101	50	150
Methyl Acetate	1	18.1582	0	20	91	20	150
Methyl-t-butyl ether	1	18.3222	0	20	92	20	200
1,1-Dichloroethane	1	18.3584	0	20	92	70	130
trans-1,2-Dichloroethene	1	19.5167	0	20	98	70	130
Ethyl-t-butyl ether	1	18.5598	0	20	93	20	160
cis-1,2-Dichloroethene	1	19.8297	0	20	99	30	160
Bromochloromethane	1	16.6762	0	20	83	30	160
2,2-Dichloropropane	1	23.3858	0	20	117	10	200
Ethyl acetate	1	18.2827	0	20	91	10	200
1,4-Dioxane	1	877.5509	0	1000	88	0	250
1,1-Dichloropropene	1	20.8795	0	20	104	40	150
Chloroform	1	17.9705	0	20	90	70	135
Cyclohexane	1	21.9844	0	20	110	20	200
1,2-Dichloroethane	1	23.1102	0	20	116	70	130
2-Butanone	1	13.4808	0	20	67	0	220
1,1,1-Trichloroethane	1	19.0825	0	20	95	70	130
Carbon Tetrachloride	1	19.4715	0	20	97	70	130
Vinyl Acetate	1	19.3438	0	20	97	20	200
Bromodichloromethane	1	19.0583	0	20	95	65	135
Methylcyclohexane	1	21.4085	0	20	107	10	200
Dibromomethane	1	22.72	0	20	114	20	160
1,2-Dichloropropane	1	19.0447	0	20	95	35	135
Trichloroethene	1	19.3188	0	20	97	65	135
Benzene	1	21.8995	0	20	109	65	135
tert-Amyl methyl ether	1	17.6296	0	20	88	20	150
Iso-propylacetate	1	15.3624	0	20	77	10	200
Methyl methacrylate	1	15.9358	0	20	80	10	200
Dibromochloromethane	1	15.2206	0	20	76	70	135
2-Chloroethylvinylether	1	15.6202	0	20	78	1	225
cis-1,3-Dichloropropene	1	15.9042	0	20	80	25	175
trans-1,3-Dichloropropene	1	15.951	0	20	80	50	150
Ethyl methacrylate	1	15.245	0	20	76	10	200
1,1,2-Trichloroethane	1	18.6864	0	20	93	70	130
1,2-Dibromoethane	1	15.4051	0	20	77	20	150
1,3-Dichloropropane	1	19.605	0	20	98	20	200
4-Methyl-2-Pentanone	1	14.2485	0	20	71	10	200
2-Hexanone	1	13.3528	0	20	67	10	200
Tetrachloroethene	1	22.2488	0	20	111	70	130
Toluene	1	17.3671	0	20	87	70	130
1,1,1,2-Tetrachloroethane	1	20.0446	0	20	100	40	160
Chlorobenzene	1	17.0666	0	20	85	65	135

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: MBS73432

n-Butyl acrylate	1	14.9316	0	20	75	10	200
n-Amyl acetate	1	15.3579	0	20	77	20	150
Bromoform	1	12.8716	0	20	64 *	70	130
Ethylbenzene	1	16.4218	0	20	82	60	140
1,1,2,2-Tetrachloroethane	1	15.0297	0	20	75	60	140
Styrene	1	18.0264	0	20	90	20	160
m&p-Xylenes	1	34.9904	0	40	87	20	200
o-Xylene	1	17.9016	0	20	90	20	200
trans-1,4-Dichloro-2-butene	1	15.9163	0	20	80	10	200
1,3-Dichlorobenzene	1	15.9585	0	20	80	70	130
1,4-Dichlorobenzene	1	15.7804	0	20	79	65	135
1,2-Dichlorobenzene	1	15.4114	0	20	77	65	135
Isopropylbenzene	1	17.4602	0	20	87	20	160
Cyclohexanone	1	85.2616	0	100	85	0	300
Camphene	1	17.3273	0	20	87	10	200
1,2,3-Trichloropropane	1	14.6861	0	20	73	30	150
2-Chlorotoluene	1	18.9544	0	20	95	30	160
p-Ethyltoluene	1	16.852	0	20	84	10	250
4-Chlorotoluene	1	16.5492	0	20	83	30	150
n-Propylbenzene	1	17.4155	0	20	87	20	160
Bromobenzene	1	15.6971	0	20	78	30	150
1,3,5-Trimethylbenzene	1	19.1604	0	20	96	30	200
Butyl methacrylate	1	17.4213	0	20	87	10	200
t-Butylbenzene	1	17.3518	0	20	87	20	160
1,2,4-Trimethylbenzene	1	17.2165	0	20	86	30	200
sec-Butylbenzene	1	18.6125	0	20	93	20	160
4-Isopropyltoluene	1	17.8023	0	20	89	30	150
n-Butylbenzene	1	17.8036	0	20	89	20	200
p-Diethylbenzene	1	17.1095	0	20	86	10	250
1,2,4,5-Tetramethylbenzene	1	17.5212	0	20	88	10	200
1,2-Dibromo-3-Chloropropane	1	14.1394	0	20	71	0	200
Camphor	1	93.741	0	200	47	0	200
Hexachlorobutadiene	1	16.8519	0	20	84	20	170
1,2,4-Trichlorobenzene	1	16.8633	0	20	84	5	200
1,2,3-Trichlorobenzene	1	15.9532	0	20	80	0	200
Naphthalene	1	15.8033	0	20	79	0	250

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73436

8101509 0120

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138706.D		MBS73436		10/22/2018 3:21:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	40.0205	0	20	200	0	300
Dichlorodifluoromethane	1	41.175	0	20	206	1	300
Chloromethane	1	37.8976	0	20	189	1	205
Bromomethane	1	31.8542	0	20	159	15	185
Vinyl Chloride	1	26.4677	0	20	132	5	195
Chloroethane	1	32.0745	0	20	160	40	160
Trichlorofluoromethane	1	26.3012	0	20	132	50	150
Ethyl ether	1	20.9172	0	20	105	10	160
Furan	1	19.269	0	20	96	20	200
1,1,2-Trichloro-1,2,2-trifluoroethane	1	30.5489	0	20	153	20	200
Methylene Chloride	1	26.0747	0	20	130	60	140
Acrolein	1	102.3589	0	100	102	60	140
Acrylonitrile	1	22.5309	0	20	113	60	140
Iodomethane	1	25.6035	0	20	128	1	200
Acetone	1	97.7749	0	100	98	10	200
Carbon Disulfide	1	23.5394	0	20	118	10	160
t-Butyl Alcohol	1	91.5061	0	100	92	1	200
n-Hexane	1	29.438	0	20	147	0	300
Di-isopropyl-ether	1	24.1923	0	20	121	20	200
1,1-Dichloroethene	1	24.2763	0	20	121	50	150
Methyl Acetate	1	20.2855	0	20	101	20	150
Methyl-t-butyl ether	1	24.4074	0	20	122	20	200
1,1-Dichloroethane	1	22.2336	0	20	111	70	130
trans-1,2-Dichloroethene	1	25.1992	0	20	126	70	130
Ethyl-t-butyl ether	1	24.7198	0	20	124	20	160
cis-1,2-Dichloroethene	1	24.7815	0	20	124	30	160
Bromochloromethane	1	20.5985	0	20	103	30	160
2,2-Dichloropropane	1	28.8424	0	20	144	10	200
Ethyl acetate	1	21.4055	0	20	107	10	200
1,4-Dioxane	1	1102.319	0	1000	110	0	250
1,1-Dichloropropene	1	25.7802	0	20	129	40	150
Chloroform	1	22.1087	0	20	111	70	135
Cyclohexane	1	27.6079	0	20	138	20	200
1,2-Dichloroethane	1	26.59	0	20	133 *	70	130
2-Butanone	1	21.3605	0	20	107	0	220
1,1,1-Trichloroethane	1	23.8775	0	20	119	70	130
Carbon Tetrachloride	1	24.8415	0	20	124	70	130
Vinyl Acetate	1	23.7555	0	20	119	20	200
Bromodichloromethane	1	23.0622	0	20	115	65	135
Methylcyclohexane	1	30.0859	0	20	150	10	200
Dibromomethane	1	27.0077	0	20	135	20	160
1,2-Dichloropropane	1	24.6972	0	20	123	35	135
Trichloroethene	1	26.9604	0	20	135	65	135
Benzene	1	28.6961	0	20	143 *	65	135
tert-Amyl methyl ether	1	23.2774	0	20	116	20	150
Iso-propylacetate	1	19.3803	0	20	97	10	200
Methyl methacrylate	1	18.3517	0	20	92	10	200
Dibromochloromethane	1	17.5544	0	20	88	70	135
2-Chloroethylvinylether	1	20.5287	0	20	103	1	225
cis-1,3-Dichloropropene	1	19.088	0	20	95	25	175
trans-1,3-Dichloropropene	1	19.0806	0	20	95	50	150
Ethyl methacrylate	1	19.6972	0	20	98	10	200
1,1,2-Trichloroethane	1	22.928	0	20	115	70	130
1,2-Dibromoethane	1	18.6295	0	20	93	20	150
1,3-Dichloropropane	1	21.6507	0	20	108	20	200
4-Methyl-2-Pentanone	1	17.2373	0	20	86	10	200
2-Hexanone	1	19.9891	0	20	100	10	200
Tetrachloroethene	1	25.7311	0	20	129	70	130
Toluene	1	20.416	0	20	102	70	130
1,1,1,2-Tetrachloroethane	1	23.6803	0	20	118	40	160
Chlorobenzene	1	20.1291	0	20	101	65	135

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: MBS73436

n-Butyl acrylate	1	20.6779	0	20	103	10	200
n-Amyl acetate	1	20.3745	0	20	102	20	150
Bromoform	1	17.7563	0	20	89	70	130
Ethylbenzene	1	22.7006	0	20	114	60	140
1,1,2,2-Tetrachloroethane	1	17.773	0	20	89	60	140
Styrene	1	21.5801	0	20	108	20	160
m&p-Xylenes	1	44.3744	0	40	111	20	200
o-Xylene	1	22.0264	0	20	110	20	200
trans-1,4-Dichloro-2-butene	1	19.4806	0	20	97	10	200
1,3-Dichlorobenzene	1	18.9875	0	20	95	70	130
1,4-Dichlorobenzene	1	18.8504	0	20	94	65	135
1,2-Dichlorobenzene	1	19.054	0	20	95	65	135
Isopropylbenzene	1	22.6948	0	20	113	20	160
Cyclohexanone	1	83.2731	0	100	83	0	300
Camphene	1	21.8836	0	20	109	10	200
1,2,3-Trichloropropane	1	18.249	0	20	91	30	150
2-Chlorotoluene	1	21.9004	0	20	110	30	160
p-Ethyltoluene	1	21.82	0	20	109	10	250
4-Chlorotoluene	1	20.5633	0	20	103	30	150
n-Propylbenzene	1	21.6127	0	20	108	20	160
Bromobenzene	1	19.0368	0	20	95	30	150
1,3,5-Trimethylbenzene	1	21.9521	0	20	110	30	200
Butyl methacrylate	1	20.9282	0	20	105	10	200
t-Butylbenzene	1	22.5253	0	20	113	20	160
1,2,4-Trimethylbenzene	1	21.5421	0	20	108	30	200
sec-Butylbenzene	1	22.0227	0	20	110	20	160
4-Isopropyltoluene	1	21.2405	0	20	106	30	150
n-Butylbenzene	1	21.2886	0	20	106	20	200
p-Diethylbenzene	1	22.4391	0	20	112	10	250
1,2,4,5-Tetramethylbenzene	1	22.5188	0	20	113	10	200
1,2-Dibromo-3-Chloropropane	1	20.9896	0	20	105	0	200
Camphor	1	101.5269	0	200	51	0	200
Hexachlorobutadiene	1	19.0881	0	20	95	20	170
1,2,4-Trichlorobenzene	1	18.8881	0	20	94	5	200
1,2,3-Trichlorobenzene	1	16.5723	0	20	83	0	200
Naphthalene	1	19.1212	0	20	96	0	250

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73438

8101509 0122

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138725.D		MBS73438		10/23/2018 9:12:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	37.0115	0	20	185	0	300
Dichlorodifluoromethane	1	35.4253	0	20	177	1	300
Chloromethane	1	31.6777	0	20	158	1	205
Bromomethane	1	25.8167	0	20	129	15	185
Vinyl Chloride	1	25.5212	0	20	128	5	195
Chloroethane	1	27.7773	0	20	139	40	160
Trichlorofluoromethane	1	20.8089	0	20	104	50	150
Ethyl ether	1	16.7614	0	20	84	10	160
Furan	1	17.2234	0	20	86	20	200
1,1,2-Trichloro-1,2,2-trifluoroethane	1	27.4357	0	20	137	20	200
Methylene Chloride	1	22.8488	0	20	114	60	140
Acrolein	1	93.0719	0	100	93	60	140
Acrylonitrile	1	18.2056	0	20	91	60	140
Iodomethane	1	20.8904	0	20	104	1	200
Acetone	1	83.4751	0	100	83	10	200
Carbon Disulfide	1	20.2144	0	20	101	10	160
t-Butyl Alcohol	1	72.864	0	100	73	1	200
n-Hexane	1	23.2698	0	20	116	0	300
Di-isopropyl-ether	1	20.1945	0	20	101	20	200
1,1-Dichloroethene	1	22.0125	0	20	110	50	150
Methyl Acetate	1	16.7035	0	20	84	20	150
Methyl-t-butyl ether	1	20.0187	0	20	100	20	200
1,1-Dichloroethane	1	20.3271	0	20	102	70	130
trans-1,2-Dichloroethene	1	20.681	0	20	103	70	130
Ethyl-t-butyl ether	1	20.542	0	20	103	20	160
cis-1,2-Dichloroethene	1	20.7066	0	20	104	30	160
Bromochloromethane	1	21.9558	0	20	110	30	160
2,2-Dichloropropane	1	25.3114	0	20	127	10	200
Ethyl acetate	1	18.6225	0	20	93	10	200
1,4-Dioxane	1	937.0468	0	1000	94	0	250
1,1-Dichloropropene	1	23.6373	0	20	118	40	150
Chloroform	1	19.6903	0	20	98	70	135
Cyclohexane	1	22.8178	0	20	114	20	200
1,2-Dichloroethane	1	23.7742	0	20	119	70	130
2-Butanone	1	16.0055	0	20	80	0	220
1,1,1-Trichloroethane	1	21.075	0	20	105	70	130
Carbon Tetrachloride	1	21.9806	0	20	110	70	130
Vinyl Acetate	1	20.155	0	20	101	20	200
Bromodichloromethane	1	22.0467	0	20	110	65	135
Methylcyclohexane	1	24.726	0	20	124	10	200
Dibromomethane	1	24.4954	0	20	122	20	160
1,2-Dichloropropane	1	19.215	0	20	96	35	135
Trichloroethene	1	21.6852	0	20	108	65	135
Benzene	1	23.9237	0	20	120	65	135
tert-Amyl methyl ether	1	18.7855	0	20	94	20	150
Iso-propylacetate	1	15.5713	0	20	78	10	200
Methyl methacrylate	1	16.6379	0	20	83	10	200
Dibromochloromethane	1	16.1549	0	20	81	70	135
2-Chloroethylvinylether	1	14.5669	0	20	73	1	225
cis-1,3-Dichloropropene	1	16.2927	0	20	81	25	175
trans-1,3-Dichloropropene	1	15.401	0	20	77	50	150
Ethyl methacrylate	1	16.0193	0	20	80	10	200
1,1,2-Trichloroethane	1	20.2906	0	20	101	70	130
1,2-Dibromoethane	1	16.7349	0	20	84	20	150
1,3-Dichloropropane	1	19.9214	0	20	100	20	200
4-Methyl-2-Pentanone	1	15.063	0	20	75	10	200
2-Hexanone	1	15.0627	0	20	75	10	200
Tetrachloroethene	1	23.2405	0	20	116	70	130
Toluene	1	17.3758	0	20	87	70	130
1,1,1,2-Tetrachloroethane	1	20.7174	0	20	104	40	160
Chlorobenzene	1	17.5712	0	20	88	65	135

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: MBS73438

n-Butyl acrylate	1	14.2993	0	20	71	10	200
n-Amyl acetate	1	14.5553	0	20	73	20	150
Bromoform	1	13.8687	0	20	69*	70	130
Ethylbenzene	1	16.1762	0	20	81	60	140
1,1,2,2-Tetrachloroethane	1	14.4984	0	20	72	60	140
Styrene	1	17.6697	0	20	88	20	160
m&p-Xylenes	1	36.5058	0	40	91	20	200
o-Xylene	1	17.4216	0	20	87	20	200
trans-1,4-Dichloro-2-butene	1	16.1771	0	20	81	10	200
1,3-Dichlorobenzene	1	16.0994	0	20	80	70	130
1,4-Dichlorobenzene	1	15.0025	0	20	75	65	135
1,2-Dichlorobenzene	1	15.3369	0	20	77	65	135
Isopropylbenzene	1	17.6141	0	20	88	20	160
Cyclohexanone	1	70.1315	0	100	70	0	300
Camphene	1	15.9799	0	20	80	10	200
1,2,3-Trichloropropane	1	14.0815	0	20	70	30	150
2-Chlorotoluene	1	18.7893	0	20	94	30	160
p-Ethyltoluene	1	16.3429	0	20	82	10	250
4-Chlorotoluene	1	17.0024	0	20	85	30	150
n-Propylbenzene	1	16.2325	0	20	81	20	160
Bromobenzene	1	14.9057	0	20	75	30	150
1,3,5-Trimethylbenzene	1	19.3784	0	20	97	30	200
Butyl methacrylate	1	15.8953	0	20	79	10	200
t-Butylbenzene	1	17.1702	0	20	86	20	160
1,2,4-Trimethylbenzene	1	16.3757	0	20	82	30	200
sec-Butylbenzene	1	16.9086	0	20	85	20	160
4-Isopropyltoluene	1	16.8475	0	20	84	30	150
n-Butylbenzene	1	16.4928	0	20	82	20	200
p-Diethylbenzene	1	17.15	0	20	86	10	250
1,2,4,5-Tetramethylbenzene	1	16.2988	0	20	81	10	200
1,2-Dibromo-3-Chloropropane	1	15.8178	0	20	79	0	200
Camphor	1	63.3321	0	200	32	0	200
Hexachlorobutadiene	1	15.5234	0	20	78	20	170
1,2,4-Trichlorobenzene	1	14.6172	0	20	73	5	200
1,2,3-Trichlorobenzene	1	13.5215	0	20	68	0	200
Naphthalene	1	13.7173	0	20	69	0	250

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73499

8101509 0124

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M139074.D		MBS73499		10/27/2018 2:27:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	31.8099	0	20	159	10	180
Dichlorodifluoromethane	1	39.5836	0	20	198	1	300
Chloromethane	1	35.4909	0	20	177	1	205
Bromomethane	1	23.7399	0	20	119	15	185
Vinyl Chloride	1	25.3551	0	20	127	5	195
Chloroethane	1	22.8865	0	20	114	40	160
Trichlorofluoromethane	1	21.2731	0	20	106	50	150
Ethyl ether	1	18.0909	0	20	90	30	150
Furan	1	20.4654	0	20	102	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.2119	0	20	126	40	170
Methylene Chloride	1	23.2177	0	20	116	60	140
Acrolein	1	109.1564	0	100	109	60	140
Acrylonitrile	1	22.8389	0	20	114	60	140
Iodomethane	1	18.6579	0	20	93	1	200
Acetone	1	109.2891	0	100	109	20	160
Carbon Disulfide	1	21.5634	0	20	108	30	160
t-Butyl Alcohol	1	97.4219	0	100	97	1	200
n-Hexane	1	25.722	0	20	129	5	210
Di-isopropyl-ether	1	25.3037	0	20	127	30	150
1,1-Dichloroethene	1	22.033	0	20	110	50	150
Methyl Acetate	1	21.2655	0	20	106	20	150
Methyl-t-butyl ether	1	20.8949	0	20	104	30	150
1,1-Dichloroethane	1	22.4491	0	20	112	70	130
trans-1,2-Dichloroethene	1	19.0259	0	20	95	70	130
Ethyl-t-butyl ether	1	23.5379	0	20	118	30	150
cis-1,2-Dichloroethene	1	22.203	0	20	111	40	160
Bromochloromethane	1	22.9462	0	20	115	30	150
2,2-Dichloropropane	1	24.4024	0	20	122	10	200
Ethyl acetate	1	26.1371	0	20	131	20	170
1,4-Dioxane	1	783.652	0	1000	78	1	200
1,1-Dichloropropene	1	23.8417	0	20	119	50	150
Chloroform	1	18.3549	0	20	92	70	135
Cyclohexane	1	29.3868	0	20	147	40	160
1,2-Dichloroethane	1	23.2714	0	20	116	70	130
2-Butanone	1	23.3495	0	20	117	1	220
1,1,1-Trichloroethane	1	19.4769	0	20	97	70	130
Carbon Tetrachloride	1	21.1934	0	20	106	70	130
Vinyl Acetate	1	24.0137	0	20	120	20	170
Bromodichloromethane	1	20.3081	0	20	102	65	135
Methylcyclohexane	1	27.3396	0	20	137	30	170
Dibromomethane	1	23.3147	0	20	117	30	160
1,2-Dichloropropane	1	25.8549	0	20	129	35	135
Trichloroethene	1	20.8421	0	20	104	65	135
Benzene	1	25.2089	0	20	126	65	135
tert-Amyl methyl ether	1	21.8572	0	20	109	30	150
Iso-propylacetate	1	27.0764	0	20	135	20	150
Methyl methacrylate	1	26.6733	0	20	133	10	170
Dibromochloromethane	1	20.0887	0	20	100	70	135
2-Chloroethylvinylether	1	26.9936	0	20	135	1	225
cis-1,3-Dichloropropene	1	22.796	0	20	114	25	175
trans-1,3-Dichloropropene	1	22.2445	0	20	111	50	150
Ethyl methacrylate	1	25.6873	0	20	128	20	150
1,1,2-Trichloroethane	1	24.9742	0	20	125	70	130
1,2-Dibromoethane	1	19.8442	0	20	99	20	150
1,3-Dichloropropane	1	27.513	0	20	138 *	50	130
4-Methyl-2-Pentanone	1	25.7242	0	20	129	30	150
2-Hexanone	1	25.6385	0	20	128	20	150
Tetrachloroethene	1	27.4945	0	20	137 *	70	130
Toluene	1	22.1215	0	20	111	70	130
1,1,1,2-Tetrachloroethane	1	23.66	0	20	118	50	150
Chlorobenzene	1	20.9518	0	20	105	65	135

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73499

n-Butyl acrylate	1	25.5755	0	20	128	10	140
n-Amyl acetate	1	26.5762	0	20	133	20	150
Bromoform	1	18.4609	0	20	92	70	130
Ethylbenzene	1	21.6379	0	20	108	60	140
1,1,2,2-Tetrachloroethane	1	22.4013	0	20	112	60	140
Styrene	1	22.3536	0	20	112	40	150
m&p-Xylenes	1	46.6928	0	40	117	40	150
o-Xylene	1	23.9654	0	20	120	40	150
trans-1,4-Dichloro-2-butene	1	22.7588	0	20	114	10	150
1,3-Dichlorobenzene	1	19.4798	0	20	97	70	130
1,4-Dichlorobenzene	1	19.3096	0	20	97	65	135
1,2-Dichlorobenzene	1	20.0641	0	20	100	65	135
Isopropylbenzene	1	23.8909	0	20	119	40	150
Cyclohexanone	1	135.4001	0	100	135	1	300
Camphene	1	21.224	0	20	106	20	150
1,2,3-Trichloropropane	1	22.6506	0	20	113	40	130
2-Chlorotoluene	1	24.0708	0	20	120	40	150
p-Ethyltoluene	1	20.2729	0	20	101	10	200
4-Chlorotoluene	1	23.067	0	20	115	40	150
n-Propylbenzene	1	24.559	0	20	123	40	150
Bromobenzene	1	21.0689	0	20	105	40	130
1,3,5-Trimethylbenzene	1	25.3091	0	20	127	40	150
Butyl methacrylate	1	26.9957	0	20	135	20	150
t-Butylbenzene	1	22.1069	0	20	111	40	150
1,2,4-Trimethylbenzene	1	21.9251	0	20	110	40	150
sec-Butylbenzene	1	23.1527	0	20	116	40	150
4-Isopropyltoluene	1	21.1332	0	20	106	40	150
n-Butylbenzene	1	24.0103	0	20	120	30	160
p-Diethylbenzene	1	23.5751	0	20	118	10	200
1,2,4,5-Tetramethylbenzene	1	25.1439	0	20	126	10	170
1,2-Dibromo-3-Chloropropane	1	22.0152	0	20	110	10	150
Camphor	1	92.6864	0	200	46	1	160
Hexachlorobutadiene	1	19.4088	0	20	97	20	170
1,2,4-Trichlorobenzene	1	19.5924	0	20	98	20	160
1,2,3-Trichlorobenzene	1	17.4893	0	20	87	5	180
Naphthalene	1	20.5107	0	20	103	1	200

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73460

8101509 0126

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M112531.D		MBS73460		10/24/2018 12:51:00 P			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	15.8902	0	20	79	10	180
Dichlorodifluoromethane	1	79.8623	0	20	399 *	1	300
Chloromethane	1	37.7	0	20	188	1	205
Bromomethane	1	20.2069	0	20	101	15	185
Vinyl Chloride	1	24.8449	0	20	124	5	195
Chloroethane	1	26.8709	0	20	134	40	160
Trichlorofluoromethane	1	22.933	0	20	115	50	150
Ethyl ether	1	16.5384	0	20	83	30	150
Furan	1	18.2972	0	20	91	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	24.3045	0	20	122	40	170
Methylene Chloride	1	15.6792	0	20	78	60	140
Acrolein	1	104.2965	0	100	104	60	140
Acrylonitrile	1	15.8518	0	20	79	60	140
Iodomethane	1	17.0109	0	20	85	1	200
Acetone	1	90.6069	0	100	91	20	160
Carbon Disulfide	1	17.1065	0	20	86	30	160
t-Butyl Alcohol	1	52.2365	0	100	52	1	200
n-Hexane	1	35.4685	0	20	177	5	210
Di-isopropyl-ether	1	15.3755	0	20	77	30	150
1,1-Dichloroethene	1	21.1578	0	20	106	50	150
Methyl Acetate	1	14.34	0	20	72	20	150
Methyl-t-butyl ether	1	13.8944	0	20	69	30	150
1,1-Dichloroethane	1	16.7499	0	20	84	70	130
trans-1,2-Dichloroethene	1	16.2138	0	20	81	70	130
Ethyl-t-butyl ether	1	13.7986	0	20	69	30	150
cis-1,2-Dichloroethene	1	17.6176	0	20	88	40	160
Bromochloromethane	1	18.9704	0	20	95	30	150
2,2-Dichloropropane	1	18.6493	0	20	93	10	200
Ethyl acetate	1	17.3472	0	20	87	20	170
1,4-Dioxane	1	597.9227	0	1000	60	1	200
1,1-Dichloropropene	1	18.1324	0	20	91	50	150
Chloroform	1	18.1799	0	20	91	70	135
Cyclohexane	1	16.6737	0	20	83	40	160
1,2-Dichloroethane	1	18.253	0	20	91	70	130
2-Butanone	1	13.2581	0	20	66	1	220
1,1,1-Trichloroethane	1	17.6479	0	20	88	70	130
Carbon Tetrachloride	1	17.5263	0	20	88	70	130
Vinyl Acetate	1	18.5569	0	20	93	20	170
Bromodichloromethane	1	17.6653	0	20	88	65	135
Methylcyclohexane	1	16.7951	0	20	84	30	170
Dibromomethane	1	16.4459	0	20	82	30	160
1,2-Dichloropropane	1	17.3266	0	20	87	35	135
Trichloroethene	1	16.6749	0	20	83	65	135
Benzene	1	17.9606	0	20	90	65	135
tert-Amyl methyl ether	1	13.7321	0	20	69	30	150
Iso-propylacetate	1	16.3996	0	20	82	20	150
Methyl methacrylate	1	16.8988	0	20	84	10	170
Dibromochloromethane	1	18.5713	0	20	93	70	135
2-Chloroethylvinylether	1	22.388	0	20	112	1	225
cis-1,3-Dichloropropene	1	18.5225	0	20	93	25	175
trans-1,3-Dichloropropene	1	17.657	0	20	88	50	150
Ethyl methacrylate	1	19.7474	0	20	99	20	150
1,1,2-Trichloroethane	1	19.13	0	20	96	70	130
1,2-Dibromoethane	1	18.1006	0	20	91	20	150
1,3-Dichloropropane	1	18.8613	0	20	94	50	130
4-Methyl-2-Pentanone	1	17.7828	0	20	89	30	150
2-Hexanone	1	17.5887	0	20	88	20	150
Tetrachloroethene	1	18.1378	0	20	91	70	130
Toluene	1	19.0296	0	20	95	70	130
1,1,1,2-Tetrachloroethane	1	18.1352	0	20	91	50	150
Chlorobenzene	1	18.9959	0	20	95	65	135

* - Indicates outside of limits

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Recovery Data Laboratory Limits

QC Batch: MBS73460

n-Butyl acrylate	1	17.9461	0	20	90	10	140
n-Amyl acetate	1	21.0158	0	20	105	20	150
Bromoform	1	17.4221	0	20	87	70	130
Ethylbenzene	1	19.6034	0	20	98	60	140
1,1,2,2-Tetrachloroethane	1	21.5902	0	20	108	60	140
Styrene	1	18.8024	0	20	94	40	150
m&p-Xylenes	1	39.03	0	40	98	40	150
o-Xylene	1	19.3309	0	20	97	40	150
trans-1,4-Dichloro-2-butene	1	24.2906	0	20	121	10	150
1,3-Dichlorobenzene	1	18.5593	0	20	93	70	130
1,4-Dichlorobenzene	1	17.7441	0	20	89	65	135
1,2-Dichlorobenzene	1	17.548	0	20	88	65	135
Isopropylbenzene	1	18.9719	0	20	95	40	150
Cyclohexanone	1	45.0017	0	100	45	1	300
Camphene	1	17.8494	0	20	89	20	150
1,2,3-Trichloropropane	1	20.8331	0	20	104	40	130
2-Chlorotoluene	1	19.1289	0	20	96	40	150
p-Ethyltoluene	1	19.2807	0	20	96	10	200
4-Chlorotoluene	1	19.1916	0	20	96	40	150
n-Propylbenzene	1	20.6393	0	20	103	40	150
Bromobenzene	1	20.0739	0	20	100	40	130
1,3,5-Trimethylbenzene	1	18.0373	0	20	90	40	150
Butyl methacrylate	1	21.1167	0	20	106	20	150
t-Butylbenzene	1	17.7966	0	20	89	40	150
1,2,4-Trimethylbenzene	1	17.8416	0	20	89	40	150
sec-Butylbenzene	1	18.6933	0	20	93	40	150
4-Isopropyltoluene	1	17.4369	0	20	87	40	150
n-Butylbenzene	1	18.9064	0	20	95	30	160
p-Diethylbenzene	1	16.5789	0	20	83	10	200
1,2,4,5-Tetramethylbenzene	1	14.7253	0	20	74	10	170
1,2-Dibromo-3-Chloropropane	1	15.7481	0	20	79	10	150
Camphor	1	63.802	0	200	32	1	160
Hexachlorobutadiene	1	11.9412	0	20	60	20	170
1,2,4-Trichlorobenzene	1	7.275	0	20	36	20	160
1,2,3-Trichlorobenzene	1	4.7807	0	20	24	5	180
Naphthalene	1	3.4161	0	20	17	1	200

Recovery Data Laboratory Limits

QC Batch: MBS73545

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M113022.D		MBS73545		11/1/2018 2:18:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	61.8368	0	50	124	20	130
Dichlorodifluoromethane	1	67.2623	0	50	135 *	20	130
Chloromethane	1	47.9983	0	50	96	20	130
Bromomethane	1	49.2973	0	50	99	20	130
Vinyl Chloride	1	50.9512	0	50	102	20	130
Chloroethane	1	51.4537	0	50	103	20	130
Trichlorofluoromethane	1	53.8391	0	50	108	20	130
Ethyl ether	1	40.3932	0	50	81	50	130
Furan	1	40.1771	0	50	80	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	67.4019	0	50	135 *	50	130
Methylene Chloride	1	42.7202	0	50	85	50	130
Acrolein	1	169.6309	0	200	85	20	130
Acrylonitrile	1	23.9987	0	50	48	20	130
Iodomethane	1	37.351	0	50	75	50	130
Acetone	1	189.1907	0	200	95	20	130
Carbon Disulfide	1	56.2833	0	50	113	50	130
t-Butyl Alcohol	1	205.4031	0	200	103	20	130
n-Hexane	1	70.7452	0	50	141 *	50	130
Di-isopropyl-ether	1	40.3024	0	50	81	50	130
1,1-Dichloroethene	1	50.5312	0	50	101	50	130
Methyl Acetate	1	36.2195	0	50	72	50	130
Methyl-t-butyl ether	1	35.8078	0	50	72	50	130
1,1-Dichloroethane	1	50.7251	0	50	101	50	130
trans-1,2-Dichloroethene	1	57.6547	0	50	115	50	130
Ethyl-t-butyl ether	1	39.6951	0	50	79	50	130
cis-1,2-Dichloroethene	1	56.4578	0	50	113	50	130
Bromochloromethane	1	51.592	0	50	103	50	130
2,2-Dichloropropane	1	60.0723	0	50	120	50	130
Ethyl acetate	1	59.8216	0	50	120	50	130
1,4-Dioxane	1	1821.434	0	2500	73	50	130
1,1-Dichloropropene	1	58.9119	0	50	118	50	130
Chloroform	1	40.5911	0	50	81	50	130
Cyclohexane	1	66.5042	0	50	133 *	50	130
1,2-Dichloroethane	1	41.1923	0	50	82	50	130
2-Butanone	1	71.7303	0	50	143 *	20	130
1,1,1-Trichloroethane	1	54.111	0	50	108	50	130
Carbon Tetrachloride	1	56.4327	0	50	113	50	130
Vinyl Acetate	1	35.3284	0	50	71	50	130
Bromodichloromethane	1	39.244	0	50	78	50	130
Methylcyclohexane	1	96.5015	0	50	193 *	50	130
Dibromomethane	1	38.7685	0	50	78	50	130
1,2-Dichloropropane	1	34.1834	0	50	68	50	130
Trichloroethene	1	43.8927	0	50	88	50	130
Benzene	1	51.7119	0	50	103	50	130
tert-Amyl methyl ether	1	41.0671	0	50	82	50	130
Iso-propylacetate	1	25.2035	0	50	50	50	130
Methyl methacrylate	1	42.5502	0	50	85	50	130
Dibromochloromethane	1	36.599	0	50	73	50	130
2-Chloroethylvinylether	1	24.3094	0	50	49 *	50	130
cis-1,3-Dichloropropene	1	28.2486	0	50	56	50	130
trans-1,3-Dichloropropene	1	39.2775	0	50	79	50	130
Ethyl methacrylate	1	34.5199	0	50	69	50	130
1,1,2-Trichloroethane	1	33.3359	0	50	67	50	130
1,2-Dibromoethane	1	43.9305	0	50	88	50	130
1,3-Dichloropropane	1	37.6699	0	50	75	50	130
4-Methyl-2-Pentanone	1	23.8969	0	50	48	20	130
2-Hexanone	1	30.2287	0	50	60	20	130
Tetrachloroethene	1	52.1368	0	50	104	50	130
Toluene	1	39.6372	0	50	79	50	130
1,1,1,2-Tetrachloroethane	1	42.1823	0	50	84	50	130
Chlorobenzene	1	45.9684	0	50	92	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73545

n-Butyl acrylate	1	34.3202	0	50	69	50	130
n-Amyl acetate	1	29.4872	0	50	59	50	130
Bromoform	1	32.5245	0	50	65	20	130
Ethylbenzene	1	61.72	0	50	123	50	130
1,1,2,2-Tetrachloroethane	1	30.4281	0	50	61	50	130
Styrene	1	45.5939	0	50	91	50	130
m&p-Xylenes	1	99.5153	0	100	100	50	130
o-Xylene	1	43.9568	0	50	88	50	130
trans-1,4-Dichloro-2-butene	1	56.6513	0	50	113	20	130
1,3-Dichlorobenzene	1	44.7621	0	50	90	50	130
1,4-Dichlorobenzene	1	42.4402	0	50	85	50	130
1,2-Dichlorobenzene	1	40.1438	0	50	80	50	130
Isopropylbenzene	1	49.6204	0	50	99	50	130
Cyclohexanone	1	225.7135	0	250	90	50	130
Camphene	1	63.0077	0	50	126	50	130
1,2,3-Trichloropropane	1	41.7146	0	50	83	50	130
2-Chlorotoluene	1	47.4228	0	50	95	50	130
p-Ethyltoluene	1	51.8977	0	50	104	50	130
4-Chlorotoluene	1	47.9894	0	50	96	50	130
n-Propylbenzene	1	51.2521	0	50	103	50	130
Bromobenzene	1	35.3572	0	50	71	50	130
1,3,5-Trimethylbenzene	1	39.5789	0	50	79	50	130
Butyl methacrylate	1	42.5759	0	50	85	50	130
t-Butylbenzene	1	42.1069	0	50	84	50	130
1,2,4-Trimethylbenzene	1	47.9455	0	50	96	50	130
sec-Butylbenzene	1	54.843	0	50	110	50	130
4-Isopropyltoluene	1	44.8044	0	50	90	50	130
n-Butylbenzene	1	47.0014	0	50	94	50	130
p-Diethylbenzene	1	61.1512	0	50	122	50	130
1,2,4,5-Tetramethylbenzene	1	54.1683	0	50	108	50	130
1,2-Dibromo-3-Chloropropane	1	32.5856	0	50	65	50	130
Camphor	1	316.8775	0	500	63	50	130
Hexachlorobutadiene	1	51.9782	0	50	104	50	130
1,2,4-Trichlorobenzene	1	48.4227	0	50	97	50	130
1,2,3-Trichlorobenzene	1	40.6626	0	50	81	50	130
Naphthalene	1	33.0145	0	50	66	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73432

8101509 0130

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138682.D		AD07030-002(MS)		10/22/2018 8:28:00 AM			
Non Spike(If applicable): 3M138624.D		AD07030-002		10/21/2018 3:52:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.7001	0	20	109	10	180
Dichlorodifluoromethane	1	36.5888	0	20	183	1	300
Chloromethane	1	31.7048	0	20	159	1	273
Bromomethane	1	27.6127	0	20	138	1	242
Vinyl Chloride	1	22.2478	0	20	111	1	251
Chloroethane	1	21.3691	0	20	107	14	230
Trichlorofluoromethane	1	21.1797	0	20	106	17	181
Ethyl ether	1	15.1902	0	20	76	30	150
Furan	1	16.4746	0	20	82	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	26.075	0	20	130	40	170
Methylene Chloride	1	23.1411	0	20	116	1	221
Acrolein	1	95.283	0	100	95	40	160
Acrylonitrile	1	20.584	0	20	103	40	160
Iodomethane	1	19.2955	0	20	96	1	200
Acetone	1	90.676	0	100	91	20	160
Carbon Disulfide	1	18.7592	0	20	94	30	160
t-Butyl Alcohol	1	73.0867	0	100	73	1	200
n-Hexane	1	20.3637	0	20	102	5	210
Di-isopropyl-ether	1	19.3985	0	20	97	30	150
1,1-Dichloroethene	1	19.818	0	20	99	1	234
Methyl Acetate	1	16.5249	0	20	83	20	150
Methyl-t-butyl ether	1	19.43	0	20	97	30	150
1,1-Dichloroethane	1	18.2479	0	20	91	59	155
trans-1,2-Dichloroethene	1	20.1932	0	20	101	54	156
Ethyl-t-butyl ether	1	18.486	0	20	92	30	150
cis-1,2-Dichloroethene	1	20.1009	0	20	101	40	160
Bromochloromethane	1	21.2841	0	20	106	30	150
2,2-Dichloropropane	1	21.8312	0	20	109	10	200
Ethyl acetate	1	17.6125	0	20	88	20	170
1,4-Dioxane	1	920.3462	0	1000	92	1	200
1,1-Dichloropropene	1	20.6233	0	20	103	50	150
Chloroform	1	18.2767	0	20	91	51	138
Cyclohexane	1	21.1754	0	20	106	40	160
1,2-Dichloroethane	1	21.9282	0	20	110	49	155
2-Butanone	1	18.6729	0	20	93	1	220
1,1,1-Trichloroethane	1	18.7564	0	20	94	52	162
Carbon Tetrachloride	1	20.0809	0	20	100	70	140
Vinyl Acetate	1	18.8829	0	20	94	20	170
Bromodichloromethane	1	19.1149	0	20	96	35	155
Methylcyclohexane	1	21.957	0	20	110	30	170
Dibromomethane	1	22.3512	0	20	112	30	160
1,2-Dichloropropane	1	17.0674	0	20	85	1	210
Trichloroethene	1	20.4714	0	20	102	70	157
Benzene	1	22.8883	0	20	114	37	151
tert-Amyl methyl ether	1	18.6339	0	20	93	30	150
Iso-propylacetate	1	15.4928	0	20	77	20	150
Methyl methacrylate	1	14.799	0	20	74	10	170
Dibromochloromethane	1	15.4179	0	20	77	53	149
2-Chloroethylvinylether	1	0	0	20	0*	1	305
cis-1,3-Dichloropropene	1	15.8259	0	20	79	1	227
trans-1,3-Dichloropropene	1	15.3584	0	20	77	17	183
Ethyl methacrylate	1	16.0699	0	20	80	20	150
1,1,2-Trichloroethane	1	20.1697	0	20	101	52	150
1,2-Dibromoethane	1	15.8243	0	20	79	20	150
1,3-Dichloropropane	1	18.8907	0	20	94	50	130
4-Methyl-2-Pentanone	1	14.0746	0	20	70	30	150
2-Hexanone	1	15.4675	0	20	77	20	150
Tetrachloroethene	1	21.078	1.1243	20	100	64	148
Toluene	1	17.4925	0	20	87	47	150
1,1,1,2-Tetrachloroethane	1	19.1452	0	20	96	50	150
Chlorobenzene	1	16.858	0	20	84	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73432

n-Butyl acrylate	1	15.672	0	20	78	10	140
n-Amyl acetate	1	16.1295	0	20	81	20	150
Bromoform	1	13.9239	0	20	70	45	169
Ethylbenzene	1	15.9317	0	20	80	37	162
1,1,2,2-Tetrachloroethane	1	15.2259	0	20	76	46	157
Styrene	1	18.1579	0	20	91	40	150
m&p-Xylenes	1	35.6884	0	40	89	40	150
o-Xylene	1	17.737	0	20	89	40	150
trans-1,4-Dichloro-2-butene	1	14.8377	0	20	74	10	150
1,3-Dichlorobenzene	1	16.421	0	20	82	59	156
1,4-Dichlorobenzene	1	15.8136	0	20	79	18	190
1,2-Dichlorobenzene	1	15.7412	0	20	79	18	190
Isopropylbenzene	1	17.6319	0	20	88	40	150
Cyclohexanone	1	62.7358	0	100	63	1	300
Camphene	1	12.5038	0	20	63	20	150
1,2,3-Trichloropropane	1	15.3984	0	20	77	40	130
2-Chlorotoluene	1	19.0238	0	20	95	40	150
p-Ethyltoluene	1	16.8046	0	20	84	10	200
4-Chlorotoluene	1	17.096	0	20	85	40	150
n-Propylbenzene	1	17.4713	0	20	87	40	150
Bromobenzene	1	15.1344	0	20	76	40	130
1,3,5-Trimethylbenzene	1	19.3257	0	20	97	40	150
Butyl methacrylate	1	18.5548	0	20	93	20	150
t-Butylbenzene	1	17.7992	0	20	89	40	150
1,2,4-Trimethylbenzene	1	17.2799	0	20	86	40	150
sec-Butylbenzene	1	17.0035	0	20	85	40	150
4-Isopropyltoluene	1	17.3786	0	20	87	40	150
n-Butylbenzene	1	18.08	0	20	90	30	160
p-Diethylbenzene	1	17.7742	0	20	89	10	200
1,2,4,5-Tetramethylbenzene	1	17.9503	0	20	90	10	170
1,2-Dibromo-3-Chloropropane	1	14.9357	0	20	75	10	150
Camphor	1	123.5885	0	200	62	1	160
Hexachlorobutadiene	1	18.8773	0	20	94	20	170
1,2,4-Trichlorobenzene	1	16.4892	0	20	82	20	160
1,2,3-Trichlorobenzene	1	15.8954	0	20	79	5	180
Naphthalene	1	16.7538	0	20	84	1	200

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73432

8101509 0132

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138683.D		AD07030-002(MSD)		10/22/2018 8:45:00 AM			
Non Spike(If applicable): 3M138624.D		AD07030-002		10/21/2018 3:52:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.5835	0	20	108	10	180
Dichlorodifluoromethane	1	34.4834	0	20	172	1	300
Chloromethane	1	29.8757	0	20	149	1	273
Bromomethane	1	25.5331	0	20	128	1	242
Vinyl Chloride	1	22.9307	0	20	115	1	251
Chloroethane	1	27.4045	0	20	137	14	230
Trichlorofluoromethane	1	21.9963	0	20	110	17	181
Ethyl ether	1	16.6171	0	20	83	30	150
Furan	1	16.4991	0	20	82	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	27.3344	0	20	137	40	170
Methylene Chloride	1	22.1217	0	20	111	1	221
Acrolein	1	86.6064	0	100	87	40	160
Acrylonitrile	1	16.9754	0	20	85	40	160
Iodomethane	1	19.3345	0	20	97	1	200
Acetone	1	84.9664	0	100	85	20	160
Carbon Disulfide	1	19.1349	0	20	96	30	160
t-Butyl Alcohol	1	66.7486	0	100	67	1	200
n-Hexane	1	21.8275	0	20	109	5	210
Di-isopropyl-ether	1	19.0413	0	20	95	30	150
1,1-Dichloroethene	1	19.9243	0	20	100	1	234
Methyl Acetate	1	16.6473	0	20	83	20	150
Methyl-t-butyl ether	1	18.8858	0	20	94	30	150
1,1-Dichloroethane	1	16.5815	0	20	83	59	155
trans-1,2-Dichloroethene	1	20.7762	0	20	104	54	156
Ethyl-t-butyl ether	1	18.9686	0	20	95	30	150
cis-1,2-Dichloroethene	1	19.6563	0	20	98	40	160
Bromochloromethane	1	16.147	0	20	81	30	150
2,2-Dichloropropane	1	21.8861	0	20	109	10	200
Ethyl acetate	1	18.1085	0	20	91	20	170
1,4-Dioxane	1	821.7487	0	1000	82	1	200
1,1-Dichloropropene	1	20.6746	0	20	103	50	150
Chloroform	1	17.4275	0	20	87	51	138
Cyclohexane	1	21.2838	0	20	106	40	160
1,2-Dichloroethane	1	21.8609	0	20	109	49	155
2-Butanone	1	18.8923	0	20	94	1	220
1,1,1-Trichloroethane	1	18.5692	0	20	93	52	162
Carbon Tetrachloride	1	21.4809	0	20	107	70	140
Vinyl Acetate	1	19.3713	0	20	97	20	170
Bromodichloromethane	1	18.8054	0	20	94	35	155
Methylcyclohexane	1	21.8143	0	20	109	30	170
Dibromomethane	1	22.0238	0	20	110	30	160
1,2-Dichloropropane	1	18.4544	0	20	92	1	210
Trichloroethene	1	19.3056	0	20	97	70	157
Benzene	1	21.9831	0	20	110	37	151
tert-Amyl methyl ether	1	17.6453	0	20	88	30	150
Iso-propylacetate	1	15.7324	0	20	79	20	150
Methyl methacrylate	1	15.1768	0	20	76	10	170
Dibromochloromethane	1	15.5213	0	20	78	53	149
2-Chloroethylvinylether	1	0	0	20	0*	1	305
cis-1,3-Dichloropropene	1	14.8293	0	20	74	1	227
trans-1,3-Dichloropropene	1	15.5899	0	20	78	17	183
Ethyl methacrylate	1	16.0267	0	20	80	20	150
1,1,2-Trichloroethane	1	19.215	0	20	96	52	150
1,2-Dibromoethane	1	15.8306	0	20	79	20	150
1,3-Dichloropropane	1	18.67	0	20	93	50	130
4-Methyl-2-Pentanone	1	14.7915	0	20	74	30	150
2-Hexanone	1	15.5546	0	20	78	20	150
Tetrachloroethene	1	22.1214	1.1243	20	105	64	148
Toluene	1	16.8072	0	20	84	47	150
1,1,1,2-Tetrachloroethane	1	20.0658	0	20	100	50	150
Chlorobenzene	1	16.6006	0	20	83	37	160

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Recovery Data Laboratory Limits

QC Batch: MBS73432

n-Butyl acrylate	1	14.6795	0	20	73	10	140
n-Amyl acetate	1	15.4999	0	20	77	20	150
Bromoform	1	13.3499	0	20	67	45	169
Ethylbenzene	1	15.6742	0	20	78	37	162
1,1,2,2-Tetrachloroethane	1	14.6669	0	20	73	46	157
Styrene	1	17.5093	0	20	88	40	150
m&p-Xylenes	1	34.9319	0	40	87	40	150
o-Xylene	1	18.5549	0	20	93	40	150
trans-1,4-Dichloro-2-butene	1	15.9246	0	20	80	10	150
1,3-Dichlorobenzene	1	15.9499	0	20	80	59	156
1,4-Dichlorobenzene	1	15.5712	0	20	78	18	190
1,2-Dichlorobenzene	1	15.8023	0	20	79	18	190
Isopropylbenzene	1	17.7384	0	20	89	40	150
Cyclohexanone	1	45.8472	0	100	46	1	300
Camphene	1	10.3571	0	20	52	20	150
1,2,3-Trichloropropane	1	15.6476	0	20	78	40	130
2-Chlorotoluene	1	18.0969	0	20	90	40	150
p-Ethyltoluene	1	16.4465	0	20	82	10	200
4-Chlorotoluene	1	17.0134	0	20	85	40	150
n-Propylbenzene	1	17.1433	0	20	86	40	150
Bromobenzene	1	15.2333	0	20	76	40	130
1,3,5-Trimethylbenzene	1	19.364	0	20	97	40	150
Butyl methacrylate	1	17.5994	0	20	88	20	150
t-Butylbenzene	1	17.3215	0	20	87	40	150
1,2,4-Trimethylbenzene	1	17.4427	0	20	87	40	150
sec-Butylbenzene	1	16.989	0	20	85	40	150
4-Isopropyltoluene	1	17.8161	0	20	89	40	150
n-Butylbenzene	1	17.4949	0	20	87	30	160
p-Diethylbenzene	1	17.1785	0	20	86	10	200
1,2,4,5-Tetramethylbenzene	1	17.7183	0	20	89	10	170
1,2-Dibromo-3-Chloropropane	1	16.1921	0	20	81	10	150
Camphor	1	131.4018	0	200	66	1	160
Hexachlorobutadiene	1	19.6606	0	20	98	20	170
1,2,4-Trichlorobenzene	1	16.6037	0	20	83	20	160
1,2,3-Trichlorobenzene	1	15.5128	0	20	78	5	180
Naphthalene	1	16.515	0	20	83	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3

RPD Data Laboratory Limits

QC Batch: MBS73432

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M138683.D	AD07030-002(MSD)	10/22/2018 8:45:00 AM
Duplicate(If applicable): 3M138682.D	AD07030-002(MS)	10/22/2018 8:28:00 AM
Inst Blank(If applicable):		
Method: 624.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBSD Conc	RPD	Limit
Chlorodifluoromethane	1	21.5835	21.7001	0.54	40
Dichlorodifluoromethane	1	34.4834	36.5888	5.9	40
Chloromethane	1	29.8757	31.7048	5.9	60
Bromomethane	1	25.5331	27.6127	7.8	61
Vinyl Chloride	1	22.9307	22.2478	3	66
Chloroethane	1	27.4045	21.3691	25	78
Trichlorofluoromethane	1	21.9963	21.1797	3.8	84
Ethyl ether	1	16.6171	15.1902	9	40
Furan	1	16.4991	16.4746	0.15	40
1,1,2-Trichloro-1,2,2-trifluoroethane	1	27.3344	26.075	4.7	40
Methylene Chloride	1	22.1217	23.1411	4.5	28
Acrolein	1	86.6064	95.283	9.5	60
Acrylonitrile	1	16.9754	20.584	19	60
Iodomethane	1	19.3345	19.2955	0.2	40
Acetone	1	84.9664	90.676	6.5	40
Carbon Disulfide	1	19.1349	18.7592	2	40
t-Butyl Alcohol	1	66.7486	73.0867	9.1	40
n-Hexane	1	21.8275	20.3637	6.9	40
Di-isopropyl-ether	1	19.0413	19.3985	1.9	40
1,1-Dichloroethene	1	19.9243	19.818	0.53	32
Methyl Acetate	1	16.6473	16.5249	0.74	40
Methyl-t-butyl ether	1	18.8858	19.43	2.8	40
1,1-Dichloroethane	1	16.5815	18.2479	9.6	40
trans-1,2-Dichloroethene	1	20.7762	20.1932	2.8	45
Ethyl-t-butyl ether	1	18.9686	18.486	2.6	40
cis-1,2-Dichloroethene	1	19.6563	20.1009	2.2	40
Bromochloromethane	1	16.147	21.2841	27	40
2,2-Dichloropropane	1	21.8861	21.8312	0.25	40
Ethyl acetate	1	18.1085	17.6125	2.8	40
1,4-Dioxane	1	821.7487	920.3462	11	40
1,1-Dichloropropene	1	20.6746	20.6233	0.25	40
Chloroform	1	17.4275	18.2767	4.8	54
Cyclohexane	1	21.2838	21.1754	0.51	40
1,2-Dichloroethane	1	21.8609	21.9282	0.31	49
2-Butanone	1	18.8923	18.6729	1.2	40
1,1,1-Trichloroethane	1	18.5692	18.7564	1	36
Carbon Tetrachloride	1	21.4809	20.0809	6.7	41
Vinyl Acetate	1	19.3713	18.8829	2.6	40
Bromodichloromethane	1	18.8054	19.1149	1.6	56
Methylcyclohexane	1	21.8143	21.957	0.65	40
Dibromomethane	1	22.0238	22.3512	1.5	40
1,2-Dichloropropane	1	18.4544	17.0674	7.8	55
Trichloroethene	1	19.3056	20.4714	5.9	48
Benzene	1	21.9831	22.8883	4	61
tert-Amyl methyl ether	1	17.6453	18.6339	5.4	40
Iso-propylacetate	1	15.7324	15.4928	1.5	40
Methyl methacrylate	1	15.1768	14.799	2.5	40
Dibromochloromethane	1	15.5213	15.4179	0.67	50
2-Chloroethylvinylether	1	0	0	NA	71
cis-1,3-Dichloropropene	1	14.8293	15.8259	6.5	58
trans-1,3-Dichloropropene	1	15.5899	15.3584	1.5	56
Ethyl methacrylate	1	16.0267	16.0699	0.27	40
1,1,2-Trichloroethane	1	19.215	20.1697	4.8	45
1,2-Dibromoethane	1	15.8306	15.8243	0.04	40
1,3-Dichloropropane	1	18.67	18.8907	1.2	40
4-Methyl-2-Pentanone	1	14.7915	14.0746	5	40
2-Hexanone	1	15.5546	15.4675	0.56	40
Tetrachloroethene	1	22.1214	21.078	4.8	39
Toluene	1	16.8072	17.4925	4	41
1,1,1,2-Tetrachloroethane	1	20.0658	19.1452	4.7	40
Chlorobenzene	1	16.6006	16.858	1.5	53
n-Butyl acrylate	1	14.6795	15.672	6.5	40
n-Amyl acetate	1	15.4999	16.1295	4	40

Form3
RPD Data Laboratory Limits

QC Batch: MBS73432

Bromoform	1	13.3499	13.9239	4.2	42
Ethylbenzene	1	15.6742	15.9317	1.6	63
1,1,2,2-Tetrachloroethane	1	14.6669	15.2259	3.7	61
Styrene	1	17.5093	18.1579	3.6	40
m&p-Xylenes	1	34.9319	35.6884	2.1	40
o-Xylene	1	18.5549	17.737	4.5	40
trans-1,4-Dichloro-2-butene	1	15.9246	14.8377	7.1	40
1,3-Dichlorobenzene	1	15.9499	16.421	2.9	43
1,4-Dichlorobenzene	1	15.5712	15.8136	1.5	57
1,2-Dichlorobenzene	1	15.8023	15.7412	0.39	57
Isopropylbenzene	1	17.7384	17.6319	0.6	40
Cyclohexanone	1	45.8472	62.7358	31	40
Camphene	1	10.3571	12.5038	19	40
1,2,3-Trichloropropane	1	15.6476	15.3984	1.6	40
2-Chlorotoluene	1	18.0969	19.0238	5	40
p-Ethyltoluene	1	16.4465	16.8046	2.2	40
4-Chlorotoluene	1	17.0134	17.096	0.48	40
n-Propylbenzene	1	17.1433	17.4713	1.9	40
Bromobenzene	1	15.2333	15.1344	0.65	40
1,3,5-Trimethylbenzene	1	19.364	19.3257	0.2	40
Butyl methacrylate	1	17.5994	18.5548	5.3	40
t-Butylbenzene	1	17.3215	17.7992	2.7	40
1,2,4-Trimethylbenzene	1	17.4427	17.2799	0.94	40
sec-Butylbenzene	1	16.989	17.0035	0.09	40
4-Isopropyltoluene	1	17.8161	17.3786	2.5	40
n-Butylbenzene	1	17.4949	18.08	3.3	40
p-Diethylbenzene	1	17.1785	17.7742	3.4	40
1,2,4,5-Tetramethylbenzene	1	17.7183	17.9503	1.3	40
1,2-Dibromo-3-Chloropropane	1	16.1921	14.9357	8.1	40
Camphor	1	131.4018	123.5885	6.1	40
Hexachlorobutadiene	1	19.6606	18.8773	4.1	40
1,2,4-Trichlorobenzene	1	16.6037	16.4892	0.69	40
1,2,3-Trichlorobenzene	1	15.5128	15.8954	2.4	40
Naphthalene	1	16.515	16.7538	1.4	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73436

8101509 0136

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138707.D		AD07037-005(MS)		10/22/2018 3:38:00 PM			
Non Spike(If applicable): 3M138703.D		AD07037-005		10/22/2018 2:29:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	29.0701	0	20	145	10	180
Dichlorodifluoromethane	1	31.7561	0	20	159	1	300
Chloromethane	1	30.7938	0	20	154	1	273
Bromomethane	1	24.9501	0	20	125	1	242
Vinyl Chloride	1	22.5683	0	20	113	1	251
Chloroethane	1	27.1171	0	20	136	14	230
Trichlorofluoromethane	1	21.5612	0	20	108	17	181
Ethyl ether	1	15.7157	0	20	79	30	150
Furan	1	16.8533	0	20	84	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	26.4475	0	20	132	40	170
Methylene Chloride	1	23.5186	0	20	118	1	221
Acrolein	1	93.006	0	100	93	40	160
Acrylonitrile	1	19.9633	0	20	100	40	160
Iodomethane	1	20.9093	0	20	105	1	200
Acetone	1	87.4622	0	100	87	20	160
Carbon Disulfide	1	20.0411	0	20	100	30	160
t-Butyl Alcohol	1	85.3034	0	100	85	1	200
n-Hexane	1	23.3007	0	20	117	5	210
Di-isopropyl-ether	1	21.4929	0	20	107	30	150
1,1-Dichloroethene	1	21.6488	0	20	108	1	234
Methyl Acetate	1	17.2731	0	20	86	20	150
Methyl-t-butyl ether	1	20.8137	0	20	104	30	150
1,1-Dichloroethane	1	19.2176	0	20	96	59	155
trans-1,2-Dichloroethene	1	21.9093	0	20	110	54	156
Ethyl-t-butyl ether	1	21.0785	0	20	105	30	150
cis-1,2-Dichloroethene	1	21.8606	0	20	109	40	160
Bromochloromethane	1	17.8428	0	20	89	30	150
2,2-Dichloropropane	1	24.4291	0	20	122	10	200
Ethyl acetate	1	18.2527	0	20	91	20	170
1,4-Dioxane	1	1090.066	0	1000	109	1	200
1,1-Dichloropropene	1	24.4997	0	20	122	50	150
Chloroform	1	18.5632	0	20	93	51	138
Cyclohexane	1	23.7553	0	20	119	40	160
1,2-Dichloroethane	1	22.9763	0	20	115	49	155
2-Butanone	1	19.4506	0	20	97	1	220
1,1,1-Trichloroethane	1	19.7386	0	20	99	52	162
Carbon Tetrachloride	1	21.2339	0	20	106	70	140
Vinyl Acetate	1	19.6647	0	20	98	20	170
Bromodichloromethane	1	20.1355	0	20	101	35	155
Methylcyclohexane	1	26.102	0	20	131	30	170
Dibromomethane	1	23.6617	0	20	118	30	160
1,2-Dichloropropane	1	20.2169	0	20	101	1	210
Trichloroethene	1	22.0328	0	20	110	70	157
Benzene	1	24.1618	0	20	121	37	151
tert-Amyl methyl ether	1	20.0623	0	20	100	30	150
Iso-propylacetate	1	17.3757	0	20	87	20	150
Methyl methacrylate	1	17.1136	0	20	86	10	170
Dibromochloromethane	1	15.9584	0	20	80	53	149
2-Chloroethylvinylether	1	0	0	20	0*	1	305
cis-1,3-Dichloropropene	1	16.6395	0	20	83	1	227
trans-1,3-Dichloropropene	1	16.3408	0	20	82	17	183
Ethyl methacrylate	1	16.2241	0	20	81	20	150
1,1,2-Trichloroethane	1	19.8672	0	20	99	52	150
1,2-Dibromoethane	1	16.3916	0	20	82	20	150
1,3-Dichloropropane	1	20.0247	0	20	100	50	130
4-Methyl-2-Pentanone	1	16.4824	0	20	82	30	150
2-Hexanone	1	17.6783	0	20	88	20	150
Tetrachloroethene	1	23.6917	0	20	118	64	148
Toluene	1	18.2002	0	20	91	47	150
1,1,1,2-Tetrachloroethane	1	20.9736	0	20	105	50	150
Chlorobenzene	1	17.5514	0	20	88	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

QC Batch: MBS73436

n-Butyl acrylate	1	18.4534	0	20	92	10	140
n-Amyl acetate	1	17.4924	0	20	87	20	150
Bromoform	1	15.2462	0	20	76	45	169
Ethylbenzene	1	18.4111	0	20	92	37	162
1,1,2,2-Tetrachloroethane	1	16.9982	0	20	85	46	157
Styrene	1	19.4734	0	20	97	40	150
m&p-Xylenes	1	39.1243	0	40	98	40	150
o-Xylene	1	19.4157	0	20	97	40	150
trans-1,4-Dichloro-2-butene	1	17.0286	0	20	85	10	150
1,3-Dichlorobenzene	1	17.0024	0	20	85	59	156
1,4-Dichlorobenzene	1	16.7133	0	20	84	18	190
1,2-Dichlorobenzene	1	16.1243	0	20	81	18	190
Isopropylbenzene	1	20.1107	0	20	101	40	150
Cyclohexanone	1	68.0277	0	100	68	1	300
Camphene	1	11.2934	0	20	56	20	150
1,2,3-Trichloropropane	1	17.015	0	20	85	40	130
2-Chlorotoluene	1	19.9258	0	20	100	40	150
p-Ethyltoluene	1	17.8905	0	20	89	10	200
4-Chlorotoluene	1	18.1896	0	20	91	40	150
n-Propylbenzene	1	19.122	0	20	96	40	150
Bromobenzene	1	15.519	0	20	78	40	130
1,3,5-Trimethylbenzene	1	21.6004	0	20	108	40	150
Butyl methacrylate	1	19.9729	0	20	100	20	150
t-Butylbenzene	1	20.2166	0	20	101	40	150
1,2,4-Trimethylbenzene	1	19.0129	0	20	95	40	150
sec-Butylbenzene	1	19.8798	0	20	99	40	150
4-Isopropyltoluene	1	19.729	0	20	99	40	150
n-Butylbenzene	1	19.3192	0	20	97	30	160
p-Diethylbenzene	1	21.2238	0	20	106	10	200
1,2,4,5-Tetramethylbenzene	1	22.0992	0	20	110	10	170
1,2-Dibromo-3-Chloropropane	1	17.7758	0	20	89	10	150
Camphor	1	127.1763	0	200	64	1	160
Hexachlorobutadiene	1	16.272	0	20	81	20	170
1,2,4-Trichlorobenzene	1	18.265	0	20	91	20	160
1,2,3-Trichlorobenzene	1	16.9824	0	20	85	5	180
Naphthalene	1	18.5858	0	20	93	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73436

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138708.D		AD07037-005(MSD)		10/22/2018 3:55:00 PM			
Non Spike(If applicable): 3M138703.D		AD07037-005		10/22/2018 2:29:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	31.5863	0	20	158	10	180
Dichlorodifluoromethane	1	35.2175	0	20	176	1	300
Chloromethane	1	34.1415	0	20	171	1	273
Bromomethane	1	28.5666	0	20	143	1	242
Vinyl Chloride	1	24.5403	0	20	123	1	251
Chloroethane	1	27.0644	0	20	135	14	230
Trichlorofluoromethane	1	21.9498	0	20	110	17	181
Ethyl ether	1	18.1064	0	20	91	30	150
Furan	1	19.0316	0	20	95	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.8145	0	20	129	40	170
Methylene Chloride	1	24.4512	0	20	122	1	221
Acrolein	1	104.966	0	100	105	40	160
Acrylonitrile	1	22.4065	0	20	112	40	160
Iodomethane	1	23.3701	0	20	117	1	200
Acetone	1	100.0416	0	100	100	20	160
Carbon Disulfide	1	21.915	0	20	110	30	160
t-Butyl Alcohol	1	97.9409	0	100	98	1	200
n-Hexane	1	23.8162	0	20	119	5	210
Di-isopropyl-ether	1	23.1595	0	20	116	30	150
1,1-Dichloroethene	1	22.8364	0	20	114	1	234
Methyl Acetate	1	20.3703	0	20	102	20	150
Methyl-t-butyl ether	1	23.0295	0	20	115	30	150
1,1-Dichloroethane	1	21.7216	0	20	109	59	155
trans-1,2-Dichloroethene	1	23.2869	0	20	116	54	156
Ethyl-t-butyl ether	1	23.0296	0	20	115	30	150
cis-1,2-Dichloroethene	1	23.0273	0	20	115	40	160
Bromochloromethane	1	19.2386	0	20	96	30	150
2,2-Dichloropropane	1	24.8239	0	20	124	10	200
Ethyl acetate	1	22.6595	0	20	113	20	170
1,4-Dioxane	1	1176.686	0	1000	118	1	200
1,1-Dichloropropene	1	23.9712	0	20	120	50	150
Chloroform	1	20.3092	0	20	102	51	138
Cyclohexane	1	24.7057	0	20	124	40	160
1,2-Dichloroethane	1	26.3109	0	20	132	49	155
2-Butanone	1	23.1042	0	20	116	1	220
1,1,1-Trichloroethane	1	22.3894	0	20	112	52	162
Carbon Tetrachloride	1	21.4545	0	20	107	70	140
Vinyl Acetate	1	22.7336	0	20	114	20	170
Bromodichloromethane	1	22.1557	0	20	111	35	155
Methylcyclohexane	1	26.0498	0	20	130	30	170
Dibromomethane	1	24.1766	0	20	121	30	160
1,2-Dichloropropane	1	22.0181	0	20	110	1	210
Trichloroethene	1	24.1405	0	20	121	70	157
Benzene	1	25.596	0	20	128	37	151
tert-Amyl methyl ether	1	23.45	0	20	117	30	150
Iso-propylacetate	1	17.8894	0	20	89	20	150
Methyl methacrylate	1	18.1152	0	20	91	10	170
Dibromochloromethane	1	17.7553	0	20	89	53	149
2-Chloroethylvinylether	1	0	0	20	0*	1	305
cis-1,3-Dichloropropene	1	18.6517	0	20	93	1	227
trans-1,3-Dichloropropene	1	18.1273	0	20	91	17	183
Ethyl methacrylate	1	17.9493	0	20	90	20	150
1,1,2-Trichloroethane	1	21.7438	0	20	109	52	150
1,2-Dibromoethane	1	17.6083	0	20	88	20	150
1,3-Dichloropropane	1	22.4184	0	20	112	50	130
4-Methyl-2-Pentanone	1	18.6308	0	20	93	30	150
2-Hexanone	1	19.1346	0	20	96	20	150
Tetrachloroethene	1	23.6258	0	20	118	64	148
Toluene	1	18.8524	0	20	94	47	150
1,1,1,2-Tetrachloroethane	1	22.3886	0	20	112	50	150
Chlorobenzene	1	18.8298	0	20	94	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73436

n-Butyl acrylate	1	20.3184	0	20	102	10	140
n-Amyl acetate	1	19.3296	0	20	97	20	150
Bromoform	1	16.3859	0	20	82	45	169
Ethylbenzene	1	18.8726	0	20	94	37	162
1,1,2,2-Tetrachloroethane	1	18.2742	0	20	91	46	157
Styrene	1	21.4442	0	20	107	40	150
m&p-Xylenes	1	40.3483	0	40	101	40	150
o-Xylene	1	21.9269	0	20	110	40	150
trans-1,4-Dichloro-2-butene	1	17.9362	0	20	90	10	150
1,3-Dichlorobenzene	1	17.9586	0	20	90	59	156
1,4-Dichlorobenzene	1	18.1377	0	20	91	18	190
1,2-Dichlorobenzene	1	17.7989	0	20	89	18	190
Isopropylbenzene	1	20.5729	0	20	103	40	150
Cyclohexanone	1	60.6368	0	100	61	1	300
Camphene	1	9.1932	0	20	46	20	150
1,2,3-Trichloropropane	1	17.9578	0	20	90	40	130
2-Chlorotoluene	1	21.6204	0	20	108	40	150
p-Ethyltoluene	1	18.1655	0	20	91	10	200
4-Chlorotoluene	1	19.5627	0	20	98	40	150
n-Propylbenzene	1	20.2377	0	20	101	40	150
Bromobenzene	1	18.0257	0	20	90	40	130
1,3,5-Trimethylbenzene	1	23.621	0	20	118	40	150
Butyl methacrylate	1	21.6781	0	20	108	20	150
t-Butylbenzene	1	21.3466	0	20	107	40	150
1,2,4-Trimethylbenzene	1	19.8755	0	20	99	40	150
sec-Butylbenzene	1	21.4214	0	20	107	40	150
4-Isopropyltoluene	1	21.5323	0	20	108	40	150
n-Butylbenzene	1	19.8752	0	20	99	30	160
p-Diethylbenzene	1	21.0696	0	20	105	10	200
1,2,4,5-Tetramethylbenzene	1	23.3046	0	20	117	10	170
1,2-Dibromo-3-Chloropropane	1	19.1959	0	20	96	10	150
Camphor	1	168.6678	0	200	84	1	160
Hexachlorobutadiene	1	19.9798	0	20	100	20	170
1,2,4-Trichlorobenzene	1	19.0881	0	20	95	20	160
1,2,3-Trichlorobenzene	1	18.6437	0	20	93	5	180
Naphthalene	1	21.8936	0	20	109	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS73436

8101509 0140

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M138708.D	AD07037-005(MSD)	10/22/2018 3:55:00 PM
Duplicate(If applicable): 3M138707.D	AD07037-005(MS)	10/22/2018 3:38:00 PM
Inst Blank(If applicable):		
Method: 624.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	31.5863	29.0701	8.3	40
Dichlorodifluoromethane	1	35.2175	31.7561	10	40
Chloromethane	1	34.1415	30.7938	10	60
Bromomethane	1	28.5666	24.9501	14	61
Vinyl Chloride	1	24.5403	22.5683	8.4	66
Chloroethane	1	27.0644	27.1171	0.19	78
Trichlorofluoromethane	1	21.9498	21.5612	1.8	84
Ethyl ether	1	18.1064	15.7157	14	40
Furan	1	19.0316	16.8533	12	40
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.8145	26.4475	2.4	40
Methylene Chloride	1	24.4512	23.5186	3.9	28
Acrolein	1	104.966	93.006	12	60
Acrylonitrile	1	22.4065	19.9633	12	60
Iodomethane	1	23.3701	20.9093	11	40
Acetone	1	100.0416	87.4622	13	40
Carbon Disulfide	1	21.915	20.0411	8.9	40
t-Butyl Alcohol	1	97.9409	85.3034	14	40
n-Hexane	1	23.8162	23.3007	2.2	40
Di-isopropyl-ether	1	23.1595	21.4929	7.5	40
1,1-Dichloroethene	1	22.8364	21.6488	5.3	32
Methyl Acetate	1	20.3703	17.2731	16	40
Methyl-t-butyl ether	1	23.0295	20.8137	10	40
1,1-Dichloroethane	1	21.7216	19.2176	12	40
trans-1,2-Dichloroethene	1	23.2869	21.9093	6.1	45
Ethyl-t-butyl ether	1	23.0296	21.0785	8.8	40
cis-1,2-Dichloroethene	1	23.0273	21.8606	5.2	40
Bromochloromethane	1	19.2386	17.8428	7.5	40
2,2-Dichloropropane	1	24.8239	24.4291	1.6	40
Ethyl acetate	1	22.6595	18.2527	22	40
1,4-Dioxane	1	1176.686	1090.066	7.6	40
1,1-Dichloropropene	1	23.9712	24.4997	2.2	40
Chloroform	1	20.3092	18.5632	9	54
Cyclohexane	1	24.7057	23.7553	3.9	40
1,2-Dichloroethane	1	26.3109	22.9763	14	49
2-Butanone	1	23.1042	19.4506	17	40
1,1,1-Trichloroethane	1	22.3894	19.7386	13	36
Carbon Tetrachloride	1	21.4545	21.2339	1	41
Vinyl Acetate	1	22.7336	19.6647	14	40
Bromodichloromethane	1	22.1557	20.1355	9.6	56
Methylcyclohexane	1	26.0498	26.102	0.2	40
Dibromomethane	1	24.1766	23.6617	2.2	40
1,2-Dichloropropane	1	22.0181	20.2169	8.5	55
Trichloroethene	1	24.1405	22.0328	9.1	48
Benzene	1	25.596	24.1618	5.8	61
tert-Amyl methyl ether	1	23.45	20.0623	16	40
Iso-propylacetate	1	17.8894	17.3757	2.9	40
Methyl methacrylate	1	18.1152	17.1136	5.7	40
Dibromochloromethane	1	17.7553	15.9584	11	50
2-Chloroethylvinylether	1	0	0	NA	71
cis-1,3-Dichloropropene	1	18.6517	16.6395	11	58
trans-1,3-Dichloropropene	1	18.1273	16.3408	10	56
Ethyl methacrylate	1	17.9493	16.2241	10	40
1,1,2-Trichloroethane	1	21.7438	19.8672	9	45
1,2-Dibromoethane	1	17.6083	16.3916	7.2	40
1,3-Dichloropropane	1	22.4184	20.0247	11	40
4-Methyl-2-Pentanone	1	18.6308	16.4824	12	40
2-Hexanone	1	19.1346	17.6783	7.9	40
Tetrachloroethene	1	23.6258	23.6917	0.28	39
Toluene	1	18.8524	18.2002	3.5	41
1,1,1,2-Tetrachloroethane	1	22.3886	20.9736	6.5	40
Chlorobenzene	1	18.8298	17.5514	7	53
n-Butyl acrylate	1	20.3184	18.4534	9.6	40
n-Amyl acetate	1	19.3296	17.4924	10	40

Form3
RPD Data Laboratory Limits

8101509 0141

QC Batch: MBS73436

Bromoform	1	16.3859	15.2462	7.2	42
Ethylbenzene	1	18.8726	18.4111	2.5	63
1,1,2,2-Tetrachloroethane	1	18.2742	16.9982	7.2	61
Styrene	1	21.4442	19.4734	9.6	40
m&p-Xylenes	1	40.3483	39.1243	3.1	40
o-Xylene	1	21.9269	19.4157	12	40
trans-1,4-Dichloro-2-butene	1	17.9362	17.0286	5.2	40
1,3-Dichlorobenzene	1	17.9586	17.0024	5.5	43
1,4-Dichlorobenzene	1	18.1377	16.7133	8.2	57
1,2-Dichlorobenzene	1	17.7989	16.1243	9.9	57
Isopropylbenzene	1	20.5729	20.1107	2.3	40
Cyclohexanone	1	60.6368	68.0277	11	40
Camphene	1	9.1932	11.2934	21	40
1,2,3-Trichloropropane	1	17.9578	17.015	5.4	40
2-Chlorotoluene	1	21.6204	19.9258	8.2	40
p-Ethyltoluene	1	18.1655	17.8905	1.5	40
4-Chlorotoluene	1	19.5627	18.1896	7.3	40
n-Propylbenzene	1	20.2377	19.122	5.7	40
Bromobenzene	1	18.0257	15.519	15	40
1,3,5-Trimethylbenzene	1	23.621	21.6004	8.9	40
Butyl methacrylate	1	21.6781	19.9729	8.2	40
t-Butylbenzene	1	21.3466	20.2166	5.4	40
1,2,4-Trimethylbenzene	1	19.8755	19.0129	4.4	40
sec-Butylbenzene	1	21.4214	19.8798	7.5	40
4-Isopropyltoluene	1	21.5323	19.729	8.7	40
n-Butylbenzene	1	19.8752	19.3192	2.8	40
p-Diethylbenzene	1	21.0696	21.2238	0.73	40
1,2,4,5-Tetramethylbenzene	1	23.3046	22.0992	5.3	40
1,2-Dibromo-3-Chloropropane	1	19.1959	17.7758	7.7	40
Camphor	1	168.6678	127.1763	28	40
Hexachlorobutadiene	1	19.9798	16.272	20	40
1,2,4-Trichlorobenzene	1	19.0881	18.265	4.4	40
1,2,3-Trichlorobenzene	1	18.6437	16.9824	9.3	40
Naphthalene	1	21.8936	18.5858	16	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73438

8101509 0142

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138735.D		AD07187-001(T:MS)		10/23/2018 12:05:00 P			
Non Spike(If applicable): 3M138727.D		AD07187-001(T)		10/23/2018 9:47:00 AM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	39.0473	0	20	195 *	10	180
Dichlorodifluoromethane	1	30.7551	0	20	154	1	300
Chloromethane	1	30.8383	0	20	154	1	273
Bromomethane	1	23.1326	0	20	116	1	242
Vinyl Chloride	1	22.6513	0	20	113	1	251
Chloroethane	1	21.6171	0	20	108	14	230
Trichlorofluoromethane	1	20.1865	0	20	101	17	181
Ethyl ether	1	21.3642	0	20	107	30	150
Furan	1	16.8786	0	20	84	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.4415	0	20	117	40	170
Methylene Chloride	1	86.871	0	20	434 *	1	221
Acrolein	1	80.2097	0	100	80	40	160
Acrylonitrile	1	20.5185	0	20	103	40	160
Iodomethane	1	21.7513	0	20	109	1	200
Acetone	1	141.3669	0	100	141	20	160
Carbon Disulfide	1	19.104	0	20	96	30	160
t-Butyl Alcohol	1	94.0327	0	100	94	1	200
n-Hexane	1	26.9588	0	20	135	5	210
Di-isopropyl-ether	1	22.6282	0	20	113	30	150
1,1-Dichloroethene	1	21.5893	0	20	108	1	234
Methyl Acetate	1	36.8736	0	20	184 *	20	150
Methyl-t-butyl ether	1	22.4412	0	20	112	30	150
1,1-Dichloroethane	1	20.9638	0	20	105	59	155
trans-1,2-Dichloroethene	1	20.4059	0	20	102	54	156
Ethyl-t-butyl ether	1	23.69	0	20	118	30	150
cis-1,2-Dichloroethene	1	21.597	0	20	108	40	160
Bromochloromethane	1	23.7338	0	20	119	30	150
2,2-Dichloropropane	1	24.0783	0	20	120	10	200
Ethyl acetate	1	22.3341	0	20	112	20	170
1,4-Dioxane	1	1105.295	0	1000	111	1	200
1,1-Dichloropropene	1	23.4345	0	20	117	50	150
Chloroform	1	18.9923	0	20	95	51	138
Cyclohexane	1	24.73	0	20	124	40	160
1,2-Dichloroethane	1	23.5773	0	20	118	49	155
2-Butanone	1	21.2127	0	20	106	1	220
1,1,1-Trichloroethane	1	19.835	0	20	99	52	162
Carbon Tetrachloride	1	20.762	0	20	104	70	140
Vinyl Acetate	1	22.3305	0	20	112	20	170
Bromodichloromethane	1	20.8198	0	20	104	35	155
Methylcyclohexane	1	26.7591	0	20	134	30	170
Dibromomethane	1	24.1139	0	20	121	30	160
1,2-Dichloropropane	1	22.7367	0	20	114	1	210
Trichloroethene	1	22.1006	0	20	111	70	157
Benzene	1	25.0146	0	20	125	37	151
tert-Amyl methyl ether	1	23.1274	0	20	116	30	150
Iso-propylacetate	1	19.7878	0	20	99	20	150
Methyl methacrylate	1	18.1597	0	20	91	10	170
Dibromochloromethane	1	16.393	0	20	82	53	149
2-Chloroethylvinylether	1	20.718	0	20	104	1	305
cis-1,3-Dichloropropene	1	17.6297	0	20	88	1	227
trans-1,3-Dichloropropene	1	17.2388	0	20	86	17	183
Ethyl methacrylate	1	19.3968	0	20	97	20	150
1,1,2-Trichloroethane	1	21.0293	0	20	105	52	150
1,2-Dibromoethane	1	17.4188	0	20	87	20	150
1,3-Dichloropropane	1	20.3631	0	20	102	50	130
4-Methyl-2-Pentanone	1	19.2296	0	20	96	30	150
2-Hexanone	1	18.5511	0	20	93	20	150
Tetrachloroethene	1	22.0361	0	20	110	64	148
Toluene	1	18.0812	0	20	90	47	150
1,1,1,2-Tetrachloroethane	1	21.8273	0	20	109	50	150
Chlorobenzene	1	17.6869	0	20	88	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits

QC Batch: MBS73438

n-Butyl acrylate	1	21.6866	0	20	108	10	140
n-Amyl acetate	1	21.8786	0	20	109	20	150
Bromoform	1	15.1392	0	20	76	45	169
Ethylbenzene	1	21.7703	0	20	109	37	162
1,1,2,2-Tetrachloroethane	1	18.1135	0	20	91	46	157
Styrene	1	21.4905	0	20	107	40	150
m&p-Xylenes	1	46.6588	0	40	117	40	150
o-Xylene	1	25.665	0	20	128	40	150
trans-1,4-Dichloro-2-butene	1	19.2221	0	20	96	10	150
1,3-Dichlorobenzene	1	18.5762	0	20	93	59	156
1,4-Dichlorobenzene	1	17.4248	0	20	87	18	190
1,2-Dichlorobenzene	1	17.5053	0	20	88	18	190
Isopropylbenzene	1	21.3013	0	20	107	40	150
Cyclohexanone	1	141.8477	0	100	142	1	300
Camphene	1	22.9553	0	20	115	20	150
1,2,3-Trichloropropane	1	18.8169	0	20	94	40	130
2-Chlorotoluene	1	20.3296	0	20	102	40	150
p-Ethyltoluene	1	19.405	0	20	97	10	200
4-Chlorotoluene	1	19.4089	0	20	97	40	150
n-Propylbenzene	1	20.2404	0	20	101	40	150
Bromobenzene	1	18.2727	0	20	91	40	130
1,3,5-Trimethylbenzene	1	22.2317	0	20	111	40	150
Butyl methacrylate	1	20.9852	0	20	105	20	150
t-Butylbenzene	1	21.1897	0	20	106	40	150
1,2,4-Trimethylbenzene	1	20.4029	0	20	102	40	150
sec-Butylbenzene	1	22.0312	0	20	110	40	150
4-Isopropyltoluene	1	22.4245	0	20	112	40	150
n-Butylbenzene	1	21.781	0	20	109	30	160
p-Diethylbenzene	1	24.074	0	20	120	10	200
1,2,4,5-Tetramethylbenzene	1	24.2748	0	20	121	10	170
1,2-Dibromo-3-Chloropropane	1	18.8643	0	20	94	10	150
Camphor	1	161.0291	0	200	81	1	160
Hexachlorobutadiene	1	21.2317	0	20	106	20	170
1,2,4-Trichlorobenzene	1	19.391	0	20	97	20	160
1,2,3-Trichlorobenzene	1	18.9656	0	20	95	5	180
Naphthalene	1	22.929	0	20	115	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
 QC Batch: MBS73438

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M138736.D		AD07187-001(T:MSD)		10/23/2018 12:22:00 P			
Non Spike(If applicable): 3M138727.D		AD07187-001(T)		10/23/2018 9:47:00 AM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	46.673	0	20	233 *	10	180
Dichlorodifluoromethane	1	37.5959	0	20	188	1	300
Chloromethane	1	39.5719	0	20	198	1	273
Bromomethane	1	31.169	0	20	156	1	242
Vinyl Chloride	1	29.086	0	20	145	1	251
Chloroethane	1	29.2272	0	20	146	14	230
Trichlorofluoromethane	1	25.043	0	20	125	17	181
Ethyl ether	1	26.2646	0	20	131	30	150
Furan	1	22.452	0	20	112	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	27.4497	0	20	137	40	170
Methylene Chloride	1	107.1452	0	20	536 *	1	221
Acrolein	1	101.7468	0	100	102	40	160
Acrylonitrile	1	24.8652	0	20	124	40	160
Iodomethane	1	27.377	0	20	137	1	200
Acetone	1	173.2693	0	100	173 *	20	160
Carbon Disulfide	1	23.4565	0	20	117	30	160
t-Butyl Alcohol	1	118.4073	0	100	118	1	200
n-Hexane	1	32.6171	0	20	163	5	210
Di-isopropyl-ether	1	26.9949	0	20	135	30	150
1,1-Dichloroethene	1	26.1968	0	20	131	1	234
Methyl Acetate	1	43.882	0	20	219 *	20	150
Methyl-t-butyl ether	1	26.9041	0	20	135	30	150
1,1-Dichloroethane	1	24.8105	0	20	124	59	155
trans-1,2-Dichloroethene	1	27.066	0	20	135	54	156
Ethyl-t-butyl ether	1	26.8601	0	20	134	30	150
cis-1,2-Dichloroethene	1	25.1184	0	20	126	40	160
Bromochloromethane	1	27.5591	0	20	138	30	150
2,2-Dichloropropane	1	29.7479	0	20	149	10	200
Ethyl acetate	1	27.194	0	20	136	20	170
1,4-Dioxane	1	1253.664	0	1000	125	1	200
1,1-Dichloropropene	1	28.0079	0	20	140	50	150
Chloroform	1	23.0835	0	20	115	51	138
Cyclohexane	1	30.4771	0	20	152	40	160
1,2-Dichloroethane	1	28.2343	0	20	141	49	155
2-Butanone	1	24.6894	0	20	123	1	220
1,1,1-Trichloroethane	1	24.6829	0	20	123	52	162
Carbon Tetrachloride	1	24.9109	0	20	125	70	140
Vinyl Acetate	1	26.0127	0	20	130	20	170
Bromodichloromethane	1	23.767	0	20	119	35	155
Methylcyclohexane	1	33.9353	0	20	170	30	170
Dibromomethane	1	28.8981	0	20	144	30	160
1,2-Dichloropropane	1	24.811	0	20	124	1	210
Trichloroethene	1	26.9165	0	20	135	70	157
Benzene	1	30.3971	0	20	152 *	37	151
tert-Amyl methyl ether	1	26.8845	0	20	134	30	150
Iso-propylacetate	1	22.3418	0	20	112	20	150
Methyl methacrylate	1	22.5128	0	20	113	10	170
Dibromochloromethane	1	18.7345	0	20	94	53	149
2-Chloroethylvinylether	1	23.4102	0	20	117	1	305
cis-1,3-Dichloropropene	1	20.5089	0	20	103	1	227
trans-1,3-Dichloropropene	1	19.8452	0	20	99	17	183
Ethyl methacrylate	1	21.7874	0	20	109	20	150
1,1,2-Trichloroethane	1	25.3243	0	20	127	52	150
1,2-Dibromoethane	1	19.8952	0	20	99	20	150
1,3-Dichloropropane	1	24.7592	0	20	124	50	130
4-Methyl-2-Pentanone	1	22.9026	0	20	115	30	150
2-Hexanone	1	23.2517	0	20	116	20	150
Tetrachloroethene	1	24.7067	0	20	124	64	148
Toluene	1	21.5627	0	20	108	47	150
1,1,1,2-Tetrachloroethane	1	25.4697	0	20	127	50	150
Chlorobenzene	1	20.436	0	20	102	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73438

n-Butyl acrylate	1	24.859	0	20	124	10	140
n-Amyl acetate	1	25.1977	0	20	126	20	150
Bromoform	1	18.6517	0	20	93	45	169
Ethylbenzene	1	24.5069	0	20	123	37	162
1,1,2,2-Tetrachloroethane	1	22.0319	0	20	110	46	157
Styrene	1	24.7254	0	20	124	40	150
m&p-Xylenes	1	56.3313	0	40	141	40	150
o-Xylene	1	29.7828	0	20	149	40	150
trans-1,4-Dichloro-2-butene	1	25.7683	0	20	129	10	150
1,3-Dichlorobenzene	1	21.3598	0	20	107	59	156
1,4-Dichlorobenzene	1	20.4863	0	20	102	18	190
1,2-Dichlorobenzene	1	20.2982	0	20	101	18	190
Isopropylbenzene	1	25.5151	0	20	128	40	150
Cyclohexanone	1	166.4102	0	100	166	1	300
Camphene	1	26.4582	0	20	132	20	150
1,2,3-Trichloropropane	1	22.2053	0	20	111	40	130
2-Chlorotoluene	1	24.4999	0	20	122	40	150
p-Ethyltoluene	1	23.8368	0	20	119	10	200
4-Chlorotoluene	1	23.7158	0	20	119	40	150
n-Propylbenzene	1	23.2362	0	20	116	40	150
Bromobenzene	1	21.88	0	20	109	40	130
1,3,5-Trimethylbenzene	1	25.4867	0	20	127	40	150
Butyl methacrylate	1	24.2389	0	20	121	20	150
t-Butylbenzene	1	26.0421	0	20	130	40	150
1,2,4-Trimethylbenzene	1	24.0896	0	20	120	40	150
sec-Butylbenzene	1	26.1313	0	20	131	40	150
4-Isopropyltoluene	1	26.4048	0	20	132	40	150
n-Butylbenzene	1	26.1749	0	20	131	30	160
p-Diethylbenzene	1	28.1988	0	20	141	10	200
1,2,4,5-Tetramethylbenzene	1	31.6204	0	20	158	10	170
1,2-Dibromo-3-Chloropropane	1	23.57	0	20	118	10	150
Camphor	1	253.7583	0	200	127	1	160
Hexachlorobutadiene	1	23.7916	0	20	119	20	170
1,2,4-Trichlorobenzene	1	24.8544	0	20	124	20	160
1,2,3-Trichlorobenzene	1	23.1365	0	20	116	5	180
Naphthalene	1	28.5936	0	20	143	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits

8101509 0146

QC Batch: MBS73438

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M138736.D	AD07187-001(T:MSD)	10/23/2018 12:22:00 P
Duplicate(If applicable): 3M138735.D	AD07187-001(T:MS)	10/23/2018 12:05:00 P
Inst Blank(If applicable):		
Method: 624.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBSD Conc	RPD	Limit
Chlorodifluoromethane	1	46.673	39.0473	18	40
Dichlorodifluoromethane	1	37.5959	30.7551	20	40
Chloromethane	1	39.5719	30.8383	25	60
Bromomethane	1	31.169	23.1326	30	61
Vinyl Chloride	1	29.086	22.6513	25	66
Chloroethane	1	29.2272	21.6171	30	78
Trichlorofluoromethane	1	25.043	20.1865	21	84
Ethyl ether	1	26.2646	21.3642	21	40
Furan	1	22.452	16.8786	28	40
1,1,2-Trichloro-1,2,2-trifluoroethane	1	27.4497	23.4415	16	40
Methylene Chloride	1	107.1452	86.871	21	28
Acrolein	1	101.7468	80.2097	24	60
Acrylonitrile	1	24.8652	20.5185	19	60
Iodomethane	1	27.377	21.7513	23	40
Acetone	1	173.2693	141.3669	20	40
Carbon Disulfide	1	23.4565	19.104	20	40
t-Butyl Alcohol	1	118.4073	94.0327	23	40
n-Hexane	1	32.6171	26.9588	19	40
Di-isopropyl-ether	1	26.9949	22.6282	18	40
1,1-Dichloroethene	1	26.1968	21.5893	19	32
Methyl Acetate	1	43.882	36.8736	17	40
Methyl-t-butyl ether	1	26.9041	22.4412	18	40
1,1-Dichloroethane	1	24.8105	20.9638	17	40
trans-1,2-Dichloroethene	1	27.066	20.4059	28	45
Ethyl-t-butyl ether	1	26.8601	23.69	13	40
cis-1,2-Dichloroethene	1	25.1184	21.597	15	40
Bromochloromethane	1	27.5591	23.7338	15	40
2,2-Dichloropropane	1	29.7479	24.0783	21	40
Ethyl acetate	1	27.194	22.3341	20	40
1,4-Dioxane	1	1253.664	1105.295	13	40
1,1-Dichloropropene	1	28.0079	23.4345	18	40
Chloroform	1	23.0835	18.9923	19	54
Cyclohexane	1	30.4771	24.73	21	40
1,2-Dichloroethane	1	28.2343	23.5773	18	49
2-Butanone	1	24.6894	21.2127	15	40
1,1,1-Trichloroethane	1	24.6829	19.835	22	36
Carbon Tetrachloride	1	24.9109	20.762	18	41
Vinyl Acetate	1	26.0127	22.3305	15	40
Bromodichloromethane	1	23.767	20.8198	13	56
Methylcyclohexane	1	33.9353	26.7591	24	40
Dibromomethane	1	28.8981	24.1139	18	40
1,2-Dichloropropane	1	24.811	22.7367	8.7	55
Trichloroethene	1	26.9165	22.1006	20	48
Benzene	1	30.3971	25.0146	19	61
tert-Amyl methyl ether	1	26.8845	23.1274	15	40
Iso-propylacetate	1	22.3418	19.7878	12	40
Methyl methacrylate	1	22.5128	18.1597	21	40
Dibromochloromethane	1	18.7345	16.393	13	50
2-Chloroethylvinylether	1	23.4102	20.718	12	71
cis-1,3-Dichloropropene	1	20.5089	17.6297	15	58
trans-1,3-Dichloropropene	1	19.8452	17.2388	14	56
Ethyl methacrylate	1	21.7874	19.3968	12	40
1,1,2-Trichloroethane	1	25.3243	21.0293	19	45
1,2-Dibromoethane	1	19.8952	17.4188	13	40
1,3-Dichloropropane	1	24.7592	20.3631	19	40
4-Methyl-2-Pentanone	1	22.9026	19.2296	17	40
2-Hexanone	1	23.2517	18.5511	22	40
Tetrachloroethene	1	24.7067	22.0361	11	39
Toluene	1	21.5627	18.0812	18	41
1,1,1,2-Tetrachloroethane	1	25.4697	21.8273	15	40
Chlorobenzene	1	20.436	17.6869	14	53
n-Butyl acrylate	1	24.859	21.6866	14	40
n-Amyl acetate	1	25.1977	21.8786	14	40

Form3
RPD Data Laboratory Limits

8101509 0147

QC Batch: MBS73438

Bromoform	1	18.6517	15.1392	21	42
Ethylbenzene	1	24.5069	21.7703	12	63
1,1,2,2-Tetrachloroethane	1	22.0319	18.1135	20	61
Styrene	1	24.7254	21.4905	14	40
m&p-Xylenes	1	56.3313	46.6588	19	40
o-Xylene	1	29.7828	25.665	15	40
trans-1,4-Dichloro-2-butene	1	25.7683	19.2221	29	40
1,3-Dichlorobenzene	1	21.3598	18.5762	14	43
1,4-Dichlorobenzene	1	20.4863	17.4248	16	57
1,2-Dichlorobenzene	1	20.2982	17.5053	15	57
Isopropylbenzene	1	25.5151	21.3013	18	40
Cyclohexanone	1	166.4102	141.8477	16	40
Camphene	1	26.4582	22.9553	14	40
1,2,3-Trichloropropane	1	22.2053	18.8169	17	40
2-Chlorotoluene	1	24.4999	20.3296	19	40
p-Ethyltoluene	1	23.8368	19.405	20	40
4-Chlorotoluene	1	23.7158	19.4089	20	40
n-Propylbenzene	1	23.2362	20.2404	14	40
Bromobenzene	1	21.88	18.2727	18	40
1,3,5-Trimethylbenzene	1	25.4867	22.2317	14	40
Butyl methacrylate	1	24.2389	20.9852	14	40
t-Butylbenzene	1	26.0421	21.1897	21	40
1,2,4-Trimethylbenzene	1	24.0896	20.4029	17	40
sec-Butylbenzene	1	26.1313	22.0312	17	40
4-Isopropyltoluene	1	26.4048	22.4245	16	40
n-Butylbenzene	1	26.1749	21.781	18	40
p-Diethylbenzene	1	28.1988	24.074	16	40
1,2,4,5-Tetramethylbenzene	1	31.6204	24.2748	26	40
1,2-Dibromo-3-Chloropropane	1	23.57	18.8643	22	40
Camphor	1	253.7583	161.0291	45*	40
Hexachlorobutadiene	1	23.7916	21.2317	11	40
1,2,4-Trichlorobenzene	1	24.8544	19.391	25	40
1,2,3-Trichlorobenzene	1	23.1365	18.9656	20	40
Naphthalene	1	28.5936	22.929	22	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73499

8101509 0148

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M139075.D		AD07121-007(MS)		10/27/2018 2:44:00 PM			
Non Spike(If applicable): 3M139071.D		AD07121-007		10/27/2018 1:35:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	38.5801	0	20	193 *	10	180
Dichlorodifluoromethane	1	28.0211	0	20	140	1	300
Chloromethane	1	28.3391	0	20	142	1	273
Bromomethane	1	18.3729	0	20	92	1	242
Vinyl Chloride	1	19.8582	0	20	99	1	251
Chloroethane	1	21.2529	0	20	106	14	230
Trichlorofluoromethane	1	14.8161	0	20	74	17	181
Ethyl ether	1	13.9969	0	20	70	30	150
Furan	1	14.6953	0	20	73	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.432	0	20	92	40	170
Methylene Chloride	1	17.9181	0	20	90	1	221
Acrolein	1	85.778	0	100	86	40	160
Acrylonitrile	1	19.7058	0	20	99	40	160
Iodomethane	1	15.1672	0	20	76	1	200
Acetone	1	74.2432	0	100	74	20	160
Carbon Disulfide	1	15.5261	0	20	78	30	160
t-Butyl Alcohol	1	74.9586	0	100	75	1	200
n-Hexane	1	18.0693	0	20	90	5	210
Di-isopropyl-ether	1	19.8448	0	20	99	30	150
1,1-Dichloroethene	1	17.0881	0	20	85	1	234
Methyl Acetate	1	16.8441	0	20	84	20	150
Methyl-t-butyl ether	1	15.7549	0	20	79	30	150
1,1-Dichloroethane	1	16.1393	0	20	81	59	155
trans-1,2-Dichloroethene	1	15.3872	0	20	77	54	156
Ethyl-t-butyl ether	1	17.7697	0	20	89	30	150
cis-1,2-Dichloroethene	1	17.9346	0	20	90	40	160
Bromochloromethane	1	17.0461	0	20	85	30	150
2,2-Dichloropropane	1	17.6248	0	20	88	10	200
Ethyl acetate	1	20.0027	0	20	100	20	170
1,4-Dioxane	1	767.1236	0	1000	77	1	200
1,1-Dichloropropene	1	18.0035	0	20	90	50	150
Chloroform	1	14.3129	0	20	72	51	138
Cyclohexane	1	19.5964	0	20	98	40	160
1,2-Dichloroethane	1	17.6292	0	20	88	49	155
2-Butanone	1	17.4313	0	20	87	1	220
1,1,1-Trichloroethane	1	15.2414	0	20	76	52	162
Carbon Tetrachloride	1	15.5527	0	20	78	70	140
Vinyl Acetate	1	19.8638	0	20	99	20	170
Bromodichloromethane	1	15.9992	0	20	80	35	155
Methylcyclohexane	1	18.3176	0	20	92	30	170
Dibromomethane	1	17.3139	0	20	87	30	160
1,2-Dichloropropane	1	19.5334	0	20	98	1	210
Trichloroethene	1	14.8936	0	20	74	70	157
Benzene	1	19.3047	0	20	97	37	151
tert-Amyl methyl ether	1	16.9221	0	20	85	30	150
Iso-propylacetate	1	20.0722	0	20	100	20	150
Methyl methacrylate	1	19.1434	0	20	96	10	170
Dibromochloromethane	1	14.5952	0	20	73	53	149
2-Chloroethylvinylether	1	0	0	20	0 *	1	305
cis-1,3-Dichloropropene	1	17.6815	0	20	88	1	227
trans-1,3-Dichloropropene	1	15.9486	0	20	80	17	183
Ethyl methacrylate	1	18.5851	0	20	93	20	150
1,1,2-Trichloroethane	1	18.5297	0	20	93	52	150
1,2-Dibromoethane	1	15.4811	0	20	77	20	150
1,3-Dichloropropane	1	21.7935	0	20	109	50	130
4-Methyl-2-Pentanone	1	20.4116	0	20	102	30	150
2-Hexanone	1	19.8074	0	20	99	20	150
Tetrachloroethene	1	18.784	0	20	94	64	148
Toluene	1	16.7223	0	20	84	47	150
1,1,1,2-Tetrachloroethane	1	20.7711	0	20	104	50	150
Chlorobenzene	1	15.4894	0	20	77	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73499

n-Butyl acrylate	1	21.3015	0	20	107	10	140
n-Amyl acetate	1	21.7995	0	20	109	20	150
Bromoform	1	14.9624	0	20	75	45	169
Ethylbenzene	1	21.189	0	20	106	37	162
1,1,2,2-Tetrachloroethane	1	17.1406	0	20	86	46	157
Styrene	1	18.0436	0	20	90	40	150
m&p-Xylenes	1	37.5457	0	40	94	40	150
o-Xylene	1	18.53	0	20	93	40	150
trans-1,4-Dichloro-2-butene	1	17.462	0	20	87	10	150
1,3-Dichlorobenzene	1	16.5417	0	20	83	59	156
1,4-Dichlorobenzene	1	15.82	0	20	79	18	190
1,2-Dichlorobenzene	1	15.5574	0	20	78	18	190
Isopropylbenzene	1	18.6483	0	20	93	40	150
Cyclohexanone	1	81.0951	0	100	81	1	300
Camphene	1	9.607	0	20	48	20	150
1,2,3-Trichloropropane	1	17.7715	0	20	89	40	130
2-Chlorotoluene	1	19.1001	0	20	96	40	150
p-Ethyltoluene	1	15.3499	0	20	77	10	200
4-Chlorotoluene	1	17.1512	0	20	86	40	150
n-Propylbenzene	1	18.7427	0	20	94	40	150
Bromobenzene	1	15.7281	0	20	79	40	130
1,3,5-Trimethylbenzene	1	17.6971	0	20	88	40	150
Butyl methacrylate	1	21.4917	0	20	107	20	150
t-Butylbenzene	1	17.3716	0	20	87	40	150
1,2,4-Trimethylbenzene	1	17.8914	0	20	89	40	150
sec-Butylbenzene	1	19.067	0	20	95	40	150
4-Isopropyltoluene	1	17.8214	0	20	89	40	150
n-Butylbenzene	1	19.029	0	20	95	30	160
p-Diethylbenzene	1	17.5927	0	20	88	10	200
1,2,4,5-Tetramethylbenzene	1	19.2787	0	20	96	10	170
1,2-Dibromo-3-Chloropropane	1	17.7082	0	20	89	10	150
Camphor	1	121.7778	0	200	61	1	160
Hexachlorobutadiene	1	15.9629	0	20	80	20	170
1,2,4-Trichlorobenzene	1	18.707	0	20	94	20	160
1,2,3-Trichlorobenzene	1	16.6859	0	20	83	5	180
Naphthalene	1	17.3346	0	20	87	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73499

8101509 0150

Data File		Sample ID:		Analysis Date			
Spike or Dup: 3M139076.D		AD07121-007(MSD)		10/27/2018 3:02:00 PM			
Non Spike(If applicable): 3M139071.D		AD07121-007		10/27/2018 1:35:00 PM			
Inst Blank(If applicable):							
Method: 624.1		Matrix: Aqueous		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	42.4217	0	20	212 *	10	180
Dichlorodifluoromethane	1	36.4507	0	20	182	1	300
Chloromethane	1	37.8517	0	20	189	1	273
Bromomethane	1	24.223	0	20	121	1	242
Vinyl Chloride	1	23.7558	0	20	119	1	251
Chloroethane	1	24.9992	0	20	125	14	230
Trichlorofluoromethane	1	18.1415	0	20	91	17	181
Ethyl ether	1	17.1593	0	20	86	30	150
Furan	1	18.5489	0	20	93	30	160
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.0234	0	20	115	40	170
Methylene Chloride	1	21.8838	0	20	109	1	221
Acrolein	1	101.3997	0	100	101	40	160
Acrylonitrile	1	23.6012	0	20	118	40	160
Iodomethane	1	18.3267	0	20	92	1	200
Acetone	1	101.927	0	100	102	20	160
Carbon Disulfide	1	19.6791	0	20	98	30	160
t-Butyl Alcohol	1	82.3766	0	100	82	1	200
n-Hexane	1	24.2332	0	20	121	5	210
Di-isopropyl-ether	1	24.2403	0	20	121	30	150
1,1-Dichloroethene	1	21.5603	0	20	108	1	234
Methyl Acetate	1	18.439	0	20	92	20	150
Methyl-t-butyl ether	1	19.2756	0	20	96	30	150
1,1-Dichloroethane	1	21.3219	0	20	107	59	155
trans-1,2-Dichloroethene	1	18.8486	0	20	94	54	156
Ethyl-t-butyl ether	1	22.2078	0	20	111	30	150
cis-1,2-Dichloroethene	1	20.8587	0	20	104	40	160
Bromochloromethane	1	21.5329	0	20	108	30	150
2,2-Dichloropropane	1	23.1233	0	20	116	10	200
Ethyl acetate	1	22.1607	0	20	111	20	170
1,4-Dioxane	1	783.0122	0	1000	78	1	200
1,1-Dichloropropene	1	21.8834	0	20	109	50	150
Chloroform	1	18.3827	0	20	92	51	138
Cyclohexane	1	25.4821	0	20	127	40	160
1,2-Dichloroethane	1	23.0648	0	20	115	49	155
2-Butanone	1	21.4612	0	20	107	1	220
1,1,1-Trichloroethane	1	19.1883	0	20	96	52	162
Carbon Tetrachloride	1	20.1647	0	20	101	70	140
Vinyl Acetate	1	22.9663	0	20	115	20	170
Bromodichloromethane	1	20.6796	0	20	103	35	155
Methylcyclohexane	1	22.8313	0	20	114	30	170
Dibromomethane	1	21.7175	0	20	109	30	160
1,2-Dichloropropane	1	23.5863	0	20	118	1	210
Trichloroethene	1	19.7657	0	20	99	70	157
Benzene	1	24.6303	0	20	123	37	151
tert-Amyl methyl ether	1	20.8047	0	20	104	30	150
Iso-propylacetate	1	23.6009	0	20	118	20	150
Methyl methacrylate	1	24.6947	0	20	123	10	170
Dibromochloromethane	1	18.7801	0	20	94	53	149
2-Chloroethylvinylether	1	0	0	20	0 *	1	305
cis-1,3-Dichloropropene	1	21.3466	0	20	107	1	227
trans-1,3-Dichloropropene	1	20.2032	0	20	101	17	183
Ethyl methacrylate	1	23.2712	0	20	116	20	150
1,1,2-Trichloroethane	1	24.9329	0	20	125	52	150
1,2-Dibromoethane	1	18.4252	0	20	92	20	150
1,3-Dichloropropane	1	24.7703	0	20	124	50	130
4-Methyl-2-Pentanone	1	22.4048	0	20	112	30	150
2-Hexanone	1	24.6172	0	20	123	20	150
Tetrachloroethene	1	25.7835	0	20	129	64	148
Toluene	1	21.1436	0	20	106	47	150
1,1,1,2-Tetrachloroethane	1	24.1578	0	20	121	50	150
Chlorobenzene	1	20.738	0	20	104	37	160

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73499

n-Butyl acrylate	1	25.9197	0	20	130	10	140
n-Amyl acetate	1	27.6269	0	20	138	20	150
Bromoform	1	19.9982	0	20	100	45	169
Ethylbenzene	1	21.8971	0	20	109	37	162
1,1,2,2-Tetrachloroethane	1	22.079	0	20	110	46	157
Styrene	1	24.3918	0	20	122	40	150
m&p-Xylenes	1	45.7189	0	40	114	40	150
o-Xylene	1	25.1146	0	20	126	40	150
trans-1,4-Dichloro-2-butene	1	18.1171	0	20	91	10	150
1,3-Dichlorobenzene	1	20.6074	0	20	103	59	156
1,4-Dichlorobenzene	1	20.6876	0	20	103	18	190
1,2-Dichlorobenzene	1	19.8263	0	20	99	18	190
Isopropylbenzene	1	23.5457	0	20	118	40	150
Cyclohexanone	1	79.5468	0	100	80	1	300
Camphene	1	10.9957	0	20	55	20	150
1,2,3-Trichloropropane	1	21.9834	0	20	110	40	130
2-Chlorotoluene	1	25.8942	0	20	129	40	150
p-Ethyltoluene	1	20.5093	0	20	103	10	200
4-Chlorotoluene	1	22.6827	0	20	113	40	150
n-Propylbenzene	1	23.2273	0	20	116	40	150
Bromobenzene	1	21.0712	0	20	105	40	130
1,3,5-Trimethylbenzene	1	27.5207	0	20	138	40	150
Butyl methacrylate	1	28.5102	0	20	143	20	150
t-Butylbenzene	1	22.4845	0	20	112	40	150
1,2,4-Trimethylbenzene	1	22.9892	0	20	115	40	150
sec-Butylbenzene	1	23.222	0	20	116	40	150
4-Isopropyltoluene	1	23.1591	0	20	116	40	150
n-Butylbenzene	1	23.9288	0	20	120	30	160
p-Diethylbenzene	1	23.8343	0	20	119	10	200
1,2,4,5-Tetramethylbenzene	1	22.8761	0	20	114	10	170
1,2-Dibromo-3-Chloropropane	1	21.454	0	20	107	10	150
Camphor	1	145.7501	0	200	73	1	160
Hexachlorobutadiene	1	23.2161	0	20	116	20	170
1,2,4-Trichlorobenzene	1	22.1884	0	20	111	20	160
1,2,3-Trichlorobenzene	1	20.1018	0	20	101	5	180
Naphthalene	1	21.0395	0	20	105	1	200

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits

8101509 0152

QC Batch: MBS73499

Data File	Sample ID:	Analysis Date
Spike or Dup: 3M139076.D	AD07121-007(MSD)	10/27/2018 3:02:00 PM
Duplicate(If applicable): 3M139075.D	AD07121-007(MS)	10/27/2018 2:44:00 PM
Inst Blank(If applicable):		
Method: 624.1	Matrix: Aqueous	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	42.4217	38.5801	9.5	40
Dichlorodifluoromethane	1	36.4507	28.0211	26	40
Chloromethane	1	37.8517	28.3391	29	60
Bromomethane	1	24.223	18.3729	27	61
Vinyl Chloride	1	23.7558	19.8582	18	66
Chloroethane	1	24.9992	21.2529	16	78
Trichlorofluoromethane	1	18.1415	14.8161	20	84
Ethyl ether	1	17.1593	13.9969	20	40
Furan	1	18.5489	14.6953	23	40
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.0234	18.432	22	40
Methylene Chloride	1	21.8838	17.9181	20	28
Acrolein	1	101.3997	85.778	17	60
Acrylonitrile	1	23.6012	19.7058	18	60
Iodomethane	1	18.3267	15.1672	19	40
Acetone	1	101.927	74.2432	31	40
Carbon Disulfide	1	19.6791	15.5261	24	40
t-Butyl Alcohol	1	82.3766	74.9586	9.4	40
n-Hexane	1	24.2332	18.0693	29	40
Di-isopropyl-ether	1	24.2403	19.8448	20	40
1,1-Dichloroethene	1	21.5603	17.0881	23	32
Methyl Acetate	1	18.439	16.8441	9	40
Methyl-t-butyl ether	1	19.2756	15.7549	20	40
1,1-Dichloroethane	1	21.3219	16.1393	28	40
trans-1,2-Dichloroethene	1	18.8486	15.3872	20	45
Ethyl-t-butyl ether	1	22.2078	17.7697	22	40
cis-1,2-Dichloroethene	1	20.8587	17.9346	15	40
Bromochloromethane	1	21.5329	17.0461	23	40
2,2-Dichloropropane	1	23.1233	17.6248	27	40
Ethyl acetate	1	22.1607	20.0027	10	40
1,4-Dioxane	1	783.0122	767.1236	2	40
1,1-Dichloropropene	1	21.8834	18.0035	19	40
Chloroform	1	18.3827	14.3129	25	54
Cyclohexane	1	25.4821	19.5964	26	40
1,2-Dichloroethane	1	23.0648	17.6292	27	49
2-Butanone	1	21.4612	17.4313	21	40
1,1,1-Trichloroethane	1	19.1883	15.2414	23	36
Carbon Tetrachloride	1	20.1647	15.5527	26	41
Vinyl Acetate	1	22.9663	19.8638	14	40
Bromodichloromethane	1	20.6796	15.9992	26	56
Methylcyclohexane	1	22.8313	18.3176	22	40
Dibromomethane	1	21.7175	17.3139	23	40
1,2-Dichloropropane	1	23.5863	19.5334	19	55
Trichloroethene	1	19.7657	14.8936	28	48
Benzene	1	24.6303	19.3047	24	61
tert-Amyl methyl ether	1	20.8047	16.9221	21	40
Iso-propylacetate	1	23.6009	20.0722	16	40
Methyl methacrylate	1	24.6947	19.1434	25	40
Dibromochloromethane	1	18.7801	14.5952	25	50
2-Chloroethylvinylether	1	0	0	NA	71
cis-1,3-Dichloropropene	1	21.3466	17.6815	19	58
trans-1,3-Dichloropropene	1	20.2032	15.9486	24	56
Ethyl methacrylate	1	23.2712	18.5851	22	40
1,1,2-Trichloroethane	1	24.9329	18.5297	29	45
1,2-Dibromoethane	1	18.4252	15.4811	17	40
1,3-Dichloropropane	1	24.7703	21.7935	13	40
4-Methyl-2-Pentanone	1	22.4048	20.4116	9.3	40
2-Hexanone	1	24.6172	19.8074	22	40
Tetrachloroethene	1	25.7835	18.784	31	39
Toluene	1	21.1436	16.7223	23	41
1,1,1,2-Tetrachloroethane	1	24.1578	20.7711	15	40
Chlorobenzene	1	20.738	15.4894	29	53
n-Butyl acrylate	1	25.9197	21.3015	20	40
n-Amyl acetate	1	27.6269	21.7995	24	40

Form3 RPD Data Laboratory Limits

QC Batch: MBS73499

Bromoform	1	19.9982	14.9624	29	42
Ethylbenzene	1	21.8971	21.189	3.3	63
1,1,2,2-Tetrachloroethane	1	22.079	17.1406	25	61
Styrene	1	24.3918	18.0436	30	40
m&p-Xylenes	1	45.7189	37.5457	20	40
o-Xylene	1	25.1146	18.53	30	40
trans-1,4-Dichloro-2-butene	1	18.1171	17.462	3.7	40
1,3-Dichlorobenzene	1	20.6074	16.5417	22	43
1,4-Dichlorobenzene	1	20.6876	15.82	27	57
1,2-Dichlorobenzene	1	19.8263	15.5574	24	57
Isopropylbenzene	1	23.5457	18.6483	23	40
Cyclohexanone	1	79.5468	81.0951	1.9	40
Camphene	1	10.9957	9.607	13	40
1,2,3-Trichloropropane	1	21.9834	17.7715	21	40
2-Chlorotoluene	1	25.8942	19.1001	30	40
p-Ethyltoluene	1	20.5093	15.3499	29	40
4-Chlorotoluene	1	22.6827	17.1512	28	40
n-Propylbenzene	1	23.2273	18.7427	21	40
Bromobenzene	1	21.0712	15.7281	29	40
1,3,5-Trimethylbenzene	1	27.5207	17.6971	43 *	40
Butyl methacrylate	1	28.5102	21.4917	28	40
t-Butylbenzene	1	22.4845	17.3716	26	40
1,2,4-Trimethylbenzene	1	22.9892	17.8914	25	40
sec-Butylbenzene	1	23.222	19.067	20	40
4-Isopropyltoluene	1	23.1591	17.8214	26	40
n-Butylbenzene	1	23.9288	19.029	23	40
p-Diethylbenzene	1	23.8343	17.5927	30	40
1,2,4,5-Tetramethylbenzene	1	22.8761	19.2787	17	40
1,2-Dibromo-3-Chloropropane	1	21.454	17.7082	19	40
Camphor	1	145.7501	121.7778	18	40
Hexachlorobutadiene	1	23.2161	15.9629	37	40
1,2,4-Trichlorobenzene	1	22.1884	18.707	17	40
1,2,3-Trichlorobenzene	1	20.1018	16.6859	19	40
Naphthalene	1	21.0395	17.3346	19	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
 QC Batch: MBS73545

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M113043.D		AD07338-001(MS)		11/1/2018 9:48:00 AM			
Non Spike(If applicable): 1M113048.D		AD07338-001		11/1/2018 11:35:00 AM			
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	84.2555	0	50	169 *	20	130
Dichlorodifluoromethane	1	43.7699	0	50	88	20	130
Chloromethane	1	33.9253	0	50	68	20	130
Bromomethane	1	35.1872	0	50	70	20	130
Vinyl Chloride	1	35.1868	0	50	70	20	130
Chloroethane	1	33.9272	0	50	68	20	130
Trichlorofluoromethane	1	33.6334	0	50	67	20	130
Ethyl ether	1	22.0052	0	50	44 *	50	130
Furan	1	22.2835	0	50	45 *	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	41.7796	0	50	84	50	130
Methylene Chloride	1	26.9617	0	50	54	50	130
Acrolein	1	126.5544	0	200	63	20	130
Acrylonitrile	1	18.6301	0	50	37	20	130
Iodomethane	1	24.3447	0	50	49 *	50	130
Acetone	1	121.5996	0	200	61	20	130
Carbon Disulfide	1	34.1223	0	50	68	50	130
t-Butyl Alcohol	1	111.0054	0	200	56	20	130
n-Hexane	1	53.6151	0	50	107	50	130
Di-isopropyl-ether	1	25.4223	0	50	51	50	130
1,1-Dichloroethene	1	34.0425	0	50	68	50	130
Methyl Acetate	1	23.2796	0	50	47 *	50	130
Methyl-t-butyl ether	1	21.4623	0	50	43 *	50	130
1,1-Dichloroethane	1	32.7737	0	50	66	50	130
trans-1,2-Dichloroethene	1	38.7557	0	50	78	50	130
Ethyl-t-butyl ether	1	24.766	0	50	50	50	130
cis-1,2-Dichloroethene	1	35.5524	0	50	71	50	130
Bromochloromethane	1	33.5644	0	50	67	50	130
2,2-Dichloropropane	1	38.0358	0	50	76	50	130
Ethyl acetate	1	37.3948	0	50	75	50	130
1,4-Dioxane	1	1370.297	0	2500	55	50	130
1,1-Dichloropropene	1	37.1117	0	50	74	50	130
Chloroform	1	26.05	0	50	52	50	130
Cyclohexane	1	35.1027	0	50	70	50	130
1,2-Dichloroethane	1	29.0798	0	50	58	50	130
2-Butanone	1	43.6267	0	50	87	20	130
1,1,1-Trichloroethane	1	32.9858	0	50	66	50	130
Carbon Tetrachloride	1	36.0924	0	50	72	50	130
Vinyl Acetate	1	27.4764	0	50	55	50	130
Bromodichloromethane	1	36.5018	0	50	73	50	130
Methylcyclohexane	1	42.7215	0	50	85	50	130
Dibromomethane	1	38.6707	0	50	77	50	130
1,2-Dichloropropane	1	28.9596	0	50	58	50	130
Trichloroethene	1	33.9792	0	50	68	50	130
Benzene	1	33.3789	0	50	67	50	130
tert-Amyl methyl ether	1	26.2905	0	50	53	50	130
Iso-propylacetate	1	20.9766	0	50	42 *	50	130
Methyl methacrylate	1	28.8917	0	50	58	50	130
Dibromochloromethane	1	30.7852	0	50	62	50	130
2-Chloroethylvinylether	1	24.1936	0	50	48 *	50	130
cis-1,3-Dichloropropene	1	32.3935	0	50	65	50	130
trans-1,3-Dichloropropene	1	29.9927	0	50	60	50	130
Ethyl methacrylate	1	22.842	0	50	46 *	50	130
1,1,2-Trichloroethane	1	24.2081	0	50	48 *	50	130
1,2-Dibromoethane	1	30.4106	0	50	61	50	130
1,3-Dichloropropane	1	27.532	0	50	55	50	130
4-Methyl-2-Pentanone	1	27.5913	0	50	55	20	130
2-Hexanone	1	24.1494	0	50	48	20	130
Tetrachloroethene	1	31.8591	0	50	64	50	130
Toluene	1	31.3534	0	50	63	50	130
1,1,1,2-Tetrachloroethane	1	29.207	0	50	58	50	130
Chlorobenzene	1	28.8205	0	50	58	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73545

n-Butyl acrylate	1	31.8234	0	50	64	50	130
n-Amyl acetate	1	25.2465	0	50	50	50	130
Bromoform	1	27.288	0	50	55	20	130
Ethylbenzene	1	41.1591	0	50	82	50	130
1,1,2,2-Tetrachloroethane	1	33.4623	0	50	67	50	130
Styrene	1	38.3252	0	50	77	50	130
m&p-Xylenes	1	85.0813	0	100	85	50	130
o-Xylene	1	36.5498	0	50	73	50	130
trans-1,4-Dichloro-2-butene	1	38.9322	0	50	78	20	130
1,3-Dichlorobenzene	1	33.1881	0	50	66	50	130
1,4-Dichlorobenzene	1	32.5676	0	50	65	50	130
1,2-Dichlorobenzene	1	31.3035	0	50	63	50	130
Isopropylbenzene	1	37.7953	0	50	76	50	130
Cyclohexanone	1	294.0015	0	250	118	50	130
Camphene	1	44.6531	0	50	89	50	130
1,2,3-Trichloropropane	1	33.8997	0	50	68	50	130
2-Chlorotoluene	1	33.4491	0	50	67	50	130
p-Ethyltoluene	1	32.3763	0	50	65	50	130
4-Chlorotoluene	1	34.8132	0	50	70	50	130
n-Propylbenzene	1	38.2526	0	50	77	50	130
Bromobenzene	1	45.5667	0	50	91	50	130
1,3,5-Trimethylbenzene	1	31.3568	0	50	63	50	130
Butyl methacrylate	1	30.2142	0	50	60	50	130
t-Butylbenzene	1	31.1502	0	50	62	50	130
1,2,4-Trimethylbenzene	1	35.4502	0	50	71	50	130
sec-Butylbenzene	1	37.9862	0	50	76	50	130
4-Isopropyltoluene	1	32.693	0	50	65	50	130
n-Butylbenzene	1	33.5914	0	50	67	50	130
p-Diethylbenzene	1	35.4999	0	50	71	50	130
1,2,4,5-Tetramethylbenzene	1	31.5122	0	50	63	50	130
1,2-Dibromo-3-Chloropropane	1	31.458	0	50	63	50	130
Camphor	1	260.0808	0	500	52	50	130
Hexachlorobutadiene	1	38.6066	0	50	77	50	130
1,2,4-Trichlorobenzene	1	37.4638	0	50	75	50	130
1,2,3-Trichlorobenzene	1	30.147	0	50	60	50	130
Naphthalene	1	27.3471	0	50	55	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS73545

8101509 0156

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M113045.D		AD07338-001(MSD)		11/1/2018 10:30:00 AM			
Non Spike(If applicable): 1M113048.D		AD07338-001		11/1/2018 11:35:00 AM			
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	65.7533	0	50	132 *	20	130
Dichlorodifluoromethane	1	68.0187	0	50	136 *	20	130
Chloromethane	1	53.883	0	50	108	20	130
Bromomethane	1	56.1812	0	50	112	20	130
Vinyl Chloride	1	53.6806	0	50	107	20	130
Chloroethane	1	57.4245	0	50	115	20	130
Trichlorofluoromethane	1	55.8908	0	50	112	20	130
Ethyl ether	1	46.9836	0	50	94	50	130
Furan	1	44.4445	0	50	89	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	67.7509	0	50	136 *	50	130
Methylene Chloride	1	53.4491	0	50	107	50	130
Acrolein	1	205.9678	0	200	103	20	130
Acrylonitrile	1	9.3449	0	50	19 *	20	130
Iodomethane	1	44.8799	0	50	90	50	130
Acetone	1	202.0627	0	200	101	20	130
Carbon Disulfide	1	60.1932	0	50	120	50	130
t-Butyl Alcohol	1	238.96	0	200	119	20	130
n-Hexane	1	69.1864	0	50	138 *	50	130
Di-isopropyl-ether	1	53.1877	0	50	106	50	130
1,1-Dichloroethene	1	52.6244	0	50	105	50	130
Methyl Acetate	1	38.6838	0	50	77	50	130
Methyl-t-butyl ether	1	45.3377	0	50	91	50	130
1,1-Dichloroethane	1	59.3209	0	50	119	50	130
trans-1,2-Dichloroethene	1	60.9137	0	50	122	50	130
Ethyl-t-butyl ether	1	52.0298	0	50	104	50	130
cis-1,2-Dichloroethene	1	65.085	0	50	130	50	130
Bromochloromethane	1	45.9289	0	50	92	50	130
2,2-Dichloropropane	1	64.5039	0	50	129	50	130
Ethyl acetate	1	72.9995	0	50	146 *	50	130
1,4-Dioxane	1	2461.14	0	2500	98	50	130
1,1-Dichloropropene	1	66.6806	0	50	133 *	50	130
Chloroform	1	50.784	0	50	102	50	130
Cyclohexane	1	72.3435	0	50	145 *	50	130
1,2-Dichloroethane	1	49.7887	0	50	100	50	130
2-Butanone	1	86.281	0	50	173 *	20	130
1,1,1-Trichloroethane	1	64.8128	0	50	130	50	130
Carbon Tetrachloride	1	67.6699	0	50	135 *	50	130
Vinyl Acetate	1	45.2778	0	50	91	50	130
Bromodichloromethane	1	49.6513	0	50	99	50	130
Methylcyclohexane	1	78.1361	0	50	156 *	50	130
Dibromomethane	1	49.7121	0	50	99	50	130
1,2-Dichloropropane	1	40.9432	0	50	82	50	130
Trichloroethene	1	44.9391	0	50	90	50	130
Benzene	1	57.6308	0	50	115	50	130
tert-Amyl methyl ether	1	47.1531	0	50	94	50	130
Iso-propylacetate	1	37.9255	0	50	76	50	130
Methyl methacrylate	1	49.6752	0	50	99	50	130
Dibromochloromethane	1	46.1509	0	50	92	50	130
2-Chloroethylvinylether	1	37.3971	0	50	75	50	130
cis-1,3-Dichloropropene	1	47.2571	0	50	95	50	130
trans-1,3-Dichloropropene	1	41.0905	0	50	82	50	130
Ethyl methacrylate	1	41.4389	0	50	83	50	130
1,1,2-Trichloroethane	1	41.5149	0	50	83	50	130
1,2-Dibromoethane	1	48.0901	0	50	96	50	130
1,3-Dichloropropane	1	43.0112	0	50	86	50	130
4-Methyl-2-Pentanone	1	44.8073	0	50	90	20	130
2-Hexanone	1	40.9649	0	50	82	20	130
Tetrachloroethene	1	55.8329	0	50	112	50	130
Toluene	1	50.5782	0	50	101	50	130
1,1,1,2-Tetrachloroethane	1	50.1406	0	50	100	50	130
Chlorobenzene	1	56.5221	0	50	113	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Recovery Data Laboratory Limits

QC Batch: MBS73545

n-Butyl acrylate	1	41.2404	0	50	82	50	130
n-Amyl acetate	1	41.1738	0	50	82	50	130
Bromoform	1	40.7825	0	50	82	20	130
Ethylbenzene	1	57.1549	0	50	114	50	130
1,1,2,2-Tetrachloroethane	1	38.4035	0	50	77	50	130
Styrene	1	56.9133	0	50	114	50	130
m&p-Xylenes	1	123.3033	0	100	123	50	130
o-Xylene	1	57.4319	0	50	115	50	130
trans-1,4-Dichloro-2-butene	1	64.5637	0	50	129	20	130
1,3-Dichlorobenzene	1	54.9566	0	50	110	50	130
1,4-Dichlorobenzene	1	51.9768	0	50	104	50	130
1,2-Dichlorobenzene	1	50.8051	0	50	102	50	130
Isopropylbenzene	1	61.9076	0	50	124	50	130
Cyclohexanone	1	174.2879	0	250	70	50	130
Camphene	1	73.1893	0	50	146*	50	130
1,2,3-Trichloropropane	1	50.9732	0	50	102	50	130
2-Chlorotoluene	1	58.1589	0	50	116	50	130
p-Ethyltoluene	1	66.536	0	50	133*	50	130
4-Chlorotoluene	1	61.0442	0	50	122	50	130
n-Propylbenzene	1	62.9599	0	50	126	50	130
Bromobenzene	1	23.288	0	50	47*	50	130
1,3,5-Trimethylbenzene	1	49.045	0	50	98	50	130
Butyl methacrylate	1	52.1017	0	50	104	50	130
t-Butylbenzene	1	51.7507	0	50	104	50	130
1,2,4-Trimethylbenzene	1	62.7536	0	50	126	50	130
sec-Butylbenzene	1	69.9217	0	50	140*	50	130
4-Isopropyltoluene	1	54.4702	0	50	109	50	130
n-Butylbenzene	1	56.2403	0	50	112	50	130
p-Diethylbenzene	1	76.5527	0	50	153*	50	130
1,2,4,5-Tetramethylbenzene	1	67.5647	0	50	135*	50	130
1,2-Dibromo-3-Chloropropane	1	44.7373	0	50	89	50	130
Camphor	1	414.318	0	500	83	50	130
Hexachlorobutadiene	1	63.0874	0	50	126	50	130
1,2,4-Trichlorobenzene	1	58.4156	0	50	117	50	130
1,2,3-Trichlorobenzene	1	49.0535	0	50	98	50	130
Naphthalene	1	43.7731	0	50	88	50	130

* - Indicates outside of limits

- Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits

QC Batch: MBS73545

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M113045.D	AD07338-001(MSD)	11/1/2018 10:30:00 AM
Duplicate(If applicable): 1M113043.D	AD07338-001(MS)	11/1/2018 9:48:00 AM
Inst Blank(If applicable):		
Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBSD Conc	RPD	Limit
Chlorodifluoromethane	1	65.7533	84.2555	25	30
Dichlorodifluoromethane	1	68.0187	43.7699	43*	30
Chloromethane	1	53.883	33.9253	45*	30
Bromomethane	1	56.1812	35.1872	46*	30
Vinyl Chloride	1	53.6806	35.1868	42*	40
Chloroethane	1	57.4245	33.9272	51*	30
Trichlorofluoromethane	1	55.8908	33.6334	50*	30
Ethyl ether	1	46.9836	22.0052	72*	30
Furan	1	44.4445	22.2835	66*	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	67.7509	41.7796	47*	30
Methylene Chloride	1	53.4491	26.9617	66*	30
Acrolein	1	205.9678	126.5544	48*	30
Acrylonitrile	1	9.3449	18.6301	66*	30
Iodomethane	1	44.8799	24.3447	59*	30
Acetone	1	202.0627	121.5996	50*	30
Carbon Disulfide	1	60.1932	34.1223	55*	30
t-Butyl Alcohol	1	238.96	111.0054	73*	30
n-Hexane	1	69.1864	53.6151	25	30
Di-isopropyl-ether	1	53.1877	25.4223	71*	30
1,1-Dichloroethene	1	52.6244	34.0425	43*	40
Methyl Acetate	1	38.6838	23.2796	50*	30
Methyl-t-butyl ether	1	45.3377	21.4623	71*	30
1,1-Dichloroethane	1	59.3209	32.7737	58*	40
trans-1,2-Dichloroethene	1	60.9137	38.7557	44*	30
Ethyl-t-butyl ether	1	52.0298	24.766	71*	30
cis-1,2-Dichloroethene	1	65.085	35.5524	59*	30
Bromochloromethane	1	45.9289	33.5644	31*	30
2,2-Dichloropropane	1	64.5039	38.0358	52*	30
Ethyl acetate	1	72.9995	37.3948	65*	30
1,4-Dioxane	1	2461.14	1370.297	57*	30
1,1-Dichloropropene	1	66.6806	37.1117	57*	30
Chloroform	1	50.784	26.05	64*	40
Cyclohexane	1	72.3435	35.1027	69*	30
1,2-Dichloroethane	1	49.7887	29.0798	53*	40
2-Butanone	1	86.281	43.6267	66*	40
1,1,1-Trichloroethane	1	64.8128	32.9858	65*	30
Carbon Tetrachloride	1	67.6699	36.0924	61*	40
Vinyl Acetate	1	45.2778	27.4764	49*	30
Bromodichloromethane	1	49.6513	36.5018	31*	30
Methylcyclohexane	1	78.1361	42.7215	59*	30
Dibromomethane	1	49.7121	38.6707	25	30
1,2-Dichloropropane	1	40.9432	28.9596	34*	30
Trichloroethene	1	44.9391	33.9792	28	40
Benzene	1	57.6308	33.3789	53*	40
tert-Amyl methyl ether	1	47.1531	26.2905	57*	30
Iso-propylacetate	1	37.9255	20.9766	58*	30
Methyl methacrylate	1	49.6752	28.8917	53*	30
Dibromochloromethane	1	46.1509	30.7852	40*	30
2-Chloroethylvinylether	1	37.3971	24.1936	43*	30
cis-1,3-Dichloropropene	1	47.2571	32.3935	37*	30
trans-1,3-Dichloropropene	1	41.0905	29.9927	31*	30
Ethyl methacrylate	1	41.4389	22.842	58*	30
1,1,2-Trichloroethane	1	41.5149	24.2081	53*	30
1,2-Dibromoethane	1	48.0901	30.4106	45*	30
1,3-Dichloropropane	1	43.0112	27.532	44*	30
4-Methyl-2-Pentanone	1	44.8073	27.5913	48*	30
2-Hexanone	1	40.9649	24.1494	52*	30
Tetrachloroethene	1	55.8329	31.8591	55*	40
Toluene	1	50.5782	31.3534	47*	40
1,1,1,2-Tetrachloroethane	1	50.1406	29.207	53*	30
Chlorobenzene	1	56.5221	28.8205	65*	40
n-Butyl acrylate	1	41.2404	31.8234	26	30
n-Amyl acetate	1	41.1738	25.2465	48*	30

Form3
RPD Data Laboratory Limits

8101509 0159

QC Batch: MBS73545

Bromoform	1	40.7825	27.288	40 *	30
Ethylbenzene	1	57.1549	41.1591	33 *	30
1,1,2,2-Tetrachloroethane	1	38.4035	33.4623	14	30
Styrene	1	56.9133	38.3252	39 *	30
m&p-Xylenes	1	123.3033	85.0813	37 *	30
o-Xylene	1	57.4319	36.5498	44 *	30
trans-1,4-Dichloro-2-butene	1	64.5637	38.9322	50 *	30
1,3-Dichlorobenzene	1	54.9566	33.1881	49 *	30
1,4-Dichlorobenzene	1	51.9768	32.5676	46 *	40
1,2-Dichlorobenzene	1	50.8051	31.3035	48 *	40
Isopropylbenzene	1	61.9076	37.7953	48 *	30
Cyclohexanone	1	174.2879	294.0015	51 *	30
Camphene	1	73.1893	44.6531	48 *	30
1,2,3-Trichloropropane	1	50.9732	33.8997	40 *	30
2-Chlorotoluene	1	58.1589	33.4491	54 *	30
p-Ethyltoluene	1	66.536	32.3763	69 *	30
4-Chlorotoluene	1	61.0442	34.8132	55 *	30
n-Propylbenzene	1	62.9599	38.2526	49 *	40
Bromobenzene	1	23.288	45.5667	65 *	30
1,3,5-Trimethylbenzene	1	49.045	31.3568	44 *	30
Butyl methacrylate	1	52.1017	30.2142	53 *	30
t-Butylbenzene	1	51.7507	31.1502	50 *	30
1,2,4-Trimethylbenzene	1	62.7536	35.4502	56 *	30
sec-Butylbenzene	1	69.9217	37.9862	59 *	40
4-Isopropyltoluene	1	54.4702	32.693	50 *	30
n-Butylbenzene	1	56.2403	33.5914	50 *	30
p-Diethylbenzene	1	76.5527	35.4999	73 *	30
1,2,4,5-Tetramethylbenzene	1	67.5647	31.5122	73 *	30
1,2-Dibromo-3-Chloropropane	1	44.7373	31.458	35 *	30
Camphor	1	414.318	260.0808	46 *	30
Hexachlorobutadiene	1	63.0874	38.6066	48 *	30
1,2,4-Trichlorobenzene	1	58.4156	37.4638	44 *	30
1,2,3-Trichlorobenzene	1	49.0535	30.147	48 *	30
Naphthalene	1	43.7731	27.3471	46 *	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form7

Continuing Calibration

8101509 0160

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 10/24/2018 8:13:00

Data File: IM112518.D
Method: EPA 624.1

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.36	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.15	18.90	20	0	60	0.253	0.239	5.51	
Dichlorodifluoromethane	1	0		2.14	99.37	20	2	60	0.116	0.252	396.85	C1
Chloromethane	1	0		2.32	42.28	20	2	41	0.188	0.274	111.42	C1
Bromomethane	1	0		2.69	23.11	20	3	37	0.213	0.246	15.56	
Vinyl Chloride	1	0		2.40	27.16	20	1	39	0.237	0.322	35.82	
Chloroethane	1	0		2.77	28.87	20	8	32	0.197	0.216	44.34	
Trichlorofluoromethane	1	0		2.98	23.84	20	10	30	0.482	0.575	19.18	
Ethyl ether	1	0		3.20	20.07	20	2	40	0.251	0.251	0.37	
Furan	1	0		3.24	21.21	20	4	40	0.412	0.437	6.06	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.39	21.10	20	4	50	0.190	0.200	5.50	
Methylene Chloride	1	0		3.78	17.49	20	12	28	0.249	0.218	12.55	
Acrolein	1	0		3.31	102.92	100	60	140	0.034	0.035	2.92	
Acrylonitrile	1	0		3.97	16.70	20	12	28	0.076	0.063	16.49	
Iodomethane	1	0		3.54	12.30	20	2	40	0.276	0.170	38.49	
Acetone	1	0		3.42	99.54	100	10	200	0.067	0.067	0.46	
Carbon Disulfide	1	0		3.61	15.29	20	2	32	0.669	0.511	23.55	
t-Butyl Alcohol	1	0		3.83	68.71	100	1	200	0.017	0.011	31.29	
n-Hexane	1	0		4.20	30.34	20	0	60	0.101	0.092	51.69	
Di-isopropyl-ether	1	0		4.34	16.86	20	4	40	0.605	0.510	15.73	
1,1-Dichloroethene	1	0		3.40	20.07	20	10	30	0.394	0.395	0.33	
Methyl Acetate	1	0		3.68	16.69	20	4	30	0.190	0.158	16.54	
Methyl-t-butyl ether	1	0		4.00	14.71	20	4	40	0.649	0.477	26.46	
1,1-Dichloroethane	1	0		4.31	17.48	20	14	26	0.424	0.370	12.61	
trans-1,2-Dichloroethene	1	0		4.00	16.92	20	14	26	0.256	0.216	15.41	
Ethyl-t-butyl ether	1	0		4.58	17.74	20	4	32	0.667	0.592	11.29	
cis-1,2-Dichloroethene	1	0		4.69	18.28	20	6	32	0.397	0.363	8.62	
Bromochloromethane	1	0		4.84	20.05	20	6	32	0.220	0.220	0.25	
2,2-Dichloropropane	1	0		4.70	18.92	20	2	40	0.316	0.299	5.38	
Ethyl acetate	1	0		4.71	19.86	20	4	32	0.209	0.208	0.72	
1,4-Dioxane	1	0		5.74	1065.43	1000	10	2500	0.002	0.002	6.54	
1,1-Dichloropropene	1	0		5.09	16.57	20	8	30	0.344	0.285	17.15	
Chloroform	1	0		4.87	18.64	20	14	27	0.486	0.453	6.81	
Dibromofluoromethane	1	0	S	4.97	31.55	30	**		0.268	0.282	5.17	
Cyclohexane	1	0		5.05	17.73	20	4	40	0.217	0.193	11.33	
1,2-Dichloroethane-d4	1	0	S	5.17	32.76	30	**		0.153	0.167	9.19	
1,2-Dichloroethane	1	0		5.21	18.55	20	14	26	0.379	0.351	7.27	
2-Butanone	1	0		4.70	19.11	20	0	44	0.088	0.084	4.46	
1,1,1-Trichloroethane	1	0		5.00	17.33	20	14	26	0.441	0.382	13.36	
Carbon Tetrachloride	1	0		5.10	16.78	20	14	26	0.371	0.311	16.09	
Vinyl Acetate	1	0		4.34	21.19	20	4	40	0.400	0.424	5.96	
Bromodichloromethane	1	0		5.82	17.91	20	13	27	0.387	0.347	10.45	
Methylcyclohexane	1	0		5.68	17.09	20	2	40	0.215	0.183	14.54	
Dibromomethane	1	0		5.75	17.48	20	4	30	0.181	0.158	12.61	
1,2-Dichloropropane	1	0		5.68	17.90	20	7	27	0.244	0.219	10.49	
Trichloroethene	1	0		5.56	16.49	20	13	27	0.273	0.225	17.56	
Benzene	1	0		5.21	17.86	20	13	27	1.008	0.900	10.69	
tert-Amyl methyl ether	1	0		5.25	16.45	20	4	30	0.749	0.616	17.76	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.20	16.41	20	2	40	0.479	0.393	17.96	
Methyl methacrylate	1	0		5.70	16.83	20	2	34	0.225	0.190	15.84	
Dibromochloromethane	1	0		6.67	16.17	20	14	27	0.360	0.291	19.17	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

8101509 0161

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 10/24/2018 8:13:00

Data File: IM112518.D
Method: EPA 624.1

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.95	21.96	20	2	45	0.114	0.151	9.78	
cis-1,3-Dichloropropene	1	0		6.05	16.11	20	5	35	0.531	0.428	19.46	
trans-1,3-Dichloropropene	1	0		6.34	16.59	20	10	30	0.493	0.409	17.07	
Ethyl methacrylate	1	0		6.36	19.64	20	2	32	0.223	0.219	1.82	
1,1,2-Trichloroethane	1	0		6.44	17.50	20	14	26	0.310	0.271	12.48	
1,2-Dibromoethane	1	0		6.74	16.98	20	4	30	0.321	0.273	15.09	
1,3-Dichloropropane	1	0		6.54	18.14	20	4	40	0.530	0.481	9.30	
4-Methyl-2-Pentanone	1	0		6.12	17.99	20	2	40	0.237	0.213	10.06	
2-Hexanone	1	0		6.55	18.92	20	2	40	0.163	0.154	5.42	
Tetrachloroethene	1	0		6.54	16.32	20	14	26	0.221	0.180	18.41	
Toluene-d8	1	0	S	6.20	30.80	30	**		1.260	1.293	2.65	
Toluene	1	0		6.24	17.28	20	14	26	0.826	0.714	13.62	
1,1,1,2-Tetrachloroethane	1	0		7.03	16.34	20	8	32	0.311	0.254	18.30	
Chlorobenzene	1	0		7.00	17.31	20	13	27	0.900	0.779	13.44	
1,4-Dichlorobenzene-d4	1	0	I	8.27	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	16.56	20	2	40	0.798	0.905	17.18	
n-Amyl acetate	1	0		7.36	20.28	20	4	30	0.636	0.878	1.38	
Bromoform	1	0		7.45	15.95	20	14	26	0.503	0.401	20.27	
Ethylbenzene	1	0		7.04	17.34	20	12	28	0.759	0.658	13.32	
1,1,2,2-Tetrachloroethane	1	0		7.66	20.49	20	12	28	0.716	0.733	2.43	
Bromofluorobenzene	1	0	S	7.62	29.80	30	**		0.891	0.885	0.66	
Styrene	1	0		7.33	17.40	20	4	32	2.145	1.867	12.98	
m&p-Xylenes	1	0		7.10	35.02	40	8	80	1.159	1.015	12.44	
o-Xylene	1	0		7.32	16.96	20	4	40	1.186	1.005	15.20	
trans-1,4-Dichloro-2-butene	1	0		7.69	24.07	20	1	40	0.206	0.248	20.35	
1,3-Dichlorobenzene	1	0		8.24	16.83	20	14	26	1.120	0.942	15.83	
1,4-Dichlorobenzene	1	0		8.28	17.24	20	13	27	1.146	0.987	13.80	
1,2-Dichlorobenzene	1	0		8.51	17.38	20	13	27	1.023	0.889	13.11	
Isopropylbenzene	1	0		7.52	17.14	20	4	32	2.371	2.032	14.30	
Cyclohexanone	1	0		7.59	69.40	100	0	300	0.028	0.016	30.60	
Camphene	1	0		7.69	17.07	20	2	40	0.587	0.501	14.65	
1,2,3-Trichloropropane	1	0		7.70	19.87	20	6	30	0.906	0.900	0.65	
2-Chlorotoluene	1	0		7.81	17.65	20	6	32	1.532	1.352	11.77	
p-Ethyltoluene	1	0		7.80	17.63	20	1	50	2.476	2.183	11.83	
4-Chlorotoluene	1	0		7.87	17.15	20	6	30	1.554	1.333	14.27	
n-Propylbenzene	1	0		7.74	17.89	20	4	32	2.612	2.336	10.56	
Bromobenzene	1	0		7.72	18.50	20	6	30	1.734	1.604	7.48	
1,3,5-Trimethylbenzene	1	0		7.83	17.93	20	6	40	1.769	1.585	10.36	
Butyl methacrylate	1	0		7.83	21.20	20	2	40	0.551	0.742	6.01	
t-Butylbenzene	1	0		8.02	16.10	20	4	32	1.622	1.306	19.52	
1,2,4-Trimethylbenzene	1	0		8.05	16.61	20	6	40	1.960	1.627	16.96	
sec-Butylbenzene	1	0		8.15	16.47	20	4	32	1.847	1.521	17.67	
4-Isopropyltoluene	1	0		8.22	15.81	20	6	30	1.558	1.232	20.95	
n-Butylbenzene	1	0		8.45	17.32	20	2	40	1.573	1.362	13.42	
p-Diethylbenzene	1	0		8.44	16.40	20	1	50	0.890	0.729	18.02	
1,2,4,5-Tetramethylbenzene	1	0		8.90	13.54	20	2	40	1.110	0.752	32.28	
1,2-Dibromo-3-Chloropropane	1	0		8.95	13.53	20	0	40	0.069	0.051	32.36	
Camphor	1	0		9.39	78.88	20	0	400	0.029	0.148	294.38	
Hexachlorobutadiene	1	0		9.53	8.71	20	4	34	0.120	0.077	56.43	
1,2,4-Trichlorobenzene	1	0		9.45	6.06	20	1	40	0.201	0.103	69.72	
1,2,3-Trichlorobenzene	1	0		9.75	3.65	20	0	40	0.183	0.040	81.76	
Naphthalene	1	0		9.61	2.68	20	0	50	0.566	0.153	86.59	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-002 % Solid: 0 Lab Name: Hampton-Clarke Nras No:
 Client Id: LMW-2-102018 F Units: UG/L Lab Code: Sdg No:
 Matrix: AQUEOUS Date Rec: 10/15/2018 Contract: Case No:
 Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M:	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW		15	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-002
 Client Id: LMW-2-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/15/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-39-3	Barium	25	120	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-70-2	Calcium	1000	78000	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7439-89-6	Iron	150	170	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7439-95-4	Magnesium	1000	28000	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7439-96-5	Manganese	25	170	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	18	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	53	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07118-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:
Client Id:	LMW-2-102018 F	Units:	UG/L	Lab Code:		Sdg No:
Matrix:	AQUEOUS	Date Rec:	10/15/2018	Contract:		Case No:
Level:	LOW					

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	3900	1	100	50	10/24/18	72866	A23276A2	21	P	PEICPRAD2A
7440-23-5	Sodium	2500	25000	1	100	50	10/24/18	72866	A23276A2	21	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-004
 Client Id: PC-1-10 2018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/15/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	MI	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW		16	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-004
 Client Id: PC-1-10 2018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/15/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	120	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-39-3	Barium	25	140	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-70-2	Calcium	1000	170000	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7439-89-6	Iron	150	240	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7439-95-4	Magnesium	1000	27000	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7439-96-5	Manganese	25	2000	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	19	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	54	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07118-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:
Client Id:	PC-1-10 2018 F	Units:	UG/L	Lab Code:		Sdg No:
Matrix:	AQUEOUS	Date Rec:	10/15/2018	Contract:		Case No:
Level:	LOW					

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	4900	1	200	100	10/24/18	72866	A23276A2	13	P	PEICPRAD2A
7440-23-5	Sodium	2500	100000	1	200	100	10/24/18	72866	A23276A2	13	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-006 % Solid: 0 Lab Name: Hampton-Clarke Nras No:
 Client Id: GW-DUP1-102018 F Units: UG/L Lab Code: Sdg No:
 Matrix: AQUEOUS Date Rec: 10/15/2018 Contract: Case No:
 Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	Mi	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW		17	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07118-006
 Client Id: GW-DUP1-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/15/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-39-3	Barium	25	130	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-70-2	Calcium	1000	170000	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7439-89-6	Iron	150	230	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7439-95-4	Magnesium	1000	26000	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7439-96-5	Manganese	25	2000	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	20	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	55	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AD07118-006 % Solid: 0 Lab Name: Hampton-Clarke Nras No:
Client Id: GW-DUP1-102018 F Units: UG/L Lab Code: Sdg No:
Matrix: AQUEOUS Date Rec: 10/15/2018 Contract: Case No:
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	5000	1	100	50	10/24/18	72866	A23276A2	22	P	PEICPRAD2A
7440-23-5	Sodium	2500	100000	1	100	50	10/24/18	72866	A23276A2	22	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07118-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:
Client Id:	MW-11-102018 F	Units:	UG/L	Lab Code:		Sdg No:
Matrix:	AQUEOUS	Date Rec:	10/15/2018	Contract:		Case No:
Level:	LOW					

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-89-6	Iron	150	1600	1	100	50	10/20/18	72824	A23190F2	56	P	PEICP2A
7439-96-5	Manganese	25	1600	1	100	50	10/20/18	72824	A23190F2	56	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-002
 Client Id: LMW-4-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	2.0	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	11	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW		19	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-002
 Client Id: LMW-4-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-39-3	Barium	25	150	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-70-2	Calcium	1000	40000	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7439-89-6	Iron	150	60000	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7439-95-4	Magnesium	1000	17000	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7439-96-5	Manganese	25	9700	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	25	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	62	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD07137-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:
Client Id:	LMW-4-102018 F	Units:	UG/L	Lab Code:		Sdg No:
Matrix:	AQUEOUS	Date Rec:	10/16/2018	Contract:		Case No:
Level:	LOW					

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	3500	1	100	50	10/24/18	72866	A23276A2	23	P	PEICPRAD2A
7440-23-5	Sodium	2500	29000	1	100	50	10/24/18	72866	A23276A2	23	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-004
 Client Id: PC-2-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	1.8	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	1.6	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW		20	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-004
 Client Id: PC-2-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-39-3	Barium	25	170	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-70-2	Calcium	1000	81000	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7439-89-6	Iron	150	61000	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7439-95-4	Magnesium	1000	19000	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7439-96-5	Manganese	25	11000	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	26	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	63	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AD07137-004
Client Id: PC-2-102018 F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	3700	1	100	50	10/24/18	72866	A23276A2	24	P	PEICPRAD2A
7440-23-5	Sodium	2500	39000	1	100	50	10/24/18	72866	A23276A2	24	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-006
 Client Id: PC-3-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7440-38-2	Arsenic	1.0	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7440-48-4	Cobalt	1.0	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	728242418BNEW	24	MSMS3_7700AQA		

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07137-006
 Client Id: PC-3-102018 F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-39-3	Barium	25	160	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-70-2	Calcium	1000	74000	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7439-89-6	Iron	150	1800	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7439-95-4	Magnesium	1000	21000	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7439-96-5	Manganese	25	570	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	27	CV	HGCV3A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	64	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AD07137-006
Client Id: PC-3-102018 F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 10/16/2018

Lab Name: Hampton-Clarke
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	7300	1	100	50	10/24/18	72866	A23276A2	25	P	PEICPRAD2A
7440-23-5	Sodium	2500	120000	1	100	50	10/24/18	72866	A23276A2	25	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-001
 Client Id: SW-1-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc.	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7439-92-1	Lead	3.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7782-49-2	Selenium	10	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	728422318BNEW		29	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-001
 Client Id: SW-1-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	200	390	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-70-2	Calcium	5000	43000	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7439-95-4	Magnesium	5000	12000	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7439-96-5	Manganese	40	1500	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842	H23291SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	10/22/18	72842	W23291B2	22	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-23-5	Sodium	5000	9300	1	50	50	10/22/18	72842	W23291B2	22	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	10/22/18	72842	W23291A2	22	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Hampton-Clarke

Data File Name: A23190F2

Lab Code: 14622

Analysis Date: 10/20/2018

Matrix: Water

Lab Sample ID: AD07161-001

Client ID: TRC-NYC

Level: low/med

Dilution: 1

Batch: 23276

% Solid: 0

Concentration Units: Mg CaCO₃/L

Cas No.	Analyte	RL	Concentration	M
-----	-----	-----	-----	---
	Hardness	6.6	150	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP

CV - Indicates analyzed by Cold Vapor

Comments: _____

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-002
 Client Id: SD-1-102018
 Matrix: SOIL
 Level: LOW

% Solid: 36
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.2	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7440-38-2	Arsenic	0.56	1.9	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7440-41-7	Beryllium	0.56	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7440-43-9	Cadmium	1.1	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7782-49-2	Selenium	5.6	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7440-22-4	Silver	0.56	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA
7440-28-0	Thallium	1.1	ND	1	0.5	100	10/20/18	728451918DNEW		21	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-002
 Client Id: SD-1-102018
 Matrix: SOIL
 Level: LOW

% Solid: 36
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	560	6500	1	1	100	10/21/18	72844	S23293C4	16	P	PEICPRAD4A
7440-39-3	Barium	28	330	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7440-70-2	Calcium	2800	5700	1	1	100	10/21/18	72844	S23293C4	16	P	PEICPRAD4A
7440-47-3	Chromium	14	19	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7440-48-4	Cobalt	6.9	11	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7440-50-8	Copper	14	15	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7439-89-6	Iron	560	31000	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7439-92-1	Lead	14	21	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7439-95-4	Magnesium	1400	2600	1	1	100	10/21/18	72844	S23293C4	16	P	PEICPRAD4A
7439-96-5	Manganese	280	17000	10	1	100	10/19/18	72844	S23293C3	13	P	PEICP3A
7439-97-6	Mercury	0.23	ND	1	0.15	25	10/20/18	72844	H23293S	16	CV	HGCV3A
7440-02-0	Nickel	14	ND	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7440-09-7	Potassium	1400	1500	1	1	100	10/21/18	72844	S23293C4	16	P	PEICPRAD4A
7440-23-5	Sodium	690	ND	1	1	100	10/21/18	72844	S23293C4	16	P	PEICPRAD4A
7440-62-2	Vanadium	28	ND	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A
7440-66-6	Zinc	28	69	1	1	100	10/19/18	72844	S23293A3	16	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-003
 Client Id: SW-2-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7439-92-1	Lead	3.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7782-49-2	Selenium	10	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	728422318BNEW		30	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-003
 Client Id: SW-2-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-70-2	Calcium	5000	44000	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7439-89-6	Iron	300	330	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	12000	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7439-96-5	Manganese	40	280	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842	H23291SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	10/22/18	72842	W23291B2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	10/22/18	72842	W23291B2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	10/22/18	72842	W23291A2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Hampton-Clarke

Data File Name: A23190F2

Lab Code: 14622

Analysis Date: 10/20/2018

Matrix: Water

Lab Sample ID: AD07161-003

Client ID: TRC-NYC

Level: low/med

Dilution: 1

Batch: 23276

% Solid: 0

Concentration Units: Mg CaCO3/L

Cas No.	Analyte	RL	Concentration	M
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	Hardness	6.6	160	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP

CV - Indicates analyzed by Cold Vapor

Comments: _____

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-004
 Client Id: SD-2-102018
 Matrix: SOIL
 Level: LOW

% Solid: 16
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	5.0	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7440-38-2	Arsenic	1.2	5.5	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7440-41-7	Beryllium	1.2	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7440-43-9	Cadmium	2.5	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7782-49-2	Selenium	13	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7440-22-4	Silver	1.2	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA
7440-28-0	Thallium	2.5	ND	1	0.5	100	10/20/18	728451918DNEW		30	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-004
 Client Id: SD-2-102018
 Matrix: SOIL
 Level: LOW

% Solid: 16
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	1200	8900	1	0.5	50	10/21/18	72844	S23293C4	22	P	PEICPRAD4A
7440-39-3	Barium	62	420	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7440-70-2	Calcium	6200	13000	1	0.5	50	10/21/18	72844	S23293C4	22	P	PEICPRAD4A
7440-47-3	Chromium	31	ND	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7440-48-4	Cobalt	16	ND	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7440-50-8	Copper	31	45	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7439-89-6	Iron	1200	34000	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7439-92-1	Lead	31	51	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7439-95-4	Magnesium	3100	5200	1	0.5	50	10/21/18	72844	S23293C4	22	P	PEICPRAD4A
7439-96-5	Manganese	250	18000	4	0.5	50	10/19/18	72844	S23293C3	19	P	PEICP3A
7439-97-6	Mercury	0.52	ND	1	0.15	25	10/20/18	72844	H23293S	20	CV	HGCV3A
7440-02-0	Nickel	31	ND	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7440-09-7	Potassium	3100	ND	1	0.5	50	10/21/18	72844	S23293C4	22	P	PEICPRAD4A
7440-23-5	Sodium	1600	ND	1	0.5	50	10/21/18	72844	S23293C4	22	P	PEICPRAD4A
7440-62-2	Vanadium	62	ND	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A
7440-66-6	Zinc	62	260	1	0.5	50	10/19/18	72844	S23293A3	22	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-005
 Client Id: SW-3-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7439-92-1	Lead	3.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7782-49-2	Selenium	10	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	728422318BNEW		31		MSMS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-005
 Client Id: SW-3-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M:	Instr
7429-90-5	Aluminum	200	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-39-3	Barium	50	92	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-70-2	Calcium	5000	170000	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7439-89-6	Iron	300	1000	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	24000	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7439-96-5	Manganese	40	980	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842	H23291SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-09-7	Potassium	5000	8100	1	50	50	10/22/18	72842	W23291B2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-23-5	Sodium	5000	99000	1	50	50	10/22/18	72842	W23291B2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	10/22/18	72842	W23291A2	26	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Hampton-Clarke

Data File Name: A23190F2

Lab Code: 14622

Analysis Date: 10/20/2018

Matrix: Water

Lab Sample ID: AD07161-005

Client ID: TRC-NYC

Level: low/med

Dilution: 1

Batch: 23276

% Solid: 0

Concentration Units: Mg CaCO₃/L

Cas No.	Analyte	RL	Concentration	M
	Hardness	6.6	500	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP

CV - Indicates analyzed by Cold Vapor

Comments: _____

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-006
 Client Id: SD-3-102018
 Matrix: SOIL
 Level: LOW

% Solid: 55
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.5	ND	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7440-38-2	Arsenic	0.36	4.2	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7440-41-7	Beryllium	0.36	0.56	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7440-43-9	Cadmium	0.73	1.2	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7782-49-2	Selenium	3.6	ND	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7440-22-4	Silver	0.36	ND	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	
7440-28-0	Thallium	0.73	ND	1	0.5	100	10/20/18	728451918DNEW		31	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-006
 Client Id: SD-3-102018
 Matrix: SOIL
 Level: LOW

% Solid: 55
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	360	27000	1	0.5	50	10/21/18	72844	S23293C4	25	P	PEICPRAD4A
7440-39-3	Barium	18	160	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7440-70-2	Calcium	1800	49000	1	0.5	50	10/21/18	72844	S23293C4	25	P	PEICPRAD4A
7440-47-3	Chromium	9.1	42	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7440-48-4	Cobalt	4.5	15	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7440-50-8	Copper	9.1	45	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7439-89-6	Iron	360	35000	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7439-92-1	Lead	9.1	150	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7439-95-4	Magnesium	910	30000	1	0.5	50	10/21/18	72844	S23293C4	25	P	PEICPRAD4A
7439-96-5	Manganese	18	430	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7439-97-6	Mercury	0.15	ND	1	0.15	25	10/20/18	72844	H23293S	23	CV	HGCV3A
7440-02-0	Nickel	9.1	35	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7440-09-7	Potassium	910	2800	1	0.5	50	10/21/18	72844	S23293C4	25	P	PEICPRAD4A
7440-23-5	Sodium	450	650	1	0.5	50	10/21/18	72844	S23293C4	25	P	PEICPRAD4A
7440-62-2	Vanadium	18	68	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A
7440-66-6	Zinc	18	200	1	0.5	50	10/19/18	72844	S23293B3	13	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-007
 Client Id: SW-DUP1-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7439-92-1	Lead	3.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7782-49-2	Selenium	10	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	728422318BNEW		32	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-007
 Client Id: SW-DUP1-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-39-3	Barium	50	110	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-70-2	Calcium	5000	190000	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7439-89-6	Iron	300	1200	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	27000	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7439-96-5	Manganese	40	1100	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842	H23291SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-09-7	Potassium	5000	9500	1	50	50	10/22/18	72842	W23291B2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-23-5	Sodium	5000	120000	1	50	50	10/22/18	72842	W23291B2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	10/22/18	72842	W23291A2	27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Hampton-Clarke

Data File Name: A23190F2

Lab Code: 14622

Analysis Date: 10/20/2018

Matrix: Water

Lab Sample ID: AD07161-007

Client ID: TRC-NYC

Level: low/med

Dilution: 1

Batch: 23276

* Solid: 0

Concentration Units: Mg CaCO3/L

Cas No.	Analyte	RL	Concentration	M
	Hardness	6.6	500	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP

CV - Indicates analyzed by Cold Vapor

Comments:

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-008
 Client Id: SW-4-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7440-38-2	Arsenic	2.0	2.6	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7440-48-4	Cobalt	2.0	5.8	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7439-92-1	Lead	3.0	24	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7782-49-2	Selenium	10	ND	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	728422318BNEW		33	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-008
 Client Id: SW-4-102018
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	9000	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-39-3	Barium	50	160	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-70-2	Calcium	5000	76000	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7439-89-6	Iron	300	20000	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	23000	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7439-96-5	Manganese	40	4600	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842	H23291SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-09-7	Potassium	5000	6200	1	50	50	10/22/18	72842	W23291B2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-23-5	Sodium	5000	31000	1	50	50	10/22/18	72842	W23291B2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A
7440-66-6	Zinc	50	110	1	50	50	10/22/18	72842	W23291A2	28	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Hampton-Clarke

Data File Name: A23190F2

Lab Code: 14622

Analysis Date: 10/20/2018

Matrix: Water

Lab Sample ID: AD07161-008

Client ID: TRC-NYC

Level: low/med

Dilution: 1

Batch: 23276

% Solid: 0

Concentration Units: Mg CaCO₃/L

Cas No.	Analyte	RL	Concentration	M
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	Hardness	6.6	310	P

U - Indicates compound not found above detection/reporting limit

* - Indicates compound above calibration range

P - Indicates analyzed by ICP

CV - Indicates analyzed by Cold Vapor

Comments: _____

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-009
 Client Id: SD-4-102018
 Matrix: SOIL
 Level: LOW

% Solid: 30
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.7	ND	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7440-38-2	Arsenic	0.67	4.5	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7440-41-7	Beryllium	0.67	ND	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7440-43-9	Cadmium	1.3	1.9	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7782-49-2	Selenium	6.7	ND	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7440-22-4	Silver	0.67	ND	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	
7440-28-0	Thallium	1.3	ND	1	0.5	100	10/20/18	728451918DNEW		32	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AD07161-009
 Client Id: SD-4-102018
 Matrix: SOIL
 Level: LOW

% Solid: 30
 Units: MG/KG
 Date Rec: 10/17/2018

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	670	16000	1	0.5	50	10/21/18	72844	S23293C4	26	P	PEICPRAD4A
7440-39-3	Barium	33	210	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7440-70-2	Calcium	3300	10000	1	0.5	50	10/21/18	72844	S23293C4	26	P	PEICPRAD4A
7440-47-3	Chromium	17	40	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7440-48-4	Cobalt	8.3	13	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7440-50-8	Copper	17	45	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7439-89-6	Iron	670	44000	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7439-92-1	Lead	17	73	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7439-95-4	Magnesium	1700	7300	1	0.5	50	10/21/18	72844	S23293C4	26	P	PEICPRAD4A
7439-96-5	Manganese	33	1300	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7439-97-6	Mercury	0.28	ND	1	0.15	25	10/20/18	72844	H23293S	24	CV	HGCV3A
7440-02-0	Nickel	17	30	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7440-09-7	Potassium	1700	3400	1	0.5	50	10/21/18	72844	S23293C4	26	P	PEICPRAD4A
7440-23-5	Sodium	830	ND	1	0.5	50	10/21/18	72844	S23293C4	26	P	PEICPRAD4A
7440-62-2	Vanadium	33	52	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A
7440-66-6	Zinc	33	260	1	0.5	50	10/19/18	72844	S23293B3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72824
 Client Id: MB 72824
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-36-0	Antimony	2.5	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7440-38-2	Arsenic	1.0	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7440-41-7	Beryllium	0.75	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7440-43-9	Cadmium	1.0	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7440-48-4	Cobalt	1.0	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7439-92-1	Lead	0.75	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7782-49-2	Selenium	5.0	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	
7440-28-0	Thallium	1.5	ND	1	100	125	10/24/18	72824	2418BNEW	12	MSMS3_7700AQA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72824 (0.5)
 Client Id: MB 72824 (0.5)
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-39-3	Barium	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-70-2	Calcium	1000	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-47-3	Chromium	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-50-8	Copper	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7439-89-6	Iron	150	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7439-95-4	Magnesium	1000	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7439-96-5	Manganese	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7439-98-7	Molybdenum	10	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-02-0	Nickel	10	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-22-4	Silver	10	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-31-5	Tin	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-32-6	Titanium	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-62-2	Vanadium	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A
7440-66-6	Zinc	25	ND	1	100	50	10/20/18	72824	A23190F2	39	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 72824 (1)
Client Id: MB 72824 (1)
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7439-97-6	Mercury	0.20	ND	1	25	25	10/23/18	72824	H23276A	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72842
 Client Id: MB 72842
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7439-92-1	Lead	3.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7782-49-2	Selenium	1.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	10/23/18	72842	2318BNEW	17	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72842 (1)
 Client Id: MB 72842 (1)
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-42-8	Boron	200	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	10/20/18	72842 H23291SW		11	CV	HGCV1A
7439-98-7	Molybdenum	20	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	10/22/18	72842SW23291B2		13	P	PEICPRAD2A
7440-21-3	Silicon	100	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	10/22/18	72842SW23291B2		13	P	PEICPRAD2A
7440-31-5	Tin	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	10/22/18	72842SW23291A2		13	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 72866 (0.5)
Client Id: MB 72866 (0.5)
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	2500	ND	1	100	50	10/24/18	72866	A23276A2	10	P	PEICPRAD2A
7440-23-5	Sodium	2500	ND	1	100	50	10/24/18	72866	A23276A2	10	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72845
 Client Id: MB 72845
 Matrix: SOIL
 Level: LOW

% Solid: 0
 Units: MG/KG

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-36-0	Antimony	0.80	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7440-38-2	Arsenic	0.20	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7440-41-7	Beryllium	0.20	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7440-43-9	Cadmium	0.40	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7782-49-2	Selenium	2.0	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7440-22-4	Silver	0.20	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	
7440-28-0	Thallium	0.40	ND	1	0.5	100	10/20/18	72845	1918DNEW	18	MSMS3_7700SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 72844 (100)
 Client Id: MB 72844 (100)
 Matrix: SOIL
 Level: LOW

% Solid: 0
 Units: MG/KG

Lab Name: Hampton-Clarke
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	10/21/18	72844	S23293C4	13	P	PEICPRAD4A
7440-39-3	Barium	10	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-41-7	Beryllium	1.2	ND	1	0.5	50	10/20/18	72844	S23293A4	13	P	PEICP4A
7440-70-2	Calcium	1000	ND	1	0.5	50	10/21/18	72844	S23293C4	13	P	PEICPRAD4A
7440-47-3	Chromium	5.0	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7439-92-1	Lead	5.0	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	10/21/18	72844	S23293C4	13	P	PEICPRAD4A
7439-96-5	Manganese	10	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	10/21/18	72844	S23293C4	13	P	PEICPRAD4A
7440-23-5	Sodium	250	ND	1	0.5	50	10/21/18	72844	S23293C4	13	P	PEICPRAD4A
7440-32-6	Titanium	10	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	10/19/18	72844	S23293A3	13	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - Cold Vapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 72844 (167)

% Solid: 0

Lab Name: Hampton-Clarke

Client Id: MB 72844 (167)

Units: MG/KG

Lab Code:

Matrix: SOIL

Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	10/20/18	72844	H23293S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 10/24/18

Data File: W102418BNEW

Prep Batch: 72824

Reporting Limits Used: 200.7/200.8/245.1

Instrument: MS3_7700AQA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	CCB V-289727-11	CCB V-289727-23	CCB V-289727-31	MB 72824-12
Antimony	2 U	2 U	2 U	2.5 U
Arsenic	.8 U	.8 U	.8 U	1 U
Beryllium	.6 U	.6 U	.6 U	.75 U
Cadmium	.8 U	.8 U	.8 U	1 U
Cobalt	.8 U	.8 U	.8 U	1 U
Lead	.6 U	.6 U	.6 U	.75 U
Selenium	4 U	4 U	4 U	5 U
Thallium	1.2 U	1.2 U	1.2 U	1.5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/23/18

Data File: A102318BNEW

Prep Batch: 72842

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: MS3_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-290258- 10	CCB V-290258- 16	CCB V-290258- 28	CCB V-290258- 39	MB 72842-17
Antimony	.75 U	1.5 U	1.5 U	1.5 U	1.5 U
Arsenic	.5 U	1 U	1 U	1 U	1 U
Beryllium	25 U	.5 U	.5 U	.5 U	.5 U
Cadmium	.5 U	1 U	1 U	1 U	1 U
Cobalt	.5 U	1 U	1 U	1 U	1 U
Lead	.75 U	1.5 U	1.5 U	1.5 U	1.5 U
Selenium	2.5 U	5 U	5 U	5 U	5 U
Thallium	.5 U	1 U	1 U	1 U	1 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/20/18

Data File: S101918DNEW

Prep Batch: 72845

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: MS3_7700SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-289735-10	CCB V-289735-17	CCB V-289735-29	CCB V-289735-37	MB 72845-18
Antimony	2 U	4 U	4 U	4 U	400 U
Arsenic	5 U	1 U	1 U	1 U	100 U
Beryllium	5 U	1 U	1 U	1 U	100 U
Cadmium	1 U	2 U	2 U	2 U	200 U
Selenium	5 U	10 U	10 U	10 U	1000 U
Silver	5 U	1 U	1 U	1 U	100 U
Thallium	1 U	2 U	2 U	2 U	200 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.

for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3 **(ICB/CCB/MB Summary)**

Date Analyzed: 10/19/18
 Data File: A23190F2
 Prep Batch: 72824
 Reporting Limits Used: 200.7/200.8/245.1
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 8101509

Lab Name: Hampton-Clarke
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:

Analyte	ICB V-287319- 8	CCB V-287319- 12	CCB V-287319- 23	CCB V-287319- 28	CCB V-287319- 38	CCB V-287319- 49	CCB V-287319- 60	CCB V-287319- 72
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Calcium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U
Magnesium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Manganese	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Nickel	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Analyte	MB 72824 (0.5)-39
Aluminum	.1 U
Barium	.025 U
Calcium	1 U
Chromium	.025 U
Copper	.025 U
Iron	.15 U
Magnesium	1 U
Manganese	.025 U
Nickel	.01 U
Silver	.01 U
Vanadium	.025 U
Zinc	.025 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
 for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/22/18

Data File: SW23291A2

Prep Batch: 72842

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 24	CCB V-287319- 35	CCB V-287319- 46	MB 72842 (1)- 13
Aluminum	.1 U	.2 U	.2 U	.2 U	.2 U	.1 U
Barium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U
Calcium	2.5 U	5 U	5 U	5 U	5 U	2.5 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U
Iron	.15 U	.3 U	.3 U	.3 U	.3 U	.15 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	2.5 U
Manganese	.02 U	.04 U	.04 U	.04 U	.04 U	.02 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U
Silver	.01 U	.02 U	.02 U	.02 U	.02 U	.01 U
Vanadium	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U
Zinc	.025 U	.05 U	.05 U	.05 U	.05 U	.025 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 10/22/18

Data File: SW23291B2

Prep Batch: 72842

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICPRAD2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 24	CCB V-287319- 33	MB 72842 (1)- 13
Potassium	2.5 U	5 U	5 U	5 U	2.5 U
Sodium	2.5 U	5 U	5 U	5 U	2.5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 10/23/18
Data File: SW23291C2
Prep Batch: 72842
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8101509

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 18
Sodium	2.5 U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 10/20/18
Data File: H23291SW
Prep Batch: 72842
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8101509

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-29	MB 72842 (1)- 11
Mercury	.5 U	.5 U	.5 U	.5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/19/18

Data File: S23293C3

Prep Batch: 72844

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 22	CCB V-287319- 28	CCB V-287319- 32
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U
Iron	10 U	20 U	20 U	20 U	20 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 10/19/18

Data File: S23293A3

Prep Batch: 72844

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 24	MB 72844 (100)-13
Barium	.05 U	.1 U	.1 U	5 U
Chromium	.025 U	.05 U	.05 U	2.5 U
Cobalt	.0125 U	.025 U	.025 U	1.3 U
Copper	.025 U	.05 U	.05 U	2.5 U
Iron	10 U	20 U	20 U	1000 U
Lead	.025 U	.05 U	.05 U	2.5 U
Nickel	.025 U	.05 U	.05 U	2.5 U
Vanadium	.05 U	.1 U	.1 U	5 U
Zinc	.05 U	.1 U	.1 U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.

for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/19/18

Data File: S23293B3

Prep Batch: 72844

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 22	CCB V-287319- 34	CCB V-287319- 43	CCB V-287319- 52
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	10 U	20 U	20 U	20 U	20 U	20 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.

for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 10/21/18

Data File: S23293C4

Prep Batch: 72844

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: PEICPRAD4A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-287319- 6	CCB V-287319- 12	CCB V-287319- 24	CCB V-287319- 30	MB 72844 (100)-13		
Aluminum	1 U	2 U	2 U	2 U	100 U		
Calcium	5 U	10 U	10 U	10 U	500 U		
Magnesium	2.5 U	5 U	5 U	5 U	250 U		
Potassium	2.5 U	5 U	5 U	5 U	250 U		
Sodium	1.25 U	2.5 U	2.5 U	2.5 U	125 U		

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.

for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 10/20/18

Data File: H23293S

Prep Batch: 72844

Reporting Limits Used: 6010D, 6020B, 7470A, 7471B

Instrument: HGCV3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 8101509

Lab Name: Hampton-Clarke

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-22	CCB-28	MB 72844 (167)-11					
Mercury	.5 U	.5 U	.5 U	83 U					

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 10/24/18
Data File: A23276A2
Prep Batch: 72866
Reporting Limits Used: 200.7/200.8/245.1
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8101509

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-287319- 7	CCB V-287319- 19	CCB V-287319- 29	MB 72866 (0.5)-10			
Potassium	5 U	5 U	5 U	2.5 U			
Sodium	5 U	5 U	5 U	2.5 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.
u-indicates result below reporting criteria.

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72824

8101509 0228

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AD07161-005									
Analyte	BatchId	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	72824	1	A23190F2	45	A23190F2	42	5.2088	0.2U	5.0000	104		70	130
Barium	72824	1	A23190F2	45	A23190F2	42	0.6641	0.1872	0.5000	95		70	130
Calcium	72824	1	A23190F2	45	A23190F2	42	360.6140	320.4960	50.000	80		70	130
Chromium	72824	1	A23190F2	45	A23190F2	42	0.4707	0.05U	0.5000	94		70	130
Copper	72824	1	A23190F2	45	A23190F2	42	0.4986	0.05U	0.5000	100		70	130
Iron	72824	1	A23190F2	45	A23190F2	42	6.7400	2.0829	5.0000	93		70	130
Magnesium	72824	1	A23190F2	45	A23190F2	42	95.3269	47.2981	50.000	96		70	130
Manganese	72824	1	A23190F2	45	A23190F2	42	2.3373	1.9205	0.5000	83		70	130
Mercury	72824	1	H23276A	17	H23276A	14	9.9320	0.2U	10	99		70	130
Nickel	72824	1	A23190F2	45	A23190F2	42	0.4639	0.02U	0.5000	93		70	130
Silver	72824	1	A23190F2	45	A23190F2	42	0.0174	0.02U	0.1000	0	a	70	130
Vanadium	72824	1	A23190F2	45	A23190F2	42	0.4790	0.05U	0.5000	96		70	130
Zinc	72824	1	A23190F2	45	A23190F2	42	0.5086	0.05U	0.5000	102		70	130

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72824

8101509 0229

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AD07161-005								
Analyte	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	A23190F2	46	A23190F2	42	5.5003	0.2U	5.00	110		85	115
Barium	1	A23190F2	46	A23190F2	42	0.7043	0.1872	0.500	103		85	115
Calcium	1	A23190F2	46	A23190F2	42	373.8370	320.4960	50	107		85	115
Chromium	1	A23190F2	46	A23190F2	42	0.5147	0.05U	0.500	103		85	115
Copper	1	A23190F2	46	A23190F2	42	0.5415	0.05U	0.500	108		85	115
Iron	1	A23190F2	46	A23190F2	42	7.2210	2.0829	5.0	103		85	115
Magnesium	1	A23190F2	46	A23190F2	42	108.9750	47.2981	50	123	a	85	115
Manganese	1	A23190F2	46	A23190F2	42	2.3929	1.9205	0.500	94		85	115
Nickel	1	A23190F2	46	A23190F2	42	0.5052	0.02U	0.500	101		85	115
Silver	1	A23190F2	46	A23190F2	42	0.0960	0.02U	.100	96		85	115
Vanadium	1	A23190F2	46	A23190F2	42	0.5220	0.05U	0.500	104		85	115
Zinc	1	A23190F2	46	A23190F2	42	0.5320	0.05U	0.500	106		85	115

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72842

8101509 0230

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS			Matrix: AQUEOUS			SampleID: AD07146-004						
Analyte	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW23291	20	SW23291	16	5.6589	0.3296	5.000	107		75	125
Barium	1	SW23291	20	SW23291	16	0.6183	0.0929	.5	105		75	125
Calcium	1	SW23291	20	SW23291	16	274.7770	209.2000	50.0	131	b	75	125
Chromium	1	SW23291	20	SW23291	16	0.5297	0.05U	.5000	106		75	125
Copper	1	SW23291	20	SW23291	16	0.5802	0.05U	0.5	116		75	125
Iron	1	SW23291	20	SW23291	16	151.6240	149.4230	5.000	44	b	75	125
Magnesium	1	SW23291	20	SW23291	16	102.7670	34.1482	50.0	137	a	75	125
Manganese	1	SW23291	20	SW23291	16	3.7745	3.3107	.5000	93		75	125
Nickel	1	SW23291	20	SW23291	16	0.5347	0.05U	.5000	107		75	125
Potassium	1	SW23291	20	SW23291	16	93.6855	14.1322	50	159	a	75	125
Silver	1	SW23291	20	SW23291	16	0.0782	0.02U	0.100	78		75	125
Sodium	1	SW23291	15	SW23291	11	398.4400	354.9810	50	87		75	125
Vanadium	1	SW23291	20	SW23291	16	0.5399	0.05U	.5000	108		75	125
Zinc	1	SW23291	20	SW23291	16	0.5610	0.05U	0.500	112		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72845

8101509 0231

Instrument Type: ICPMS

Analytical Method(s): 6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 72845							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	72845	1	S101918D	20	48.1260	94.1	51		0.021	206	
Arsenic	72845	1	S101918D	20	55.8320	58.5	95		83	117	
Beryllium	72845	1	S101918D	20	56.0150	59.7	94		83	118	
Cadmium	72845	1	S101918D	20	252.4080	249	101		82	118	
Selenium	72845	1	S101918D	20	139.5660	145	96		78	121	
Silver	72845	1	S101918D	20	45.8100	51.0	90		79	121	
Thallium	72845	1	S101918D	20	190.0660	188	101		80	120	

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 72845							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	72845	1	S101918D	19	48.2570	94.1	51		0.021	206	
Arsenic	72845	1	S101918D	19	55.4600	58.5	95		83	117	
Beryllium	72845	1	S101918D	19	55.9850	59.7	94		83	118	
Cadmium	72845	1	S101918D	19	250.0020	249	100		82	118	
Selenium	72845	1	S101918D	19	139.4160	145	96		78	121	
Silver	72845	1	S101918D	19	46.0860	51.0	90		79	121	
Thallium	72845	1	S101918D	19	190.8940	188	102		80	120	

TxtQcType: MSD		Matrix: SOIL		SampleID: AD07161-002									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	72845	1	S101918D	25	S101918D	21	80.7640	4U	250	32	a	75	125
Arsenic	72845	1	S101918D	25	S101918D	21	209.3960	3.4560	250	82		75	125
Beryllium	72845	1	S101918D	25	S101918D	21	198.7020	1U	250	79		75	125
Cadmium	72845	1	S101918D	25	S101918D	21	210.5850	2U	250	84		75	125
Selenium	72845	1	S101918D	25	S101918D	21	203.7350	10U	250	81		75	125
Silver	72845	1	S101918D	25	S101918D	21	36.6550	1U	50	73	a	75	125
Thallium	72845	1	S101918D	25	S101918D	21	215.2190	2U	250	86		75	125

TxtQcType: MS		Matrix: SOIL		SampleID: AD07161-002									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	72845	1	S101918D	24	S101918D	21	64.4650	4U	250	26	a	75	125
Arsenic	72845	1	S101918D	24	S101918D	21	200.2730	3.4560	250	79		75	125
Beryllium	72845	1	S101918D	24	S101918D	21	181.1020	1U	250	72	a	75	125
Cadmium	72845	1	S101918D	24	S101918D	21	201.1190	2U	250	80		75	125
Selenium	72845	1	S101918D	24	S101918D	21	191.9490	10U	250	77		75	125
Silver	72845	1	S101918D	24	S101918D	21	34.7870	1U	50	70	a	75	125
Thallium	72845	1	S101918D	24	S101918D	21	200.9700	2U	250	80		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72844

8101509 0232

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: SOIL		SampleID: AD07161-002								
Analyte	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S23293C4	20	S23293C4	16	29.3872	23.4878	5.0	118		75	125
Barium	1	S23293A3	20	S23293A3	16	1.6557	1.1766	0.50	96		75	125
Calcium	1	S23293C4	20	S23293C4	16	75.2221	20.6923	50	109		75	125
Chromium	1	S23293A3	20	S23293A3	16	0.5897	0.0682	0.50	104		75	125
Cobalt	1	S23293A3	20	S23293A3	16	0.6009	0.0406	0.50	112		75	125
Copper	1	S23293A3	20	S23293A3	16	0.5795	0.0544	0.50	105		75	125
Iron	1	S23293A3	20	S23293A3	16	111.4300	112.0070	5.0	-12	b	75	125
Lead	1	S23293A3	20	S23293A3	16	0.6197	0.0747	0.50	109		75	125
Magnesium	1	S23293C4	20	S23293C4	16	63.1811	9.5206	50	107		75	125
Manganese	1	S23293C3	17	S23293C3	13	5.7227	6.0199	0.50	-59	b	75	125
Nickel	1	S23293A3	20	S23293A3	16	0.6317	0.05U	0.50	126	a	75	125
Potassium	1	S23293C4	20	S23293C4	16	58.1502	5.4776	50	105		75	125
Sodium	1	S23293C4	20	S23293C4	16	53.9446	2.5U	50	108		75	125
Vanadium	1	S23293A3	20	S23293A3	16	0.6196	0.1U	0.50	124		75	125
Zinc	1	S23293A3	20	S23293A3	16	0.7567	0.2487	0.50	102		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72844

8101509 0233

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 72844						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	72844	1	S23293C4	15	59.3360	87.2	68		52	148
Barium	72844	1	S23293A3	15	1.7559	1.83	96		82	119
Calcium	72844	1	S23293C4	15	44.8667	46.0	98		81	119
Chromium	72844	1	S23293A3	15	0.6520	0.649	100		81	119
Cobalt	72844	1	S23293A3	15	0.4738	0.450	105		84	116
Copper	72844	1	S23293A3	15	1.1153	1.13	99		83	117
Iron	72844	1	S23293A3	15	105.8780	136	78		59	141
Lead	72844	1	S23293A3	15	1.7014	1.61	106		81	119
Magnesium	72844	1	S23293C4	15	19.4418	23.1	84		76	124
Manganese	72844	1	S23293A3	15	2.0463	2.19	93		82	119
Mercury	72844	5	H23293S	15	12.8300	70.8	91		70	130
Nickel	72844	1	S23293A3	15	1.6544	1.47	113		82	118
Potassium	72844	1	S23293C4	15	15.9208	20.3	78		70	130
Sodium	72844	1	S23293C4	15	25.0912	24.3	103		73	126
Vanadium	72844	1	S23293A3	15	1.1359	1.25	91		78	122
Zinc	72844	1	S23293A3	15	1.2018	1.21	99		80	119

TxtQcType: LCS		Matrix: SOIL		SampleID: LCS 72844						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	72844	1	S23293C4	14	58.7960	87.2	67		52	148
Barium	72844	1	S23293A3	14	1.7386	1.83	95		82	119
Calcium	72844	1	S23293C4	14	44.7865	46.0	97		81	119
Chromium	72844	1	S23293A3	14	0.6041	0.649	93		81	119
Cobalt	72844	1	S23293A3	14	0.4608	0.450	102		84	116
Copper	72844	1	S23293A3	14	1.0886	1.13	96		83	117
Iron	72844	1	S23293A3	14	90.5429	136	67		59	141
Lead	72844	1	S23293A3	14	1.5952	1.61	99		81	119
Magnesium	72844	1	S23293C4	14	18.9149	23.1	82		76	124
Manganese	72844	1	S23293A3	14	1.9829	2.19	91		82	119
Mercury	72844	5	H23293S	14	12.3400	70.8	87		70	130
Nickel	72844	1	S23293A3	14	1.5507	1.47	105		82	118
Potassium	72844	1	S23293C4	14	15.4093	20.3	76		70	130
Sodium	72844	1	S23293C4	14	26.9846	24.3	111		73	126
Vanadium	72844	1	S23293A3	14	1.0820	1.25	87		78	122
Zinc	72844	1	S23293A3	14	1.1605	1.21	96		80	119

TxtQcType: MSD		Matrix: SOIL		SampleID: AD07161-002									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	72844	1	S23293C4	19	S23293C4	16	15.5064	23.4878	5.0	-160	b	75	125
Barium	72844	1	S23293A3	19	S23293A3	16	0.9085	1.1766	0.5	-54	a	75	125
Calcium	72844	1	S23293C4	19	S23293C4	16	54.9540	20.6923	50	69	a	75	125
Chromium	72844	1	S23293A3	19	S23293A3	16	0.6847	0.0682	0.5	123		75	125
Cobalt	72844	1	S23293A3	19	S23293A3	16	0.4836	0.0406	0.5	89		75	125
Copper	72844	1	S23293A3	19	S23293A3	16	0.4576	0.0544	0.5	81		75	125
Iron	72844	1	S23293A3	19	S23293A3	16	48.7751	112.0070	5.0	-1300	b	75	125
Lead	72844	1	S23293A3	19	S23293A3	16	0.4956	0.0747	0.5	84		75	125
Magnesium	72844	1	S23293C4	19	S23293C4	16	46.6694	9.5206	50	74	a	75	125
Manganese	72844	10	S23293C3	16	S23293C3	13	2.4670	6.0199	0.5	-7100	b	75	125
Mercury	72844	1	H23293S	19	H23293S	16	9.7520	.5U	10	98		75	125
Nickel	72844	1	S23293A3	19	S23293A3	16	0.5463	0.05U	0.5	109		75	125
Potassium	72844	1	S23293C4	19	S23293C4	16	45.3185	5.4776	50	80		75	125
Sodium	72844	1	S23293C4	19	S23293C4	16	44.8001	2.5U	50	90		75	125
Vanadium	72844	1	S23293A3	19	S23293A3	16	0.4830	0.1U	0.5	97		75	125
Zinc	72844	1	S23293A3	19	S23293A3	16	0.5859	0.2487	0.5	67	a	75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 72844

8101509 0234

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: SOIL		SampleID: AD07161-002									
Analyte	BatchId	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	72844	1	S23293C4	18	S23293C4	16	13.8787	23.4878	5.0	-190	b	75	125
Barium	72844	1	S23293A3	18	S23293A3	16	0.8405	1.1766	0.5	-67	a	75	125
Calcium	72844	1	S23293C4	18	S23293C4	16	53.7032	20.6923	50	66	a	75	125
Chromium	72844	1	S23293A3	18	S23293A3	16	0.4737	0.0682	0.5	81		75	125
Cobalt	72844	1	S23293A3	18	S23293A3	16	0.4878	0.0406	0.5	89		75	125
Copper	72844	1	S23293A3	18	S23293A3	16	0.4586	0.0544	0.5	81		75	125
Iron	72844	1	S23293A3	18	S23293A3	16	41.2068	112.0070	5.0	-1400	b	75	125
Lead	72844	1	S23293A3	18	S23293A3	16	0.5029	0.0747	0.5	86		75	125
Magnesium	72844	1	S23293C4	18	S23293C4	16	45.8964	9.5206	50	73	a	75	125
Manganese	72844	10	S23293C3	15	S23293C3	13	2.1529	6.0199	0.5	-7700	b	75	125
Mercury	72844	1	H23293S	18	H23293S	16	9.9570	.5U	10	100		75	125
Nickel	72844	1	S23293A3	18	S23293A3	16	0.5084	0.05U	0.5	102		75	125
Potassium	72844	1	S23293C4	18	S23293C4	16	44.8776	5.4776	50	79		75	125
Sodium	72844	1	S23293C4	18	S23293C4	16	44.8054	2.5U	50	90		75	125
Vanadium	72844	1	S23293A3	18	S23293A3	16	0.4831	0.1U	0.5	97		75	125
Zinc	72844	1	S23293A3	18	S23293A3	16	0.5507	0.2487	0.5	60	a	75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 72824

8101509 0235

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 72824					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72824	A23190F2	41	A23190F2	40	5.2791	5.4928	4	20
Barium	72824	A23190F2	41	A23190F2	40	0.5129	0.5319	3.6	20
Calcium	72824	A23190F2	41	A23190F2	40	51.3323	52.0883	1.5	20
Chromium	72824	A23190F2	41	A23190F2	40	0.5008	0.5206	3.9	20
Copper	72824	A23190F2	41	A23190F2	40	0.5003	0.5209	4	20
Iron	72824	A23190F2	41	A23190F2	40	5.1065	5.3010	3.7	20
Magnesium	72824	A23190F2	41	A23190F2	40	51.2931	52.2654	1.9	20
Manganese	72824	A23190F2	41	A23190F2	40	0.5008	0.5143	2.7	20
Mercury	72824	H23276A	13	H23276A	12	10.4800	10.2400	2.3	20
Nickel	72824	A23190F2	41	A23190F2	40	0.5097	0.5296	3.8	20
Silver	72824	A23190F2	41	A23190F2	40	0.0971	0.1131	15	20
Vanadium	72824	A23190F2	41	A23190F2	40	0.5037	0.5254	4.2	20
Zinc	72824	A23190F2	41	A23190F2	40	0.5272	0.5441	3.2	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AD07161-005					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72824	A23190F2	43	A23190F2	42	0.2U	0.2U	---	20
Barium	72824	A23190F2	43	A23190F2	42	0.1857	0.1872	0.78	20
Calcium	72824	A23190F2	43	A23190F2	42	319.1980	320.4960	0.41	20
Chromium	72824	A23190F2	43	A23190F2	42	0.05U	0.05U	---	20
Copper	72824	A23190F2	43	A23190F2	42	0.05U	0.05U	---	20
Iron	72824	A23190F2	43	A23190F2	42	2.0418	2.0829	2	20
Magnesium	72824	A23190F2	43	A23190F2	42	46.2758	47.2981	2.2	20
Manganese	72824	A23190F2	43	A23190F2	42	1.8791	1.9205	2.2	20
Mercury	72824	H23276A	15	H23276A	14	0.2U	0.2U	---	20
Nickel	72824	A23190F2	43	A23190F2	42	0.02U	0.02U	---	20
Silver	72824	A23190F2	43	A23190F2	42	0.02U	0.02U	---	20
Vanadium	72824	A23190F2	43	A23190F2	42	0.05U	0.05U	---	20
Zinc	72824	A23190F2	43	A23190F2	42	0.05U	0.05U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AD07161-005					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72824	A23190F2	45	A23190F2	44	5.2088	5.3384	2.5	20
Barium	72824	A23190F2	45	A23190F2	44	0.6641	0.6827	2.8	20
Calcium	72824	A23190F2	45	A23190F2	44	360.6140	365.4610	1.3	20
Chromium	72824	A23190F2	45	A23190F2	44	0.4707	0.4886	3.7	20
Copper	72824	A23190F2	45	A23190F2	44	0.4986	0.5152	3.3	20
Iron	72824	A23190F2	45	A23190F2	44	6.7400	6.9714	3.4	20
Magnesium	72824	A23190F2	45	A23190F2	44	95.3269	94.3978	.98	20
Manganese	72824	A23190F2	45	A23190F2	44	2.3373	2.3827	1.9	20
Mercury	72824	H23276A	17	H23276A	16	9.9320	10.2500	3.2	20
Nickel	72824	A23190F2	45	A23190F2	44	0.4639	0.4824	3.9	20
Silver	72824	A23190F2	45	A23190F2	44	0.0174	0.0991	140	20
Vanadium	72824	A23190F2	45	A23190F2	44	0.4790	0.4965	3.6	20
Zinc	72824	A23190F2	45	A23190F2	44	0.5086	0.5118	.62	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

8101509 0236

RPD/%Difference Data

PREP BATCH: 72845

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 72845					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	72845	S101918D	20	S101918D	19	48.1260	48.2570	.27	20
Arsenic	72845	S101918D	20	S101918D	19	55.8320	55.4600	.67	20
Beryllium	72845	S101918D	20	S101918D	19	56.0150	55.9850	.054	20
Cadmium	72845	S101918D	20	S101918D	19	252.4080	250.0020	.96	20
Selenium	72845	S101918D	20	S101918D	19	139.5660	139.4160	.11	20
Silver	72845	S101918D	20	S101918D	19	45.8100	46.0860	.6	20
Thallium	72845	S101918D	20	S101918D	19	190.0660	190.8940	.43	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD07161-002					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	72845	S101918D	22	S101918D	21	4U	4U	---	20
Arsenic	72845	S101918D	22	S101918D	21	1.1480	3.4560	100 b	20
Beryllium	72845	S101918D	22	S101918D	21	1U	1U	---	20
Cadmium	72845	S101918D	22	S101918D	21	2U	2U	---	20
Selenium	72845	S101918D	22	S101918D	21	10U	10U	---	20
Silver	72845	S101918D	22	S101918D	21	1U	1U	---	20
Thallium	72845	S101918D	22	S101918D	21	2U	2U	---	20

TxtQcType: MSD		Matrix: SOIL		SampleID: AD07161-002					
Analyte	BatchId	Data Fil	Seq#	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	72845	S101918D	25	S101918D	24	80.7640	64.4650	22 a	20
Arsenic	72845	S101918D	25	S101918D	24	209.3960	200.2730	4.5	20
Beryllium	72845	S101918D	25	S101918D	24	198.7020	181.1020	9.3	20
Cadmium	72845	S101918D	25	S101918D	24	210.5850	201.1190	4.6	20
Selenium	72845	S101918D	25	S101918D	24	203.7350	191.9490	6	20
Silver	72845	S101918D	25	S101918D	24	36.6550	34.7870	5.2	20
Thallium	72845	S101918D	25	S101918D	24	215.2190	200.9700	6.8	20

TxtQcType: SD		Matrix: SOIL		SampleID: AD07161-002						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	72845	S101918D	23	S101918D	21	5	0.0200	0.1250	---	20
Arsenic	72845	S101918D	23	S101918D	21	5	0.7160	3.4560	3.6	20
Beryllium	72845	S101918D	23	S101918D	21	5	0.0490	0.1870	31 c	20
Cadmium	72845	S101918D	23	S101918D	21	5	0.0650	0.2790	16 c	20
Selenium	72845	S101918D	23	S101918D	21	5	0.1940	0.5930	64 c	20
Silver	72845	S101918D	23	S101918D	21	5	0.0060	0.0460	---	20
Thallium	72845	S101918D	23	S101918D	21	5	0.0140	0.0990	---	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

8101509 0237

RPD/%Difference Data

PREP BATCH: 72844

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: SOIL		SampleID: LCS MR 72844					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72844	S23293C4	15	S23293C4	14	59.3360	58.7960	.91	20
Barium	72844	S23293A3	15	S23293A3	14	1.7559	1.7386	.98	20
Calcium	72844	S23293C4	15	S23293C4	14	44.8667	44.7865	.18	20
Chromium	72844	S23293A3	15	S23293A3	14	0.6520	0.6041	7.6	20
Cobalt	72844	S23293A3	15	S23293A3	14	0.4738	0.4608	2.8	20
Copper	72844	S23293A3	15	S23293A3	14	1.1153	1.0886	2.4	20
Iron	72844	S23293A3	15	S23293A3	14	105.8780	90.5429	16	20
Lead	72844	S23293A3	15	S23293A3	14	1.7014	1.5952	6.4	20
Magnesium	72844	S23293C4	15	S23293C4	14	19.4418	18.9149	2.7	20
Manganese	72844	S23293A3	15	S23293A3	14	2.0463	1.9829	3.1	20
Mercury	72844	H23293S	15	H23293S	14	12.8300	12.3400	3.9	20
Nickel	72844	S23293A3	15	S23293A3	14	1.6544	1.5507	6.5	20
Potassium	72844	S23293C4	15	S23293C4	14	15.9208	15.4093	3.3	20
Sodium	72844	S23293C4	15	S23293C4	14	25.0912	26.9846	7.3	20
Vanadium	72844	S23293A3	15	S23293A3	14	1.1359	1.0820	4.9	20
Zinc	72844	S23293A3	15	S23293A3	14	1.2018	1.1605	3.5	20

TxtQcType: MR		Matrix: SOIL		SampleID: AD07161-002					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72844	S23293C4	17	S23293C4	16	13.9048	23.4878	51 a	20
Barium	72844	S23293A3	17	S23293A3	16	0.7406	1.1766	45 a	20
Calcium	72844	S23293C4	17	S23293C4	16	15.6753	20.6923	28 b	20
Chromium	72844	S23293A3	17	S23293A3	16	0.05U	0.0682	---	20
Cobalt	72844	S23293A3	17	S23293A3	16	0.025U	0.0406	---	20
Copper	72844	S23293A3	17	S23293A3	16	0.05U	0.0544	---	20
Iron	72844	S23293A3	17	S23293A3	16	66.5123	112.0070	51 a	20
Lead	72844	S23293A3	17	S23293A3	16	0.0646	0.0747	15	20
Magnesium	72844	S23293C4	17	S23293C4	16	6.0010	9.5206	45 b	20
Manganese	72844	S23293C3	14	S23293C3	13	3.7723	6.0199	46 a	20
Mercury	72844	H23293S	17	H23293S	16	.5U	.5U	---	20
Nickel	72844	S23293A3	17	S23293A3	16	0.05U	0.05U	---	20
Potassium	72844	S23293C4	17	S23293C4	16	5U	5.4776	---	20
Sodium	72844	S23293C4	17	S23293C4	16	2.5U	2.5U	---	20
Vanadium	72844	S23293A3	17	S23293A3	16	0.1U	0.1U	---	20
Zinc	72844	S23293A3	17	S23293A3	16	0.1494	0.2487	50 b	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 72844

8101509 0238

Instrument Type: ICP/HG

Analytical Method(s): 6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD		Matrix: SOIL		SampleID: AD07161-002					
Analyte	BatchId	Data Fil	Seq#	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	72844	S23293C4	19	S23293C4	18	15.5064	13.8787	11	20
Barium	72844	S23293A3	19	S23293A3	18	0.9085	0.8405	7.8	20
Calcium	72844	S23293C4	19	S23293C4	18	54.9540	53.7032	2.3	20
Chromium	72844	S23293A3	19	S23293A3	18	0.6847	0.4737	36 a	20
Cobalt	72844	S23293A3	19	S23293A3	18	0.4836	0.4878	.87	20
Copper	72844	S23293A3	19	S23293A3	18	0.4576	0.4586	.23	20
Iron	72844	S23293A3	19	S23293A3	18	48.7751	41.2068	17	20
Lead	72844	S23293A3	19	S23293A3	18	0.4956	0.5029	1.5	20
Magnesium	72844	S23293C4	19	S23293C4	18	46.6694	45.8964	1.7	20
Manganese	72844	S23293C3	16	S23293C3	15	2.4670	2.1529	14	20
Mercury	72844	H23293S	19	H23293S	18	9.7520	9.9570	2.1	20
Nickel	72844	S23293A3	19	S23293A3	18	0.5463	0.5084	7.2	20
Potassium	72844	S23293C4	19	S23293C4	18	45.3185	44.8776	.98	20
Sodium	72844	S23293C4	19	S23293C4	18	44.8001	44.8054	.012	20
Vanadium	72844	S23293A3	19	S23293A3	18	0.4830	0.4831	.024	20
Zinc	72844	S23293A3	19	S23293A3	18	0.5859	0.5507	6.2	20

TxtQcType: SD		Matrix: SOIL		SampleID: AD07161-002						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Aluminum	72844	S23293C4	21	S23293C4	16	5	4.7947	23.4878	2.1	10
Barium	72844	S23293A3	21	S23293A3	16	5	0.2335	1.1766	0.79	10
Calcium	72844	S23293C4	21	S23293C4	16	5	3.8241	20.6923	7.6	10
Chromium	72844	S23293A3	21	S23293A3	16	5	0.0161	0.0682	18 a	10
Cobalt	72844	S23293A3	21	S23293A3	16	5	0.0103	0.0406	27 a	10
Copper	72844	S23293A3	21	S23293A3	16	5	0.0159	0.0544	46 c	10
Iron	72844	S23293A3	21	S23293A3	16	5	21.0038	112.0070	6.2	10
Lead	72844	S23293A3	21	S23293A3	16	5	0.0172	0.0747	15 c	10
Magnesium	72844	S23293C4	21	S23293C4	16	5	1.9090	9.5206	0.26	10
Manganese	72844	S23293C3	18	S23293C3	13	5	1.1566	6.0199	3.9	10
Nickel	72844	S23293A3	21	S23293A3	16	5	0.0073	0.0500	27 c	10
Potassium	72844	S23293C4	21	S23293C4	16	5	1.1896	5.4776	8.6	10
Sodium	72844	S23293C4	21	S23293C4	16	5	-0.0742	0.2648	---	10
Vanadium	72844	S23293A3	21	S23293A3	16	5	0.0205	0.0936	9.4	10
Zinc	72844	S23293A3	21	S23293A3	16	5	0.0425	0.2487	15 a	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD07118-001	Project Number: 8101509
Matrix Aqueous	Received Date: 10/15/2018
Client SampleID: LMW-2-102018 U	Collect Date: 10/15/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	15	mg/L	2.0	10/22/18	10/22/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18

Lab#: AD07118-003	Project Number: 8101509
Matrix Aqueous	Received Date: 10/15/2018
Client SampleID: PC-1-10 2018 U	Collect Date: 10/15/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Alkalinity	ALKALIN-MUR	1	450	mg CaCO3/l	10	10/18/18	10/18/18
pH Endpoint	ALKALIN-MUR	1	4.5	pH		10/18/18	10/18/18
Alkalinity	ALK-BICARB	1	450	mg CaCO3/L	10	10/18/18	10/18/18
Chloride	CHLORIDE-ICW	10	230	mg/L	20	10/22/18	10/22/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18
Nitrite	NO2-ICW	1	ND	mg/L	1.0	10/15/18	10/15/18
Nitrate	NO3-ICW	1	ND	mg/L	1.0	10/15/18	10/15/18
p-Alkalinity	P-ALKALINITY	1	ND	mg CaCO3/l	10	10/18/18	10/18/18
Sulfate	SO4-ICW	1	8.1	mg/L	2.0	10/15/18	10/15/18

Lab#: AD07118-005	Project Number: 8101509
Matrix Aqueous	Received Date: 10/15/2018
Client SampleID: GW-DUP1-102018 U	Collect Date: 10/15/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	10	220	mg/L	20	10/22/18	10/22/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18

Lab#: AD07118-007	Project Number: 8101509
Matrix Aqueous	Received Date: 10/15/2018
Client SampleID: MW-11-102018 U	Collect Date: 10/15/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Alkalinity	ALKALIN-MUR	1	270	mg CaCO3/l	10	10/18/18	10/18/18
pH Endpoint	ALKALIN-MUR	1	4.5	pH		10/18/18	10/18/18
Alkalinity	ALK-BICARB	1	270	mg CaCO3/L	10	10/18/18	10/18/18
Nitrite	NO2-ICW	1	ND	mg/L	1.0	10/15/18	10/15/18
Nitrate	NO3-ICW	1	ND	mg/L	1.0	10/15/18	10/15/18
p-Alkalinity	P-ALKALINITY	1	ND	mg CaCO3/l	10	10/18/18	10/18/18
Sulfate	SO4-ICW	1	7.5	mg/L	2.0	10/15/18	10/15/18

Lab#: AD07137-001	Project Number: 8101509
Matrix Aqueous	Received Date: 10/16/2018
Client SampleID: LMW-4-102018 U	Collect Date: 10/16/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	32	mg/L	2.0	10/26/18	10/26/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18

Lab#: AD07137-003	Project Number: 8101509
Matrix Aqueous	Received Date: 10/16/2018
Client SampleID: PC-2-102018 U	Collect Date: 10/16/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	21	mg/L	2.0	10/26/18	10/26/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD07137-005				Project Number: 8101509			
Matrix Aqueous				Received Date: 10/16/2018			
Client SampleID: PC-3-102018 U				Collect Date: 10/16/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	10	230	mg/L	20	10/26/18	10/26/18
Cyanide	CN-WATER-MUR	1	ND	mg/L	0.020	10/17/18	10/17/18
Lab#: AD07161-001				Project Number: 8101509			
Matrix Aqueous				Received Date: 10/17/2018			
Client SampleID: SW-1-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	5.5	mg/L	2.0	10/26/18	10/26/18
Cyanide	CN-W-9012	1	ND	mg/L	0.020	10/22/18	10/23/18
Lab#: AD07161-002				Project Number: 8101509			
Matrix Sediment/Encore				Received Date: 10/17/2018			
Client SampleID: SD-1-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICS	1	ND	mg/Kg	56	10/18/18	10/19/18
Cyanide	CN-S-9012	1	ND	mg/Kg	0.67	10/22/18	10/22/18
Lab#: AD07161-003				Project Number: 8101509			
Matrix Aqueous				Received Date: 10/17/2018			
Client SampleID: SW-2-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	7.8	mg/L	2.0	10/26/18	10/26/18
Cyanide	CN-W-9012	1	ND	mg/L	0.020	10/22/18	10/23/18
Lab#: AD07161-004				Project Number: 8101509			
Matrix Sediment/Encore				Received Date: 10/17/2018			
Client SampleID: SD-2-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICS	1	ND	mg/Kg	120	10/18/18	10/19/18
Cyanide	CN-S-9012	1	1.9	mg/Kg	1.5	10/22/18	10/22/18
Lab#: AD07161-005				Project Number: 8101509			
Matrix Aqueous				Received Date: 10/17/2018			
Client SampleID: SW-3-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	5	170	mg/L	10	10/26/18	10/27/18
Cyanide	CN-W-9012	1	ND	mg/L	0.020	10/22/18	10/23/18
Lab#: AD07161-006				Project Number: 8101509			
Matrix Sediment/Encore				Received Date: 10/17/2018			
Client SampleID: SD-3-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICS	1	200	mg/Kg	36	10/18/18	10/19/18
Cyanide	CN-S-9012	1	1.3	mg/Kg	0.44	10/22/18	10/22/18
Lab#: AD07161-007				Project Number: 8101509			
Matrix Aqueous				Received Date: 10/17/2018			
Client SampleID: SW-DUP1-102018				Collect Date: 10/17/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	5	150	mg/L	10	10/26/18	10/27/18
Cyanide	CN-W-9012	1	ND	mg/L	0.020	10/22/18	10/23/18

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD07161-008	Project Number: 8101509
Matrix Aqueous	Received Date: 10/17/2018
Client SampleID: SW-4-102018	Collect Date: 10/17/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICW	1	41	mg/L	2.0	10/26/18	10/26/18
Cyanide	CN-W-9012	1	ND	mg/L	0.020	10/22/18	10/23/18

Lab#: AD07161-009	Project Number: 8101509
Matrix Sediment/Encore	Received Date: 10/17/2018
Client SampleID: SD-4-102018	Collect Date: 10/17/2018

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Chloride	CHLORIDE-ICS	1	100	mg/Kg	67	10/18/18	10/19/18
Cyanide	CN-S-9012	1	ND	mg/Kg	0.80	10/22/18	10/22/18

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD07325-001				Project Number: 8102513			
Matrix Aqueous				Received Date: 10/24/2018			
Client SampleID: PC-1-102018				Collect Date: 10/23/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Sulfide (Total)	SULFIDE-MUR	1	ND	mg/l	2	10/29/18	10/29/18
Lab#: AD07325-002				Project Number: 8102513			
Matrix Aqueous				Received Date: 10/24/2018			
Client SampleID: MW-11-102018				Collect Date: 10/23/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Sulfide (Total)	SULFIDE-MUR	1	ND	mg/l	2	10/29/18	10/29/18
Lab#: AD07325-003				Project Number: 8102513			
Matrix Aqueous				Received Date: 10/24/2018			
Client SampleID: GW-DUP1-102018				Collect Date: 10/23/2018			
Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Sulfide (Total)	SULFIDE-MUR	1	ND	mg/l	2	10/29/18	10/29/18

Batch Number: TSULFIDE-W-387

Units: mg/l

Qc Summary Results

Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-10/29/18	16	90-110	NA	16.03	100	NA	
DUP	AD07337-001	0	NA	20	1.20225	NA	NA	Nc
LCS	LCS	16	75-125	NA	16.43075	103	NA	
MS	AD07337-001	16	75-125	NA	16.43075	103	NA	
MSD	AD07337-001	16	75-125	20	16.8315	105	2.4	

Analytical Method(s)

SM4500-S2F11

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Tit Vol	Iod Vol	Sam Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-10/29/18	CAL-01		16		100	16.03	6.0	10	100			10/29/18	JMP
MB-1-10/29/18	MB	MB-1-10/29/18	ND	2	100	0.40075	9.9	10	100	10/29/18	JMP	10/29/18	JMP
LCS	LCS	MB-1-10/29/18	16	2	100	16.431	5.9	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-001	MS	MB-1-10/29/18	16	2	100	16.431	5.9	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-001	MSD	MB-1-10/29/18	17	2	100	16.831	5.8	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-001	DUP	MB-1-10/29/18	ND	2	100	1.2022	9.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-001	Sample	MB-1-10/29/18	ND	2	100	1.603	9.6	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-002	Sample	MB-1-10/29/18	ND	2	100	0.8015	9.8	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-003	Sample	MB-1-10/29/18	ND	2	100	0.40075	9.9	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-004	Sample	MB-1-10/29/18	ND	2	100	1.2022	9.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-005	Sample	MB-1-10/29/18	ND	2	100	1.603	9.6	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-006	Sample	MB-1-10/29/18	ND	2	100	1.2022	9.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-007	Sample	MB-1-10/29/18	ND	2	100	0.40075	9.9	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-008	Sample	MB-1-10/29/18	2.8	2	100	2.8052	9.3	10	100	10/29/18	JMP	10/29/18	JMP
AD07337-009	Sample	MB-1-10/29/18	3.2	2	100	3.206	9.2	10	100	10/29/18	JMP	10/29/18	JMP
AD07310-001	Sample	MB-1-10/29/18	13	2	100	13.225	6.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07310-003	Sample	MB-1-10/29/18	6.0	2	100	6.0112	8.5	10	100	10/29/18	JMP	10/29/18	JMP
AD07310-006	Sample	MB-1-10/29/18	3.2	2	100	3.206	9.2	10	100	10/29/18	JMP	10/29/18	JMP
AD07310-008	Sample	MB-1-10/29/18	ND	2	100	0.40075	9.9	10	100	10/29/18	JMP	10/29/18	JMP
AD07325-001	Sample	MB-1-10/29/18	ND	2	100	1.2022	9.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07325-002	Sample	MB-1-10/29/18	ND	2	100	0.8015	9.8	10	100	10/29/18	JMP	10/29/18	JMP
AD07325-003	Sample	MB-1-10/29/18	ND	2	100	1.2022	9.7	10	100	10/29/18	JMP	10/29/18	JMP
AD07336-001	Sample	MB-1-10/29/18	ND	2	100	1.603	9.6	10	100	10/29/18	JMP	10/29/18	JMP
AD07336-010	Sample	MB-1-10/29/18	ND	2	100	0.40075	9.9	10	100	10/29/18	JMP	10/29/18	JMP

JMP
10/29/18JW
11/3/18

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)

Rp - RPD failed specified criteria

Na - Not Applicable

Nc - Not Checked either one or both values =ND

Batch Number: ALKAL-M-572

Units: mg CaCO3/l

Qc Summary Results

Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AD07118-003	0	NA	20	445	NA	1.1	
LCS	LCS	100	75-125	NA	100	100	NA	
LCSD	LCSD	100	75-125	20	101	101	1	

Analytical Method(s)

SM2320B-11

Sam #	Type	MB	Result	RL	Per Sol	Full ml Result	h2so4 h2so4	h2so4 (N)	Sam Vol (ml)	2nd Endpoi nt	Prep Date	Prep By	Anal Date	Anal By
MB-1-10/18/18	MB	MB-1-10/18/18	ND	5	100	1	0.15	0.02	100	0.20	10/18/18	BCT	10/18/18	BCT
LCS	LCS	MB-1-10/18/18	100	10	100	100	5.00	0.02	50		10/18/18	BCT	10/18/18	BCT
LCSD	LCSD	MB-1-10/18/18	100	10	100	101	5.05	0.02	50		10/18/18	BCT	10/18/18	BCT
AD07118-003	DUP	MB-1-10/18/18	440	10	100	445	22.25	0.02	50		10/18/18	BCT	10/18/18	BCT
AD07118-003	Sample	MB-1-10/18/18	450	10	100	450	22.50	0.02	50		10/18/18	BCT	10/18/18	BCT
AD07118-007	Sample	MB-1-10/18/18	270	10	100	270	13.50	0.02	50		10/18/18	BCT	10/18/18	BCT
AD06468-011	Sample	MB-1-10/18/18	80	10	100	80	4.00	0.02	50		10/18/18	BCT	10/18/18	BCT

BM
10/19/18SW
10/21/18Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable

Rp - RPD failed specified criteria.

Nc - Not Checked ..either one or both values =ND

Batch Number: ALKAL-P-82

Units: mg CaCO3/l

Qc Summary Results

Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AD07118-003	0	NA	20	0	NA	NA	Nc
LCS	LCS	100	75-125	NA	88	88	NA	
LCSD	LCSD	100	75-125	20	89	89	1 1	

Analytical Method(s)

NOTAV

Sam #	Type	MB	Result	RL	Per Sol	Full ml Result	h2so4 (N)	Sam Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
MB-1-10/18/18	MB	MB-1-10/18/18	ND	5	100	0	0.0	100	10/18/18	BCT	10/18/18	BCT
LCS	LCS	MB-1-10/18/18	88	10	100	88	4.40	50	10/18/18	BCT	10/18/18	BCT
LCSD	LCSD	MB-1-10/18/18	89	10	100	89	4.45	50	10/18/18	BCT	10/18/18	BCT
AD07118-003	DUP	MB-1-10/18/18	ND	10	100	0	0.0	50	10/18/18	BCT	10/18/18	BCT
AD07118-003	Sample	MB-1-10/18/18	ND	10	100	0	0.0	50	10/18/18	BCT	10/18/18	BCT
AD07118-007	Sample	MB-1-10/18/18	ND	10	100	0	0.0	50	10/18/18	BCT	10/18/18	BCT

B7
10/19/18OW
10/21/18

GW 10/21/18

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Calibration Summary:

8101509 0247

Instrument: DA1

Analysis Meth: EPA 335.4

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20181017135	9	ICV	96	0.4	90-110
Cyanide	20181017135	21	CCV	100	0.4	90-110
Cyanide	20181017135	27	CCV	99	0.4	90-110
Cyanide	20181017135	29	CCV	105	0.4	90-110
Cyanide	20181017135	32	CCV	101	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 10/17/18

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017135	10/17/18 14:22	MBW-1322	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017135	10/17/18 14:20	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017135	10/17/18 14:48	CCB	22	Cyanide	ND	0.020
20181017135	10/17/18 14:58	CCB	28	Cyanide	ND	0.020
20181017135	10/17/18 15:15	CCB	30	Cyanide	ND	0.020
20181017135	10/17/18 15:20	CCB	33	Cyanide	ND	0.020

LCS Recoveries

BatchRunID/RunID: ====>			201810171359-12									
QcBatchID: ====>			LCSW-1322									
Date/Time: ====>			10/17/18 14:24									
Analytical Method: ====>			EPA 335.4									
Matrix: ====>			Aqueous		Soil		Soil		Soil		Soil	
EPA 335.4												
Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	90-110			97							

MS/MSD/DUP Recovery

8101509 0250

Prep Batch: W-1322
Method: EPA 335.4

Sample ID: AD07118-001
Matrix: Aqueous

Qc Type: DUP								MS/MSD/DUP			Non Spike		
		Limits		DUP	Sample								
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		20	1	0	0	NA		20181017135	15	10/17/18 14:31	20181017135	14	10/17/18 14:29

Qc Type: MS								MS/MSD/DUP			Non Spike		
		Limits		MS	Sample								
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3799	0	95		20181017135	16	10/17/18 14:34	20181017135	14	10/17/18 14:29

Qc Type: MSD											MS/MSD/DUP			Non Spike		
		Limits		MSD	Sample											
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag		Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3707	0	93	2.5			20181017135	17	10/17/18 14:36	20181017135	14	10/17/18 14:29

Calibration Summary:

8101509 0251

Instrument: DA1

Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20181022105	9	ICV	100	0.4	85-115
Cyanide	20181022105	21	CCV	98	0.4	85-115
Cyanide	20181022105	33	CCV	101	0.4	85-115
Cyanide	20181022105	41	CCV	99	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary

Prep Date: 10/22/18

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181022105	10/22/18 11:14	MBS-2071	11	Cyanide	ND	0.020

Qc Type: ICB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181022105	10/22/18 11:12	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181022105	10/22/18 11:40	CCB	22	Cyanide	ND	0.020
20181022105	10/22/18 12:08	CCB	34	Cyanide	ND	0.020
20181022105	10/22/18 12:23	CCB	42	Cyanide	ND	0.020

LCS Recoveries

BatchRunID/RunID:====> 201810221051-13
QcBatchID:====> LCSS-2071DUP
Date/Time:====> 10/22/18 11:19
Analytical Method:====> EPA 9012B
Matrix:====> Soil

EPA 9012B														
Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	80-120			92									

MS/MSD/DUP Recovery

8101509 0254

Prep Batch: S-2071

Sample ID: AD07152-001

Method: EPA 9012B

Matrix: Soil

Qc Type: DUP

		Limits		DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		35	1	0.0357	0.0367	2.8		20181022105	15	10/22/18 11:23	20181022105	14	10/22/18 11:21

Qc Type: MS

		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.414	0.0367	94		20181022105	16	10/22/18 11:26	20181022105	14	10/22/18 11:21

Qc Type: MSD

QC Type: MSD										MS/MSD/DUP				Non Spike		
Analyte	Amt	Limits		Dil	MSD Conc	Sample		Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date		
		Recov	Rpd			Conc	% Rec								Rpd	
Cyanide	0.4	75-125	20	1	0.4131	0.0367	94	0.2	20181022105	17	10/22/18 11:28	20181022105	14	10/22/18 11:21		

Calibration Summary:

8101509 0255

Instrument: DA1

Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20181023074	9	ICV	100	0.4	85-115
Cyanide	20181023074	21	CCV	97	0.4	85-115
Cyanide	20181023074	26	CCV	103	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary

Prep Date: 10/22/18

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181023074	10/23/18 08:07	MBW-1323	11	Cyanide	ND	0.020

Qc Type: ICB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181023074	10/23/18 08:05	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181023074	10/23/18 08:32	CCB	22	Cyanide	ND	0.020
20181023074	10/23/18 08:41	CCB	27	Cyanide	ND	0.020

LCS Recoveries

BatchRunID/RunID:====> 201810230744-12
 QcBatchID:====> LCSW-1323
 Date/Time:====> 10/23/18 08:09
 Analytical Method:====> EPA 9012B
 Matrix:====> Aqueous

EPA 9012B														
Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	80-120			92									

MS/MSD/DUP Recovery

8101509 0258

Prep Batch: W-1323

Sample ID: AD07161-001

Method: EPA 9012B

Matrix: Aqueous

Qc Type: DUP

Limits				DUP				MS/MSD/DUP			Non Spike		
Analyte	Rpd	Dil	Conc	Sample Conc	Rpd	Flag		Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA			20181023074	15	10/23/18 08:16	20181023074	14	10/23/18 08:14

Qc Type: MS

Limits				MS				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Sample Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3745	0	94		20181023074	16	10/23/18 08:19	20181023074	14	10/23/18 08:14

Qc Type: MSD

Qc Type: MSD										MS/MSD/DUP						Non Spike		
Limits					MSD	Sample												
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	%	Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date		
Cyanide	0.4	75-125	20	1	0.3557	0	89	5.1			20181023074	17	10/23/18 08:21	20181023074	14	10/23/18 08:14		

LCS Recoveries

BatchRunID/RunID:====> 201809251047-292
QcBatchID:====> LCSW-2247
Date/Time:====> 10/15/18 17:37
Analytical Method:====> 300.0 rev2.1
Matrix:====> Aqueous

201810171053-122
 LCSW-2251
 10/22/18 10:55
 300.0 rev2.1
 Aqueous

Soil

Soil

Soil

300.0 rev2.

Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Chloride	5	90-110			110		108							
Nitrate	5	90-110			102		100							
Nitrite	5	90-110			100		99							
Sulfate	5	90-110			99		99							

MS/MSD/DUP Recovery

8101509 0260

Prep Batch: W-2247

Sample ID: AD07114-001

Method: 300.0 rev2.1

Matrix: Aqueous

Qc Type: MS									MS/MSD/DUP			Non Spike		
		Limits		MS		Sample								
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date	
Chloride	5	80-120	1	34.7853	29.5744	104		20180925104	294	10/15/18 18:32	20180925104	293	10/15/18 18:04	
Nitrate	5	80-120	1	7.7665	3.1749	92		20180925104	294	10/15/18 18:32	20180925104	293	10/15/18 18:04	
Nitrite	5	80-120	1	5.2633	0	105		20180925104	294	10/15/18 18:32	20180925104	293	10/15/18 18:04	
Sulfate	5	80-120	1	17.1144	11.6183	110		20180925104	294	10/15/18 18:32	20180925104	293	10/15/18 18:04	

Qc Type: MSD										MS/MSD/DUP			Non Spike		
		Limits			MSD	Sample									
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	20	1	34.7194	29.5744	103	0.2		20180925104	295	10/15/18 18:59	20180925104	293	10/15/18 18:04
Nitrate	5	80-120	20	1	7.7901	3.1749	92	0.3		20180925104	295	10/15/18 18:59	20180925104	293	10/15/18 18:04
Nitrite	5	80-120	20	1	5.3082	0	106	0.8		20180925104	295	10/15/18 18:59	20180925104	293	10/15/18 18:04
Sulfate	5	80-120	20	1	17.2058	11.6183	112	0.5		20180925104	295	10/15/18 18:59	20180925104	293	10/15/18 18:04

Prep Batch: W-2251

Sample ID: AD07118-001

Method: 300.0 rev2.1

Matrix: Aqueous

Qc Type: MS									MS/MSD/DUP			Non Spike		
Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date	
Chloride	5	80-120	1	19.3009	14.7503	91		20181017105	129	10/22/18 14:19	20181017105	128	10/22/18 13:51	
Nitrate	5	80-120	1	5.4361	1.2023	85		20181017105	129	10/22/18 14:19	20181017105	128	10/22/18 13:51	
Nitrite	5	80-120	1	4.9221	0	98		20181017105	129	10/22/18 14:19	20181017105	128	10/22/18 13:51	
Sulfate	5	80-120	1	36.9571	30.8063	123	Mw	20181017105	129	10/22/18 14:19	20181017105	128	10/22/18 13:51	

Qc Type: MSD										MS/MSD/DUP			Non Spike		
		Limits			MSD	Sample									
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	20	1	19.2305	14.7503	90	0.4		20181017105	130	10/22/18 14:46	20181017105	128	10/22/18 13:51
Nitrate	5	80-120	20	1	5.4063	1.2023	84	0.5		20181017105	130	10/22/18 14:46	20181017105	128	10/22/18 13:51
Nitrite	5	80-120	20	1	4.9163	0	98	0.1		20181017105	130	10/22/18 14:46	20181017105	128	10/22/18 13:51
Sulfate	5	80-120	20	1	36.452	30.8063	113	1.4		20181017105	130	10/22/18 14:46	20181017105	128	10/22/18 13:51

Calibration Curve

Instrument: IC1

Analysis Date: 09/25/18

Analytical Methods: 300.0 rev2.1; EPA 9056; EPA 9056A

Batch ID:	Analyte:	Area Found						Concentration Amount						rSq
		Area1	Area2	Area3	Area4	Area5	Area6	Conc1	Conc2	Conc3	Conc4	Conc5	Conc6	
201809251047	Chloride	0	0.209	1.056	2.136	4.59	12.55	0	1	5	10	20	50	99.866
201809251047	Nitrate	0	0.504	2.532	5.345	11.899		0	1	5	10	20	50	99.692
201809251047	Nitrite	0	0.419	2.205	4.537	9.503		0	1	5	10	20	50	99.945
201809251047	Sulfate	0	0.22	0.822	1.604	3.355	8.198	0	1	5	10	20	50	99.981
201810171053	Chloride	0	0.205	1.137	2.317	4.855	13.494	0	1	5	10	20	50	99.84
201810171053	Nitrate	0	0.518	2.698	5.76	12.614		0	1	5	10	20	50	99.778
201810171053	Nitrite	0	0.44	2.311	4.776	9.853		0	1	5	10	20	50	99.974
201810171053	Sulfate	0	0.203	0.902	1.733	3.432	8.751	0	1	5	10	20	50	99.988

8101509 0261

Calibration Summary:

8101509 0262

Instrument: IC1

Analysis Meth: 300.0 rev2.1

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20180925104	7	ICV	105	10	90-110
Chloride	20180925104	289	CCV	101	10	90-110
Chloride	20180925104	300	CCV	102	10	90-110
Chloride	20181017105	7	ICV	96	10	90-110
Chloride	20181017105	119	CCV	95	10	90-110
Chloride	20181017105	131	CCV	97	10	90-110
Chloride	20181017105	143	CCV	96	10	90-110
Nitrate	20180925104	7	ICV	105	10	90-110
Nitrate	20180925104	289	CCV	101	10	90-110
Nitrate	20180925104	300	CCV	103	10	90-110
Nitrate	20181017105	7	ICV	98	10	90-110
Nitrate	20181017105	119	CCV	96	10	90-110
Nitrate	20181017105	131	CCV	97	10	90-110
Nitrate	20181017105	143	CCV	96	10	90-110
Nitrite	20180925104	7	ICV	99	10	90-110
Nitrite	20180925104	289	CCV	103	10	90-110
Nitrite	20180925104	300	CCV	104	10	90-110
Nitrite	20181017105	7	ICV	101	10	90-110
Nitrite	20181017105	119	CCV	99	10	90-110
Nitrite	20181017105	131	CCV	100	10	90-110
Nitrite	20181017105	143	CCV	99	10	90-110
Sulfate	20180925104	7	ICV	106	10	90-110
Sulfate	20180925104	289	CCV	101	10	90-110
Sulfate	20180925104	300	CCV	105	10	90-110
Sulfate	20181017105	7	ICV	100	10	90-110
Sulfate	20181017105	119	CCV	95	10	90-110
Sulfate	20181017105	131	CCV	104	10	90-110
Sulfate	20181017105	143	CCV	92	10	90-110

Blank Summary

Instrument: IC1

Qc Type: Method Blank Summary

Prep Date: 10/15/18

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20180925104	10/15/18 16:43	MBW-2247	291	Chloride	ND	2.0
20180925104	10/15/18 16:43	MBW-2247	291	Nitrate	ND	1.0
20180925104	10/15/18 16:43	MBW-2247	291	Nitrite	ND	1.0
20180925104	10/15/18 16:43	MBW-2247	291	Sulfate	ND	2.0
20181017105	10/22/18 10:28	MBW-2251	121	Chloride	ND	2.0
20181017105	10/22/18 10:28	MBW-2251	121	Nitrate	ND	1.0
20181017105	10/22/18 10:28	MBW-2251	121	Nitrite	ND	1.0
20181017105	10/22/18 10:28	MBW-2251	121	Sulfate	ND	2.0

Qc Type: ICB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20180925104	9/25/18 16:38	ICB	8	Chloride	ND	2.0
20180925104	9/25/18 16:38	ICB	8	Nitrate	ND	1.0
20180925104	9/25/18 16:38	ICB	8	Nitrite	ND	1.0
20180925104	9/25/18 16:38	ICB	8	Sulfate	ND	2.0
20181017105	10/17/18 18:49	ICB	8	Chloride	ND	2.0
20181017105	10/17/18 18:49	ICB	8	Nitrate	ND	1.0
20181017105	10/17/18 18:49	ICB	8	Nitrite	ND	1.0
20181017105	10/17/18 18:49	ICB	8	Sulfate	ND	2.0

Qc Type: CCB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20180925104	10/15/18 16:16	CCB	290	Chloride	ND	2.0
20180925104	10/15/18 21:42	CCB	301	Chloride	ND	2.0
20180925104	10/15/18 16:16	CCB	290	Nitrate	ND	1.0
20180925104	10/15/18 21:42	CCB	301	Nitrate	ND	1.0
20180925104	10/15/18 16:16	CCB	290	Nitrite	ND	1.0
20180925104	10/15/18 21:42	CCB	301	Nitrite	ND	1.0
20180925104	10/15/18 16:16	CCB	290	Sulfate	ND	2.0
20180925104	10/15/18 21:42	CCB	301	Sulfate	ND	2.0
20181017105	10/22/18 10:01	CCB	120	Chloride	ND	2.0
20181017105	10/22/18 15:40	CCB	132	Chloride	ND	2.0
20181017105	10/22/18 21:08	CCB	144	Chloride	ND	2.0
20181017105	10/22/18 10:01	CCB	120	Nitrate	ND	1.0
20181017105	10/22/18 15:40	CCB	132	Nitrate	ND	1.0
20181017105	10/22/18 21:08	CCB	144	Nitrate	ND	1.0
20181017105	10/22/18 10:01	CCB	120	Nitrite	ND	1.0
20181017105	10/22/18 15:40	CCB	132	Nitrite	ND	1.0
20181017105	10/22/18 21:08	CCB	144	Nitrite	ND	1.0
20181017105	10/22/18 10:01	CCB	120	Sulfate	ND	2.0
20181017105	10/22/18 15:40	CCB	132	Sulfate	ND	2.0
20181017105	10/22/18 21:08	CCB	144	Sulfate	ND	2.0

Calibration Curve

Instrument: IC1

Analysis Date: 10/17/18

Analytical Methods: 300.0 rev2.1; EPA 9056; EPA 9056A

Batch ID:	Analyte:	Area Found						Concentration Amount						rSq
		Area1	Area2	Area3	Area4	Area5	Area6	Conc1	Conc2	Conc3	Conc4	Conc5	Conc6	
201810171053	Chloride	0	0.205	1.137	2.317	4.855	13.494	0	1	5	10	20	50	99.84

Calibration Summary:

8101509 0265

Instrument: IC1

Analysis Meth: 300.0 rev2.1

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20181017105	7	ICV	96	10	90-110
Chloride	20181017105	247	CCV	95	10	90-110
Chloride	20181017105	259	CCV	96	10	90-110
Chloride	20181017105	271	CCV	95	10	90-110

Blank Summary

Instrument: IC1

Qc Type: Method Blank Summary**Prep Date: 10/26/18**

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/26/18 08:55	MBW-2255	249	Chloride	ND	2.0

Qc Type: ICB Summary**Prep Date: NA**

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/17/18 18:49	ICB	8	Chloride	ND	2.0

Qc Type: CCB Summary**Prep Date: NA**

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/26/18 08:28	CCB	248	Chloride	ND	2.0
20181017105	10/26/18 14:34	CCB	260	Chloride	ND	2.0
20181017105	10/26/18 20:02	CCB	272	Chloride	ND	2.0

LCS Recoveries

BatchRunID/RunID:====> 201810171053-250
QcBatchID:====> LCSW-2255
Date/Time:====> 10/26/18 09:23
Analytical Method:====> 300.0 rev2.1
Matrix:====> Aqueous

Analyte	300.0 rev2.											
	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Chloride	5	90-110			106							

MS/MSD/DUP Recovery

8101509 0268

Prep Batch: W-2255

Sample ID: AD07161-001

Method: 300.0 rev2.1

Matrix: Aqueous

Qc Type: MS								MS/MSD/DUP			Non Spike		
		Limits		MS	Sample								
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	1	9.4753	5.477	80		20181017105	265	10/26/18 16:52	20181017105	264	10/26/18 16:25

Qc Type: MSD										MS/MSD/DUP			Non Spike				
		Limits			MSD	Sample				Batch		RunID	Analysis Date	Batch		RunID	Analysis Date
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag								
Chloride	5	80-120	20	1	9.4988	5.477	80	0.2		20181017105	266	10/26/18 17:19		20181017105	264	10/26/18 16:25	

Calibration Curve

Instrument: IC1

Analysis Date: 10/17/18

Analytical Methods: 300.0 rev2.1; EPA 9056; EPA 9056A

Batch ID:	Analyte:	Area Found						Concentration Amount						rSq
		Area1	Area2	Area3	Area4	Area5	Area6	Conc1	Conc2	Conc3	Conc4	Conc5	Conc6	
201810171053	Chloride	0	0.205	1.137	2.317	4.855	13.494	0	1	5	10	20	50	99.84

Calibration Summary:

8101509 0270

Instrument: IC1

Analysis Meth: 300.0 rev2.1

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20181017105	7	ICV	96	10	90-110
Chloride	20181017105	62	CCV	96	10	90-110
Chloride	20181017105	74	CCV	94	10	90-110
Chloride	20181017105	85	CCV	95	10	90-110
Chloride	20181017105	247	CCV	95	10	90-110
Chloride	20181017105	259	CCV	96	10	90-110
Chloride	20181017105	271	CCV	95	10	90-110
Chloride	20181017105	278	CCV	94	10	90-110
Chloride	20181017105	290	CCV	95	10	90-110
Chloride	20181017105	302	CCV	96	10	90-110
Chloride	20181017105	308	CCV	95	10	90-110

Calibration Summary:

8101509 0271

Instrument: IC1

Analysis Meth: EPA 9056A

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20181017105	7	ICV	96	10	90-110
Chloride	20181017105	62	CCV	96	10	90-110
Chloride	20181017105	74	CCV	94	10	90-110
Chloride	20181017105	85	CCV	95	10	90-110
Chloride	20181017105	247	CCV	95	10	90-110
Chloride	20181017105	259	CCV	96	10	90-110
Chloride	20181017105	271	CCV	95	10	90-110
Chloride	20181017105	278	CCV	94	10	90-110
Chloride	20181017105	290	CCV	95	10	90-110
Chloride	20181017105	302	CCV	96	10	90-110
Chloride	20181017105	308	CCV	95	10	90-110

Blank Summary

Instrument: IC1

Qc Type: Method Blank Summary

Prep Date: 10/18/18

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/18/18 23:21	MBS-1272	64	Chloride	ND	20
20181017105	10/26/18 23:40	MBW-2256	280	Chloride	ND	2.0

Qc Type: ICB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/17/18 18:49	ICB	8	Chloride	ND	2.0

Qc Type: CCB Summary

Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20181017105	10/18/18 22:54	CCB	63	Chloride	ND	2.0
20181017105	10/19/18 04:21	CCB	75	Chloride	ND	2.0
20181017105	10/19/18 09:20	CCB	86	Chloride	ND	2.0
20181017105	10/26/18 08:28	CCB	248	Chloride	ND	2.0
20181017105	10/26/18 14:34	CCB	260	Chloride	ND	2.0
20181017105	10/26/18 20:02	CCB	272	Chloride	ND	2.0
20181017105	10/26/18 23:13	CCB	279	Chloride	ND	2.0
20181017105	10/27/18 04:39	CCB	291	Chloride	ND	2.0
20181017105	10/27/18 10:08	CCB	303	Chloride	ND	2.0
20181017105	10/27/18 15:29	CCB	309	Chloride	ND	2.0

LCS Recoveries

BatchRunID/RunID: ====>		201810171053-65		201810171053-250		201810171053-281			
QcBatchID: ====>		LCSS-1272		LCSW-2255		LCSW-2256			
Date/Time: ====>		10/18/18 23:48		10/26/18 09:23		10/27/18 00:07			
Analytical Method: ====>		EPA 9056A		300.0 rev2.1		300.0 rev2.1			
Matrix: ====>		Soil		Aqueous		Aqueous		Soil	
300.0 rev2. EPA 9056A									
Amt Limits Amt Limits									
Analyte		% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Chloride	5 90-110 5 80-120	104		106		107			

MS/MSD/DUP Recovery

8101509 0274

Prep Batch: S-1272
Method: EPA 9056A

Sample ID: AD07164-001
Matrix: Soil

Qc Type: MS									MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Limits	Dil	MS Conc	Sample Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120		1	5.286	0	106		20181017105	67	10/19/18 00:43	20181017105	66	10/19/18 00:16

Qc Type: MSD											MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Limits	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	20		1	5.3718	0	107	1.6		20181017105	68	10/19/18 01:10	20181017105	66	10/19/18 00:16

Prep Batch: W-2255
Method: 300.0 rev2.1

Sample ID: AD07161-001
Matrix: Aqueous

Qc Type: MS									MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Limits	Dil	MS Conc	Sample Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120		1	9.4753	5.477	80		20181017105	265	10/26/18 16:52	20181017105	264	10/26/18 16:25

Qc Type: MSD											MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Limits	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	20		1	9.4988	5.477	80	0.2		20181017105	266	10/26/18 17:19	20181017105	264	10/26/18 16:25

Prep Batch: W-2256
Method: 300.0 rev2.1

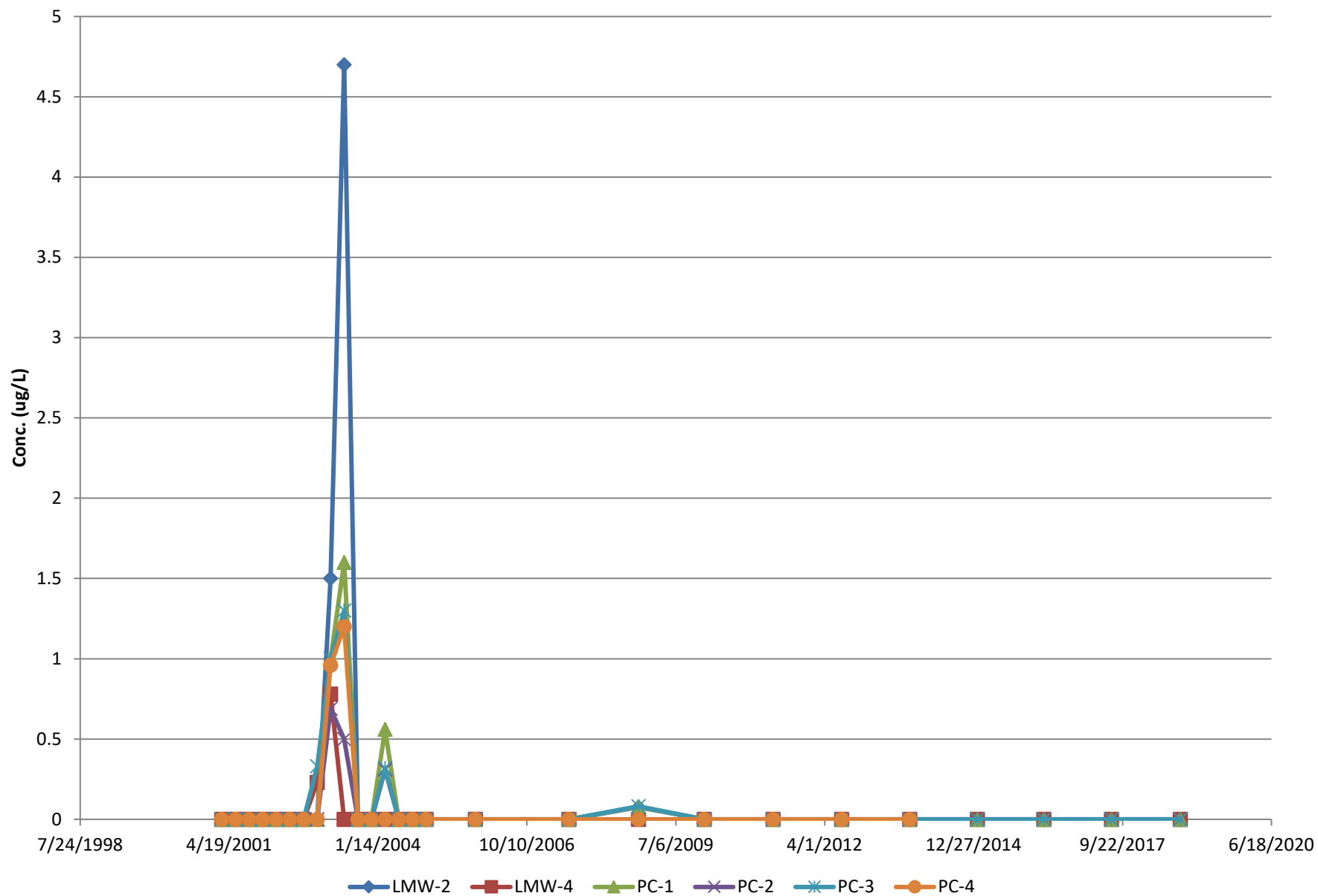
Sample ID: AD07365-001
Matrix: Aqueous

Qc Type: MS									MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Limits	Dil	MS Conc	Sample Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120		1	131.400	125.639	115		20181017105	283	10/27/18 01:02	20181017105	282	10/27/18 00:34

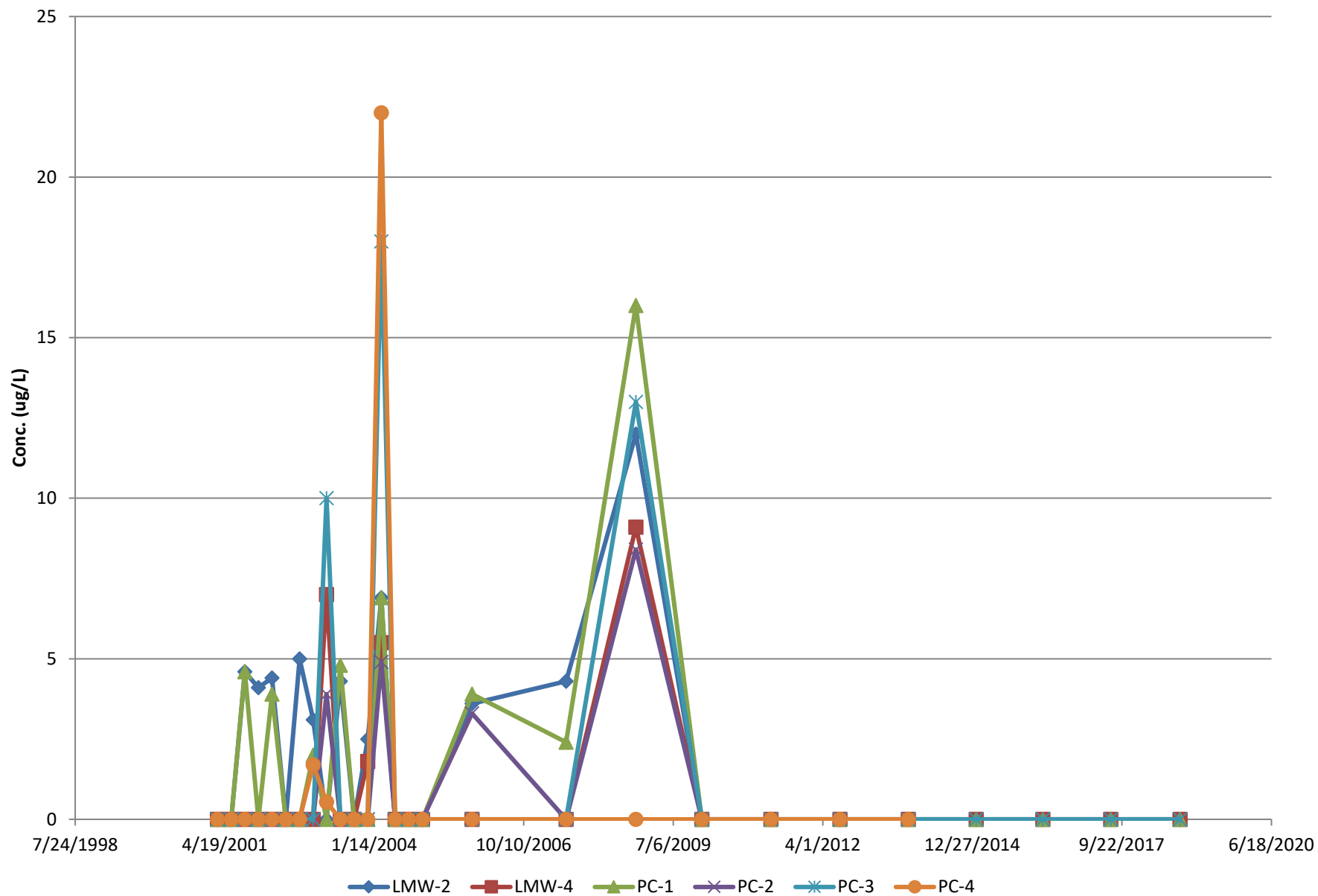
Qc Type: MSD											MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Limits	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Chloride	5	80-120	20		1	131.368	125.639	115	0		20181017105	284	10/27/18 01:29	20181017105	282	10/27/18 00:34

APPENDIX E
SELECT ANALYTE DATA TRENDS

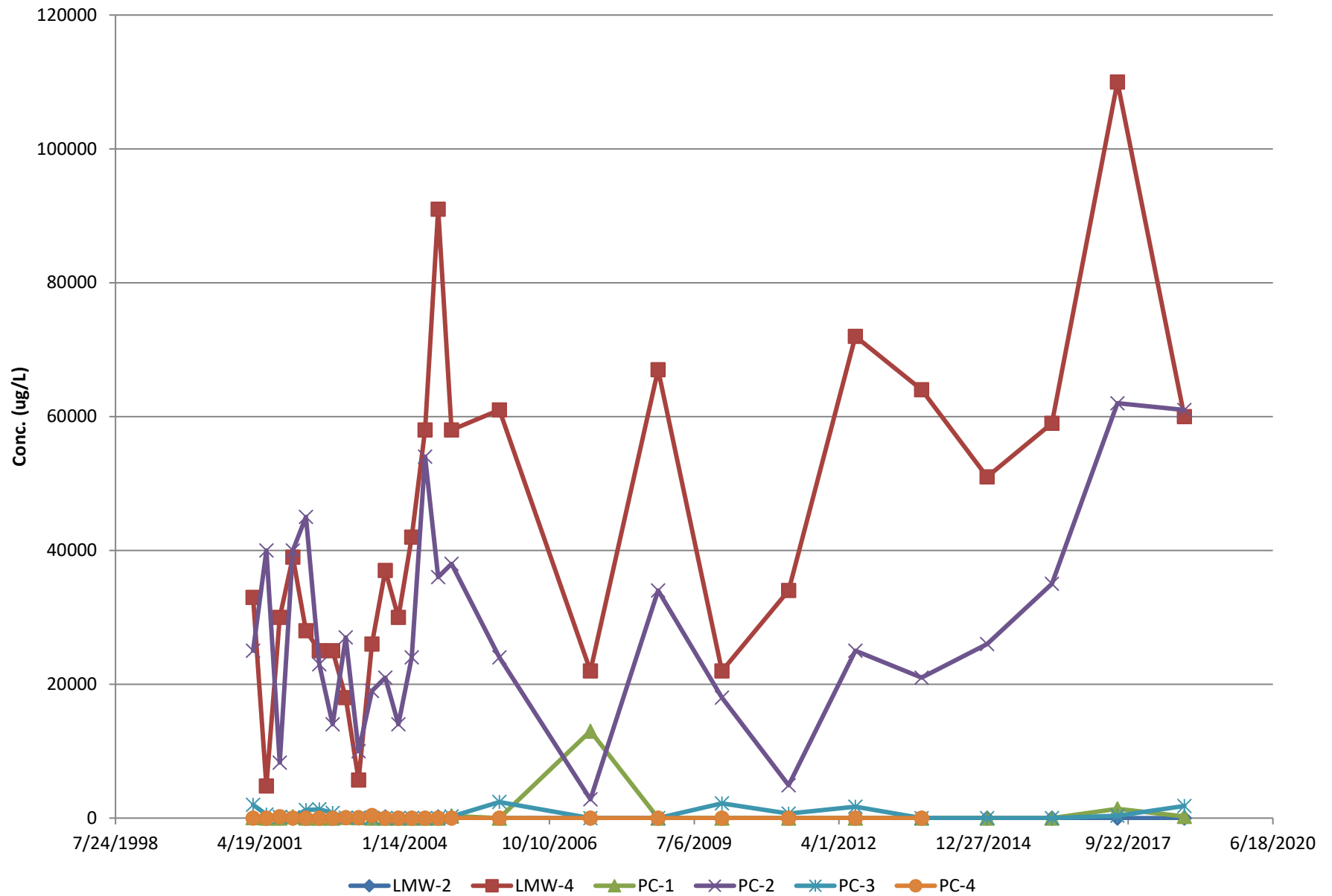
NYSDOT Harrison Landfill - Groundwater - Cadmium (Cd)



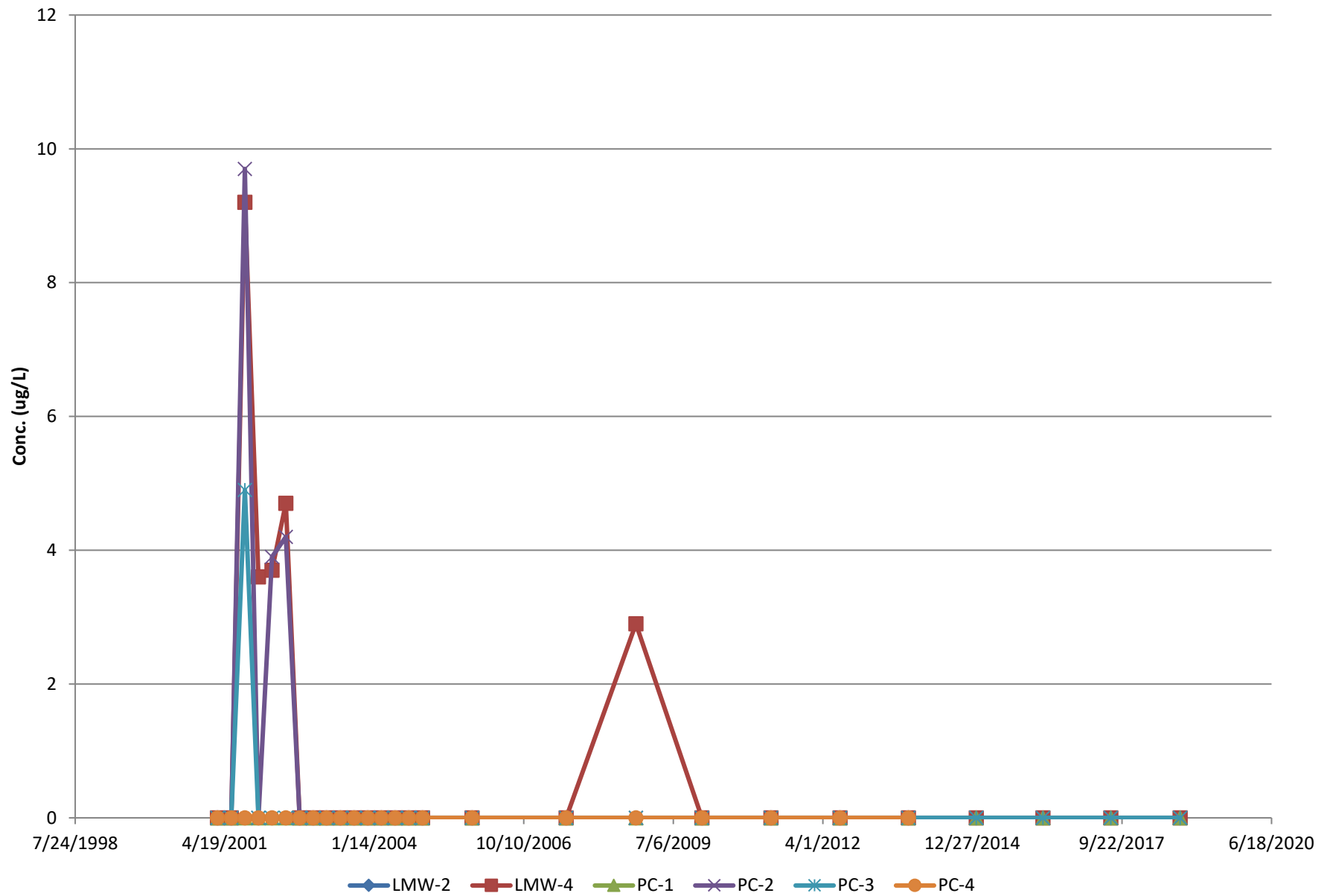
NYSDOT Harrison Landfill - Groundwater - Copper (Cu)



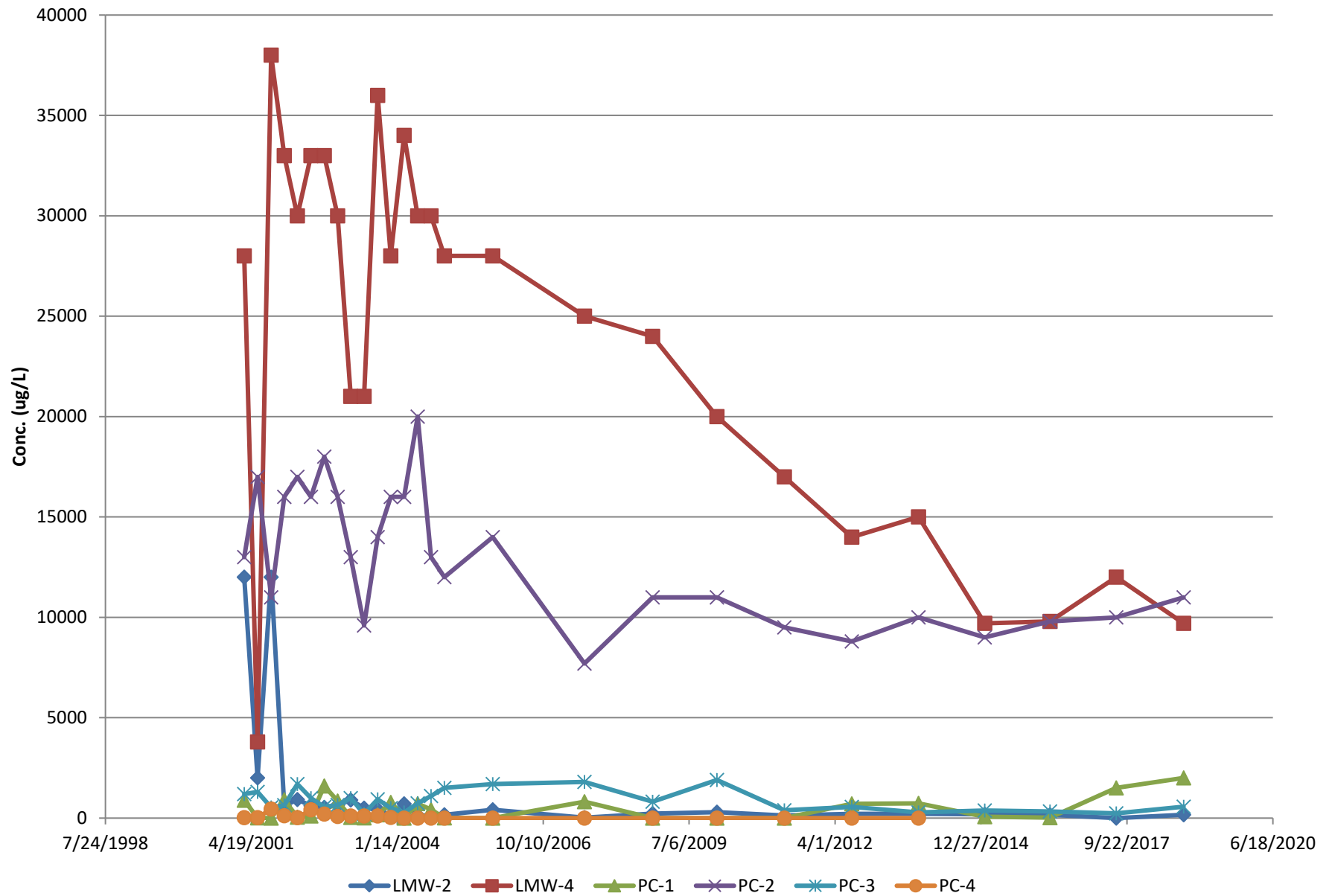
NYSDOT Harrison Landfill - Groundwater - Iron (Fe)



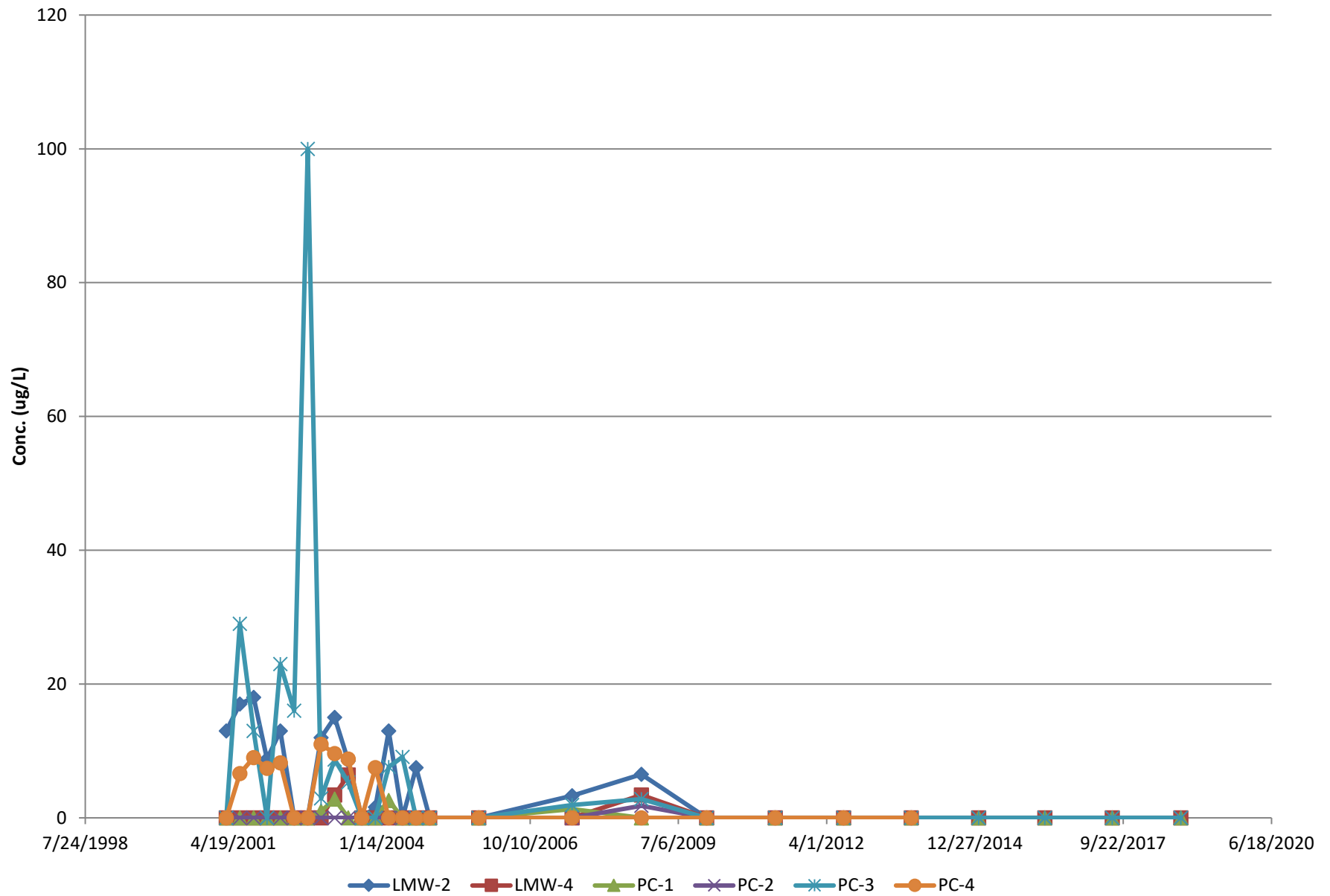
NYSDOT Harrison Landfill - Groundwater - Lead (Pb)



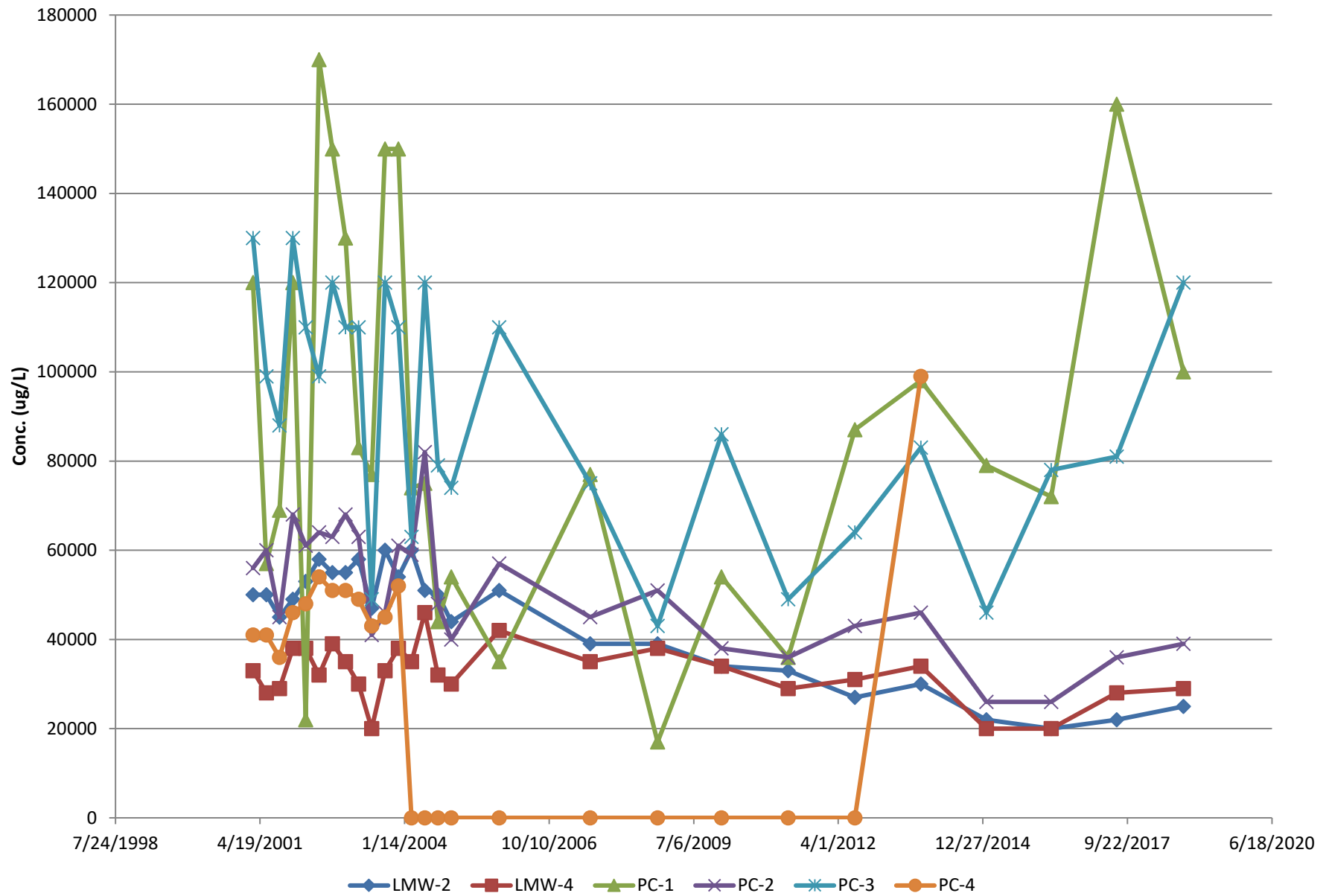
NYSDOT Harrison Landfill - Groundwater - Manganese (Mn)



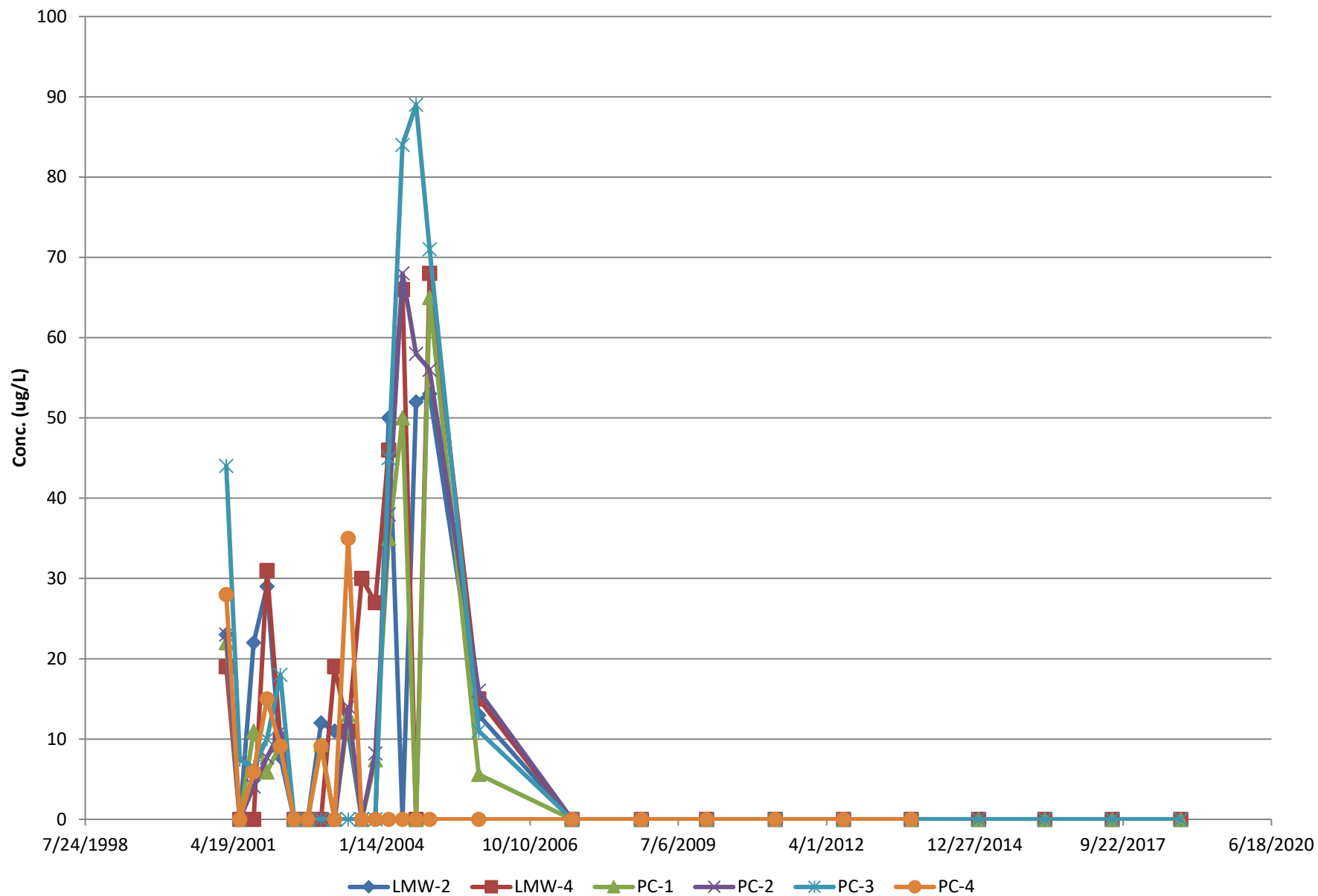
NYSDOT Harrison Landfill - Groundwater - Nickel (Ni)



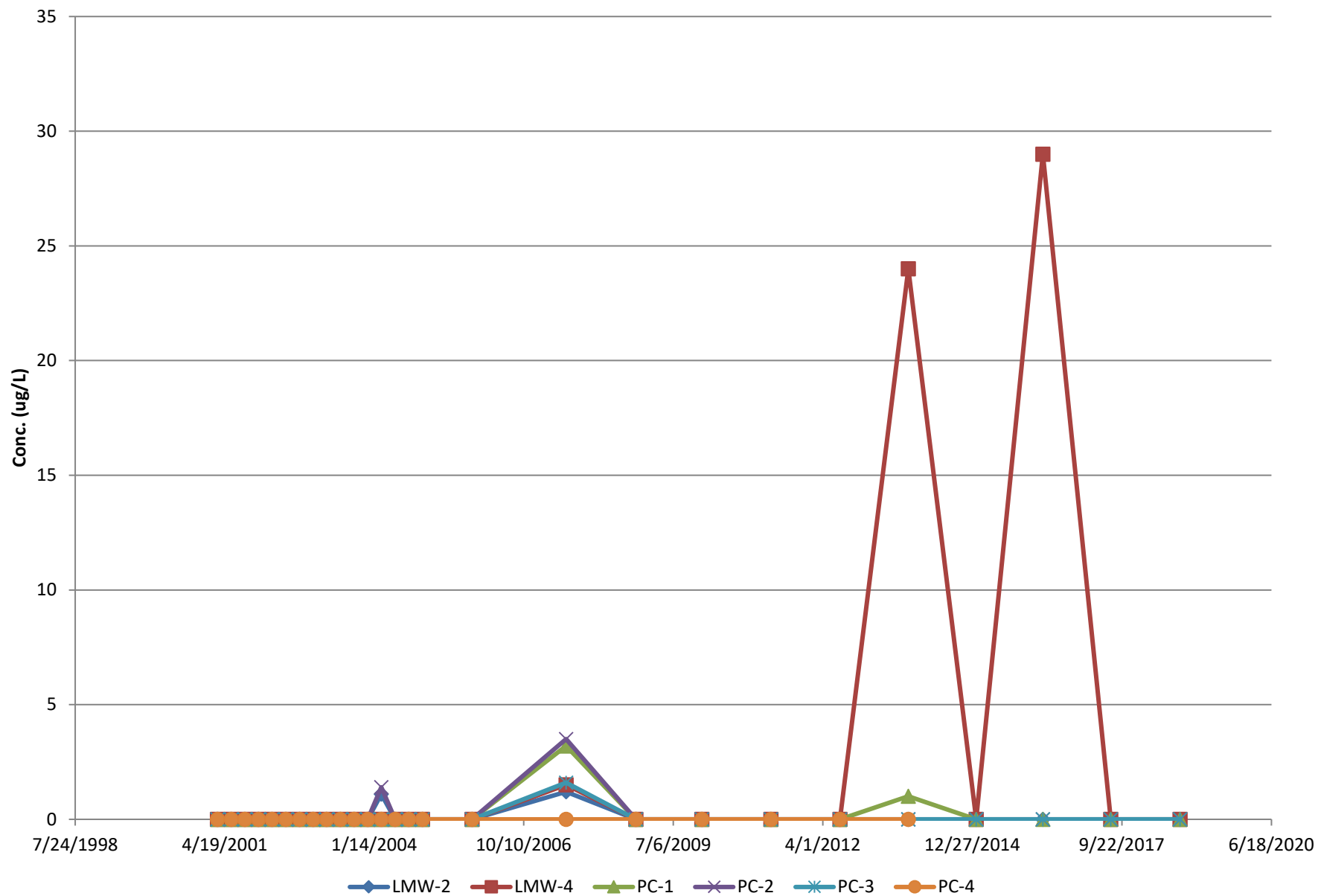
NYSDOT Harrison Landfill - Groundwater - Sodium (Na)



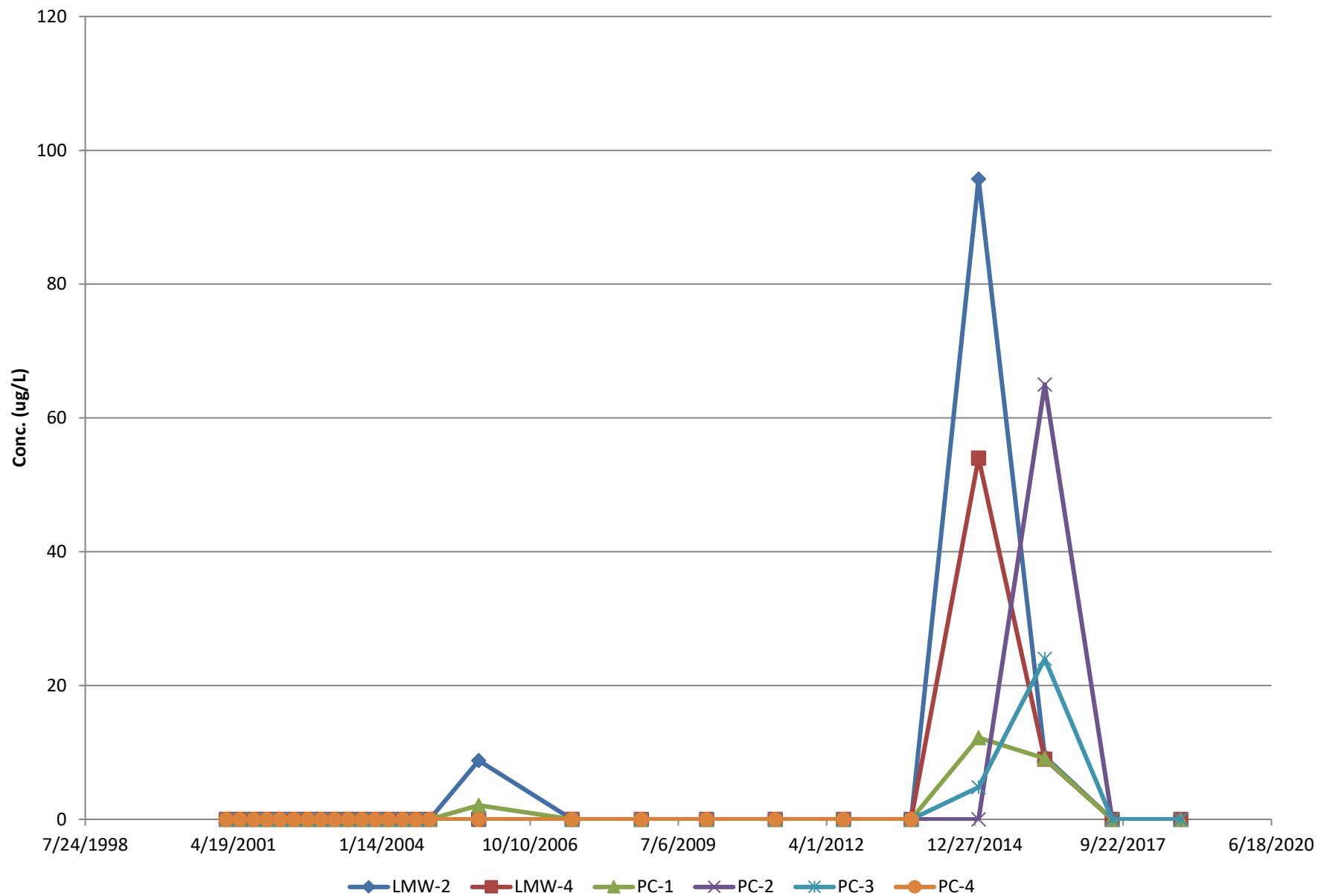
NYSDOT Harrison Landfill - Groundwater - Zinc (Zn)



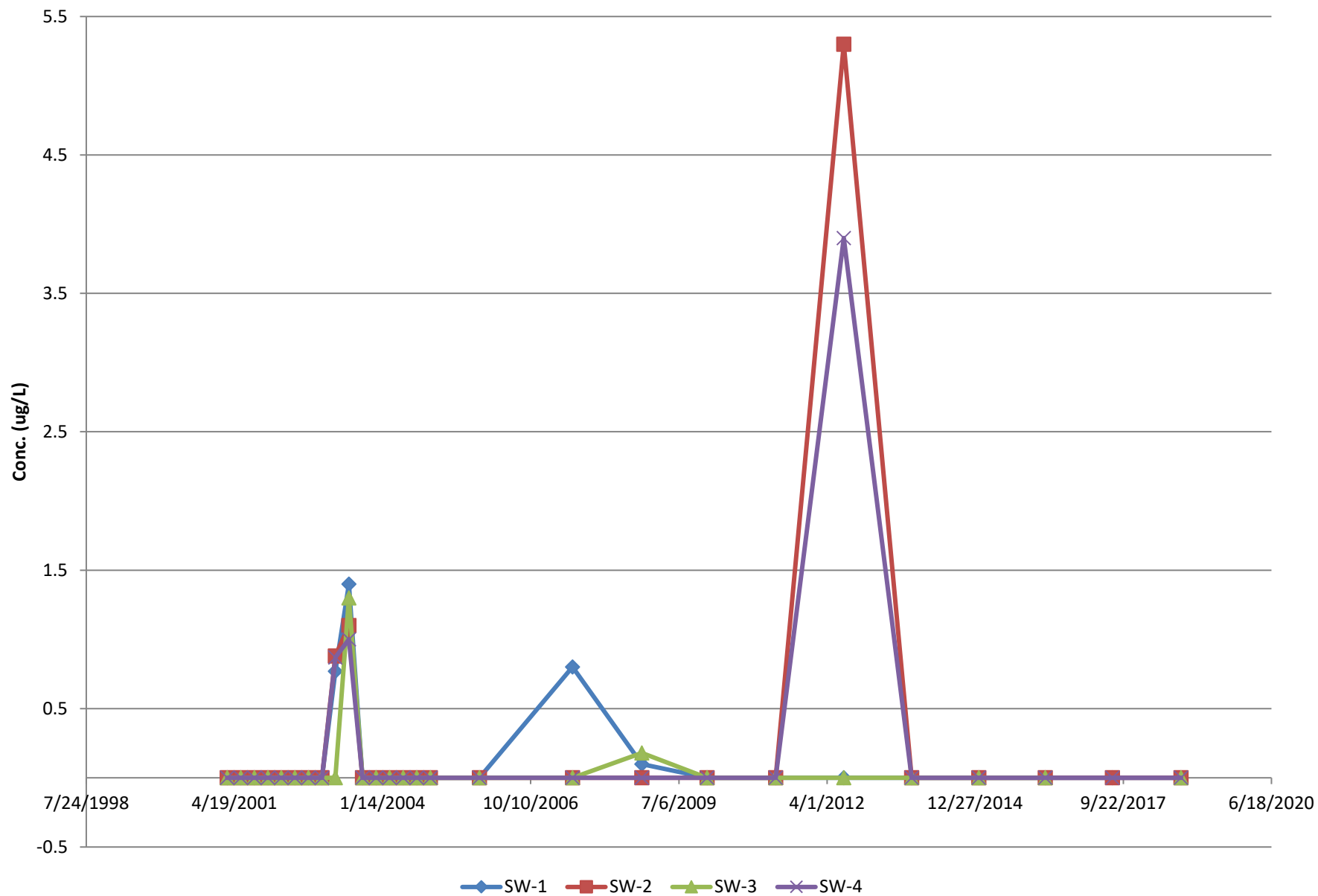
NYSDOT Harrison Landfill - Groundwater - Total VOCs



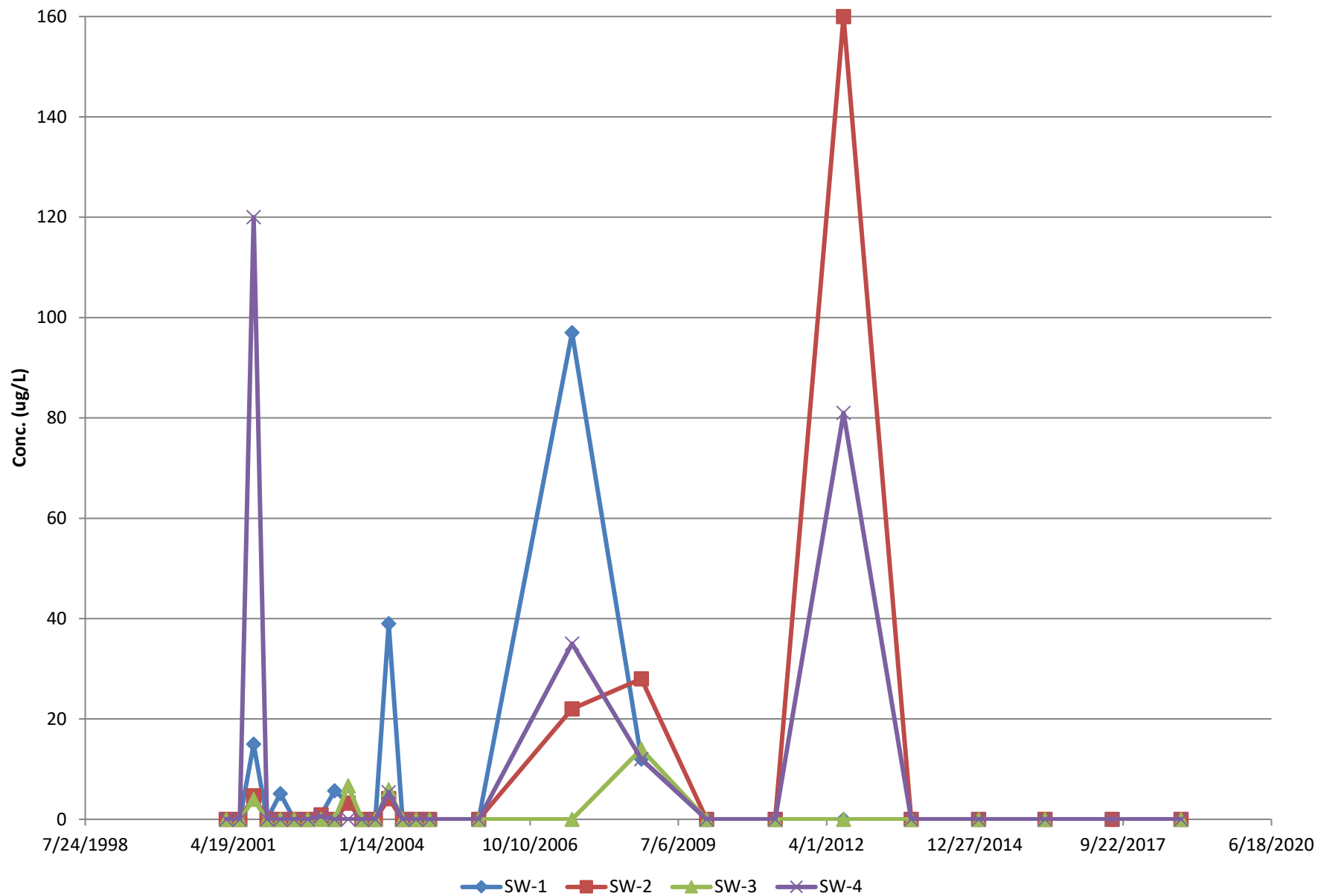
NYSDOT Harrison Landfill - Groundwater - Total SVOCs



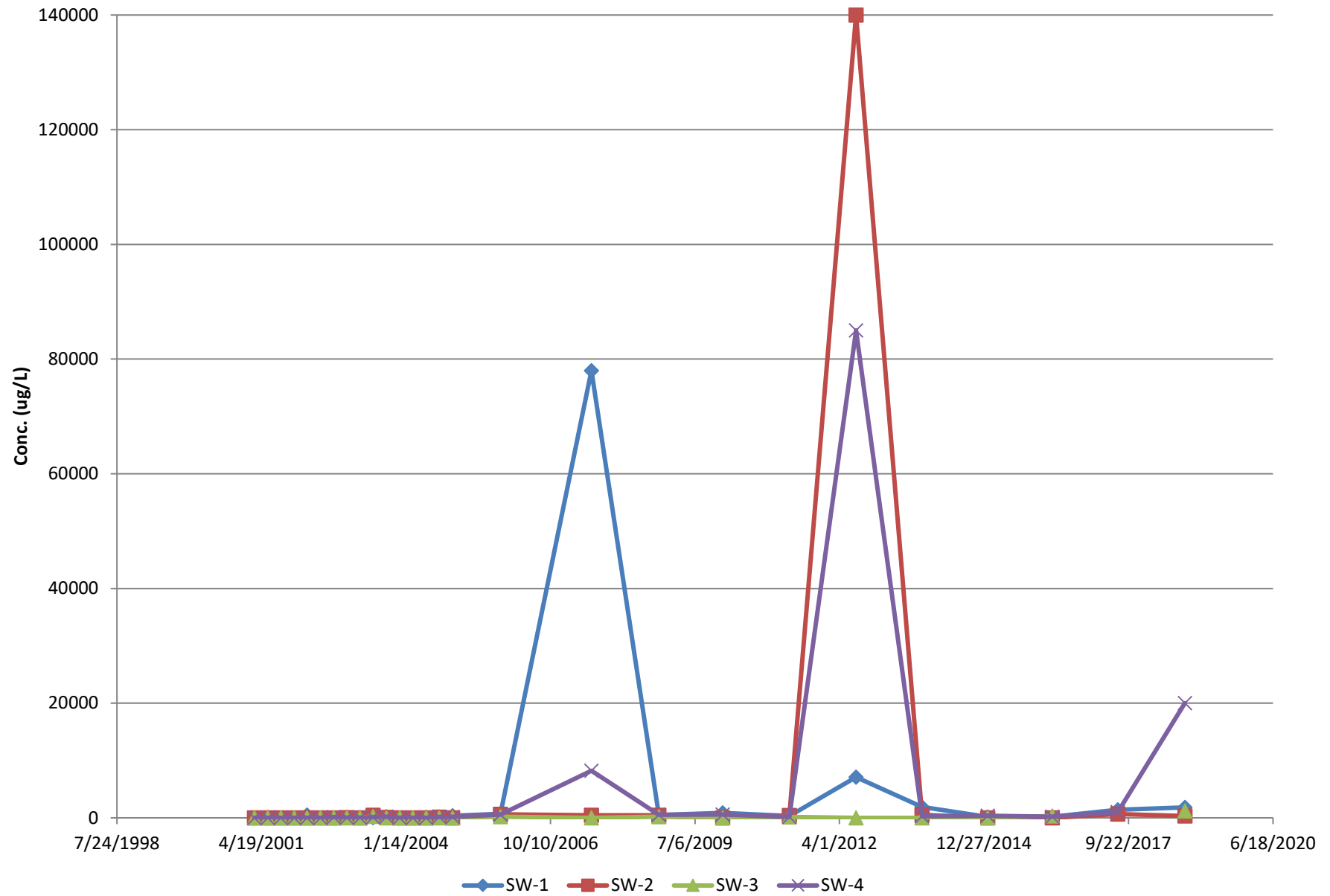
NYSDOT Harrison Landfill - Surface Water - Cadmium (Cd)



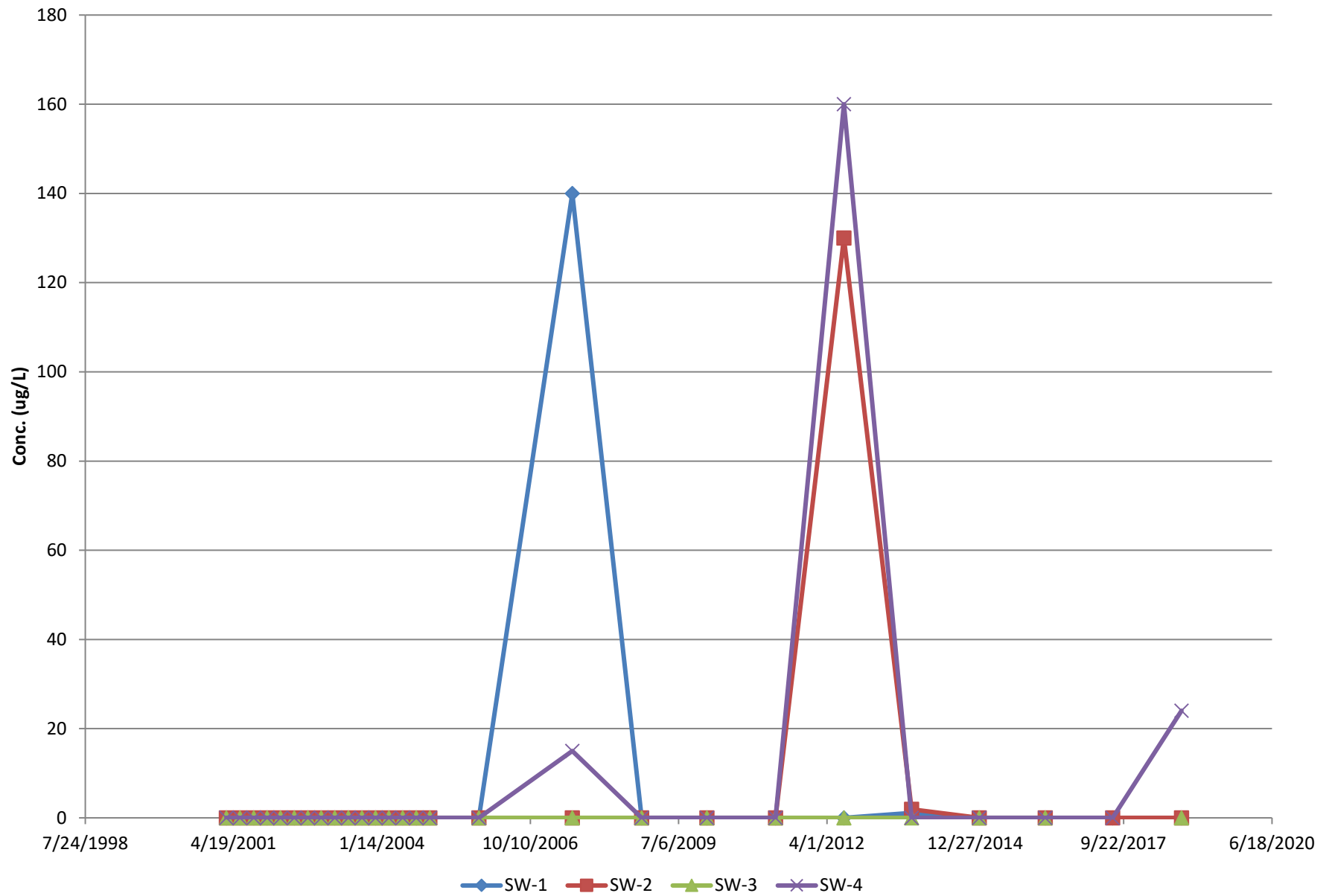
NYSDOT Harrison Landfill - Surface Water - Copper (Cu)



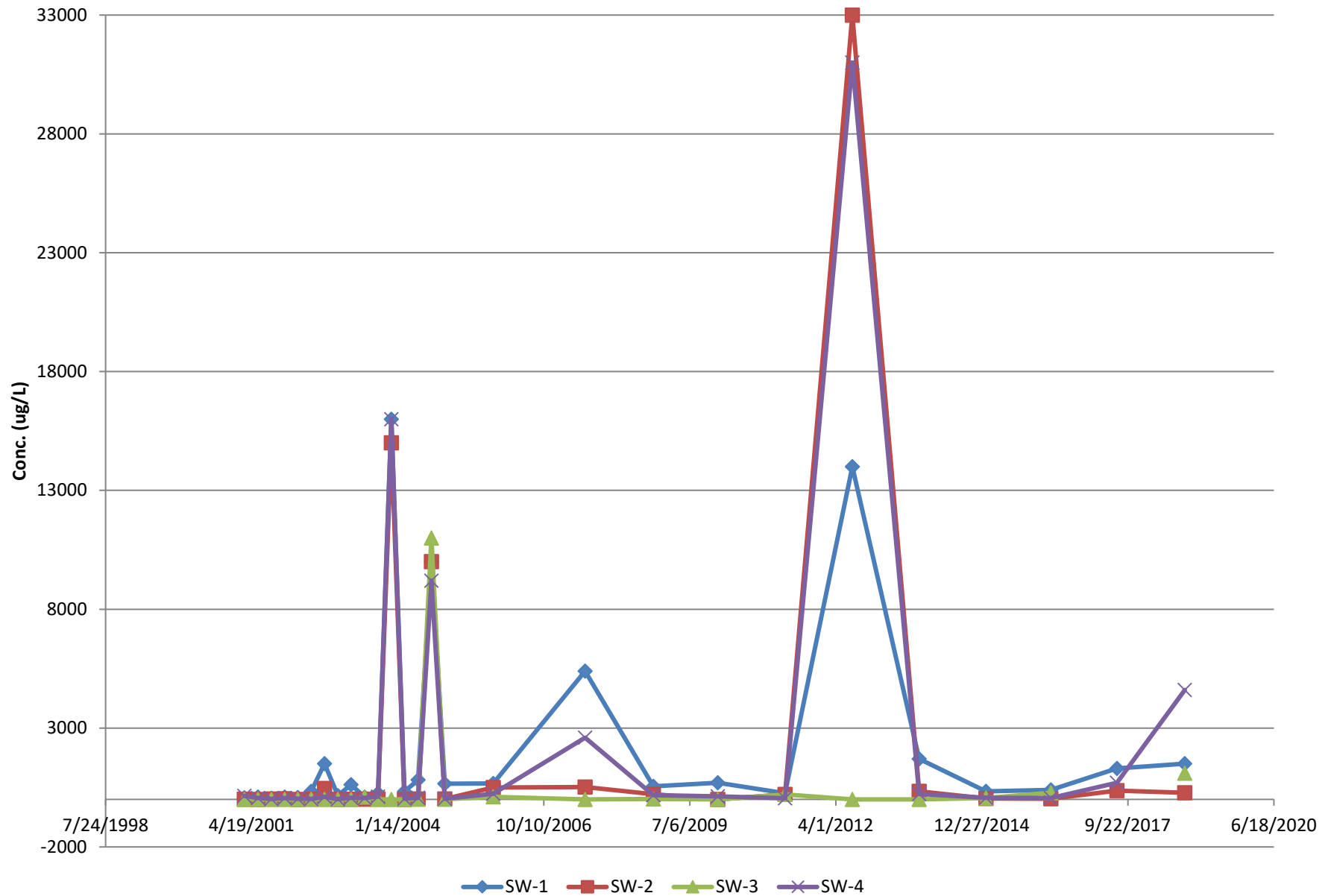
NYSDOT Harrison Landfill - Surface Water - Iron (Fe)



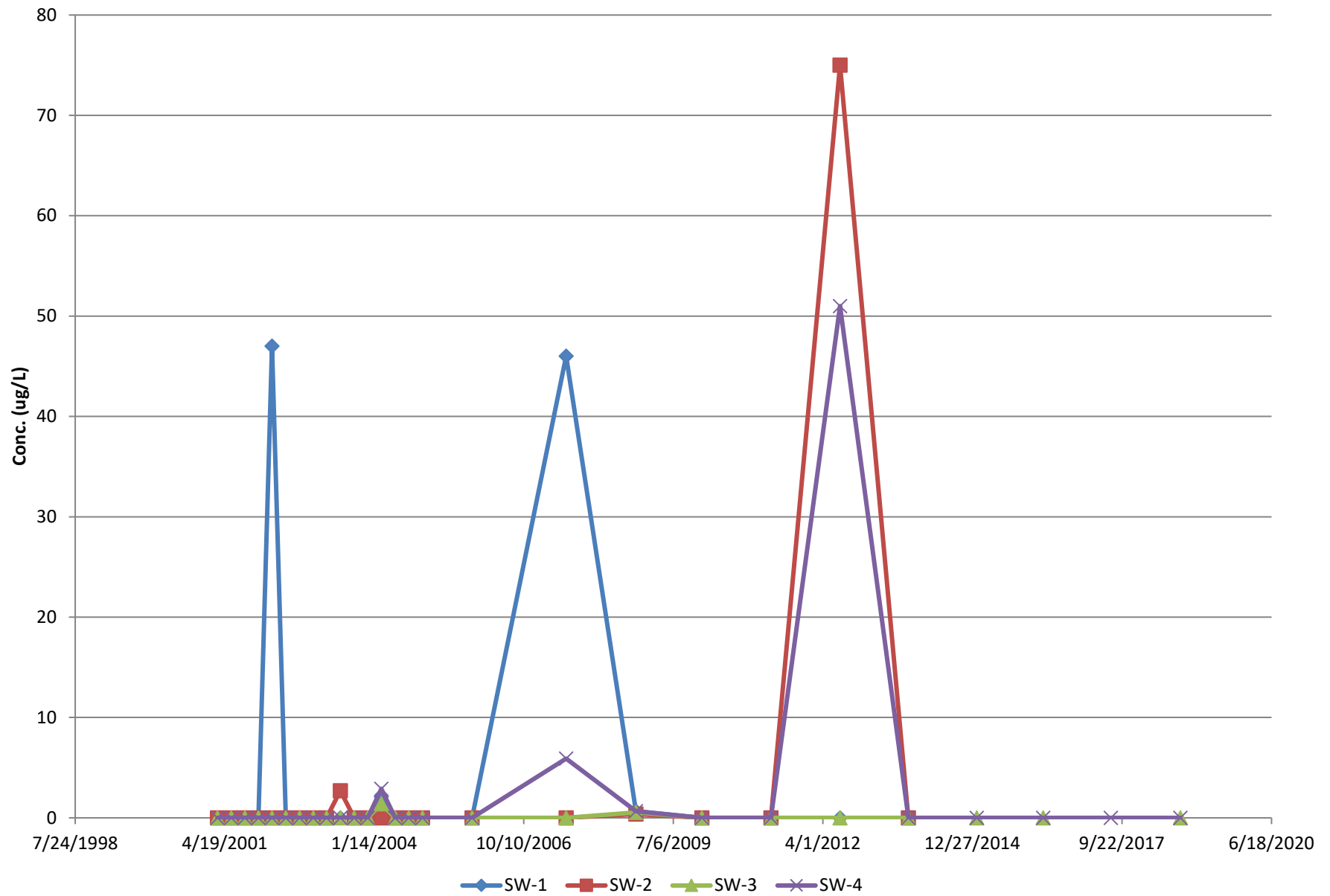
NYSDOT Harrison Landfill - Surface Water - Lead (Pb)



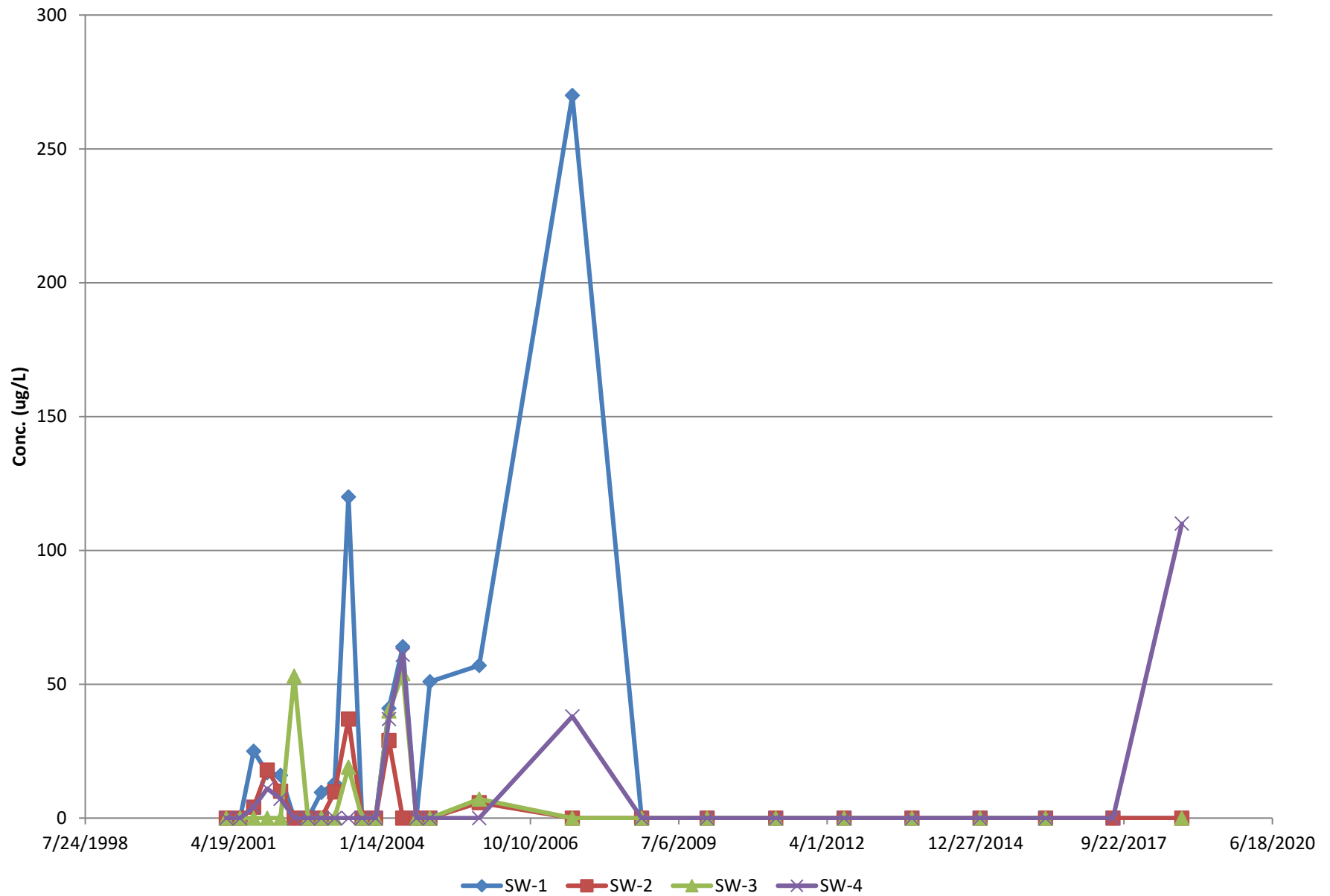
NYSDOT Harrison Landfill - Surface Water - Manganese (Mn)



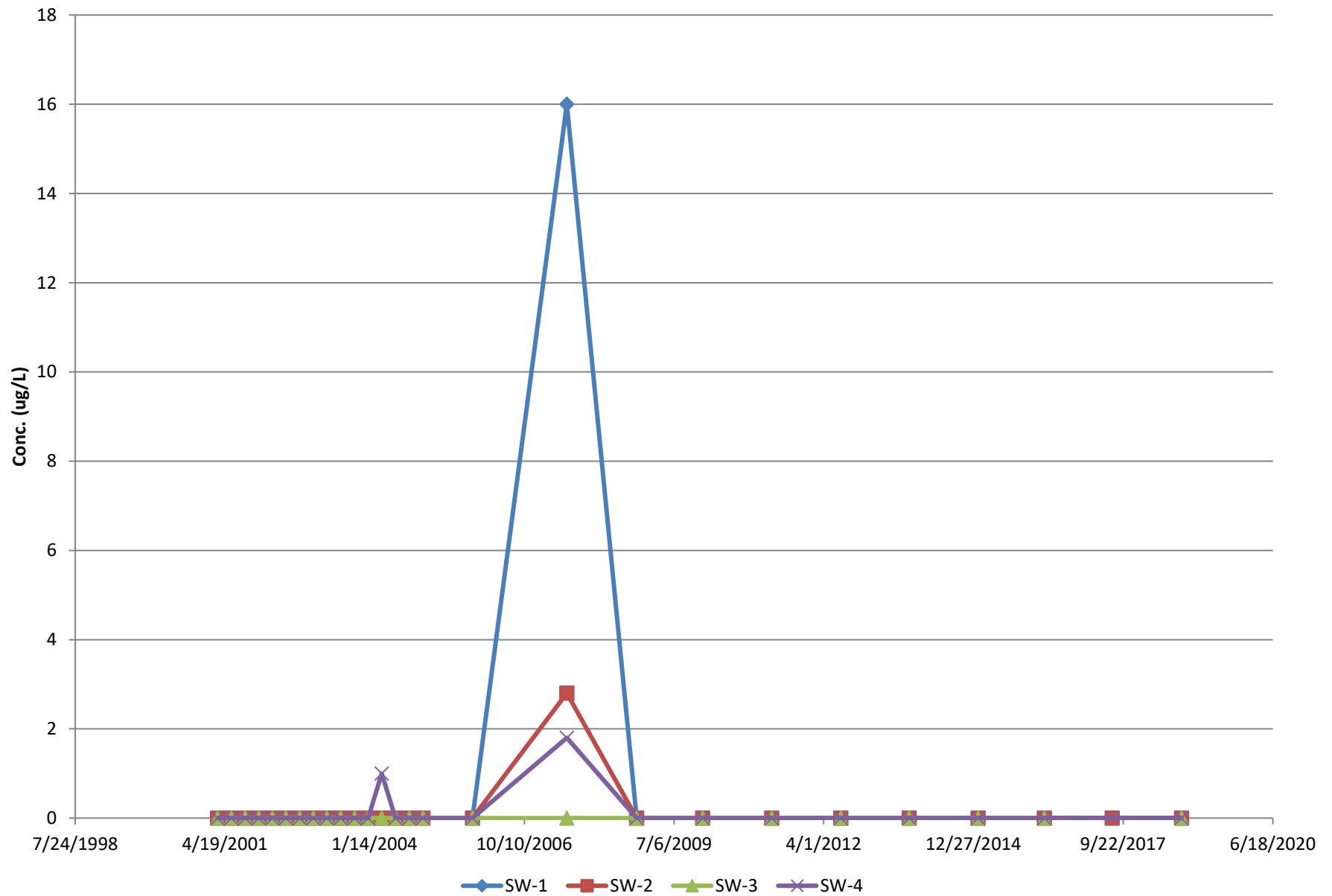
NYSDOT Harrison Landfill - Surface Water - Nickel (Ni)



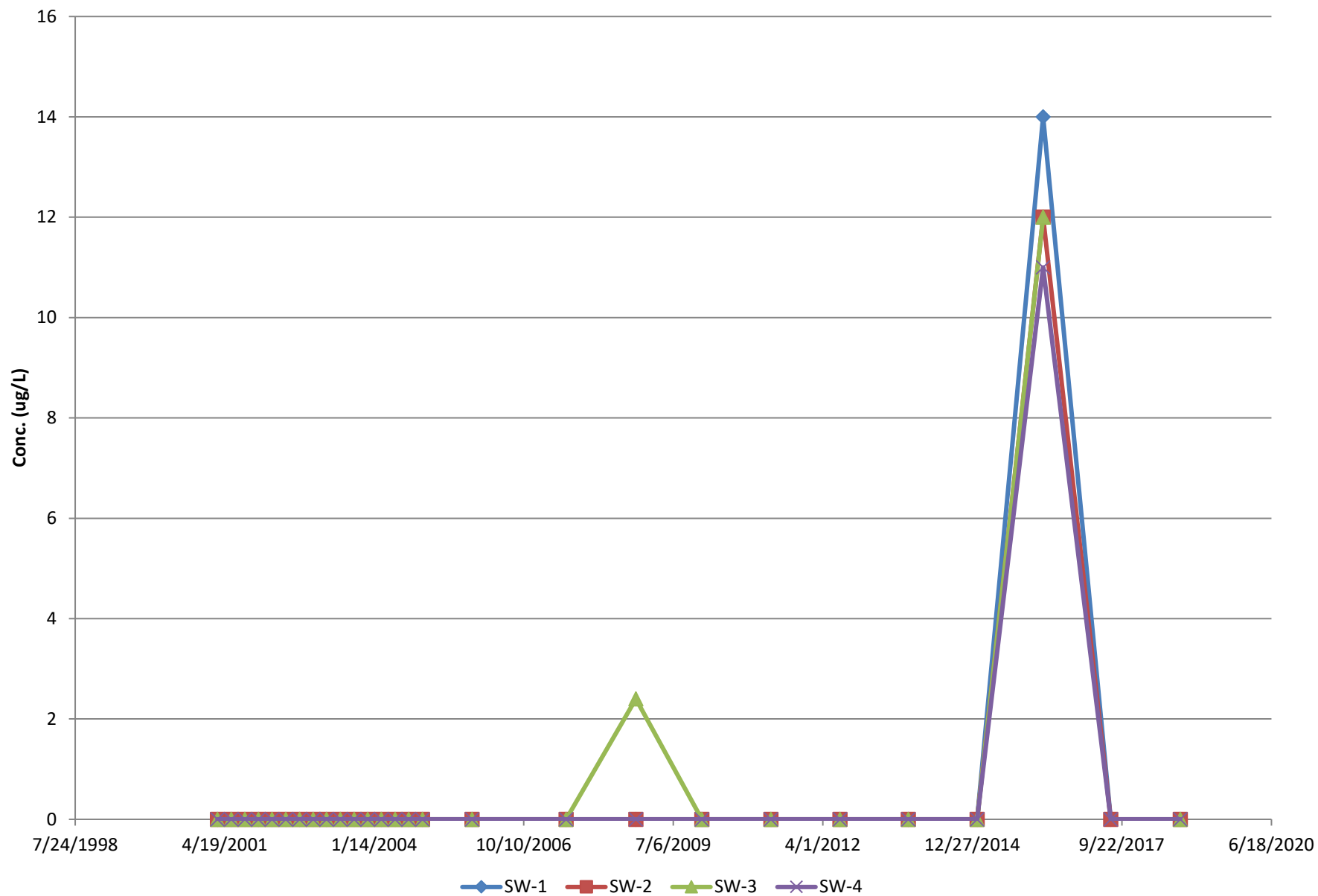
NYSDOT Harrison Landfill - Surface Water - Zinc (Zn)



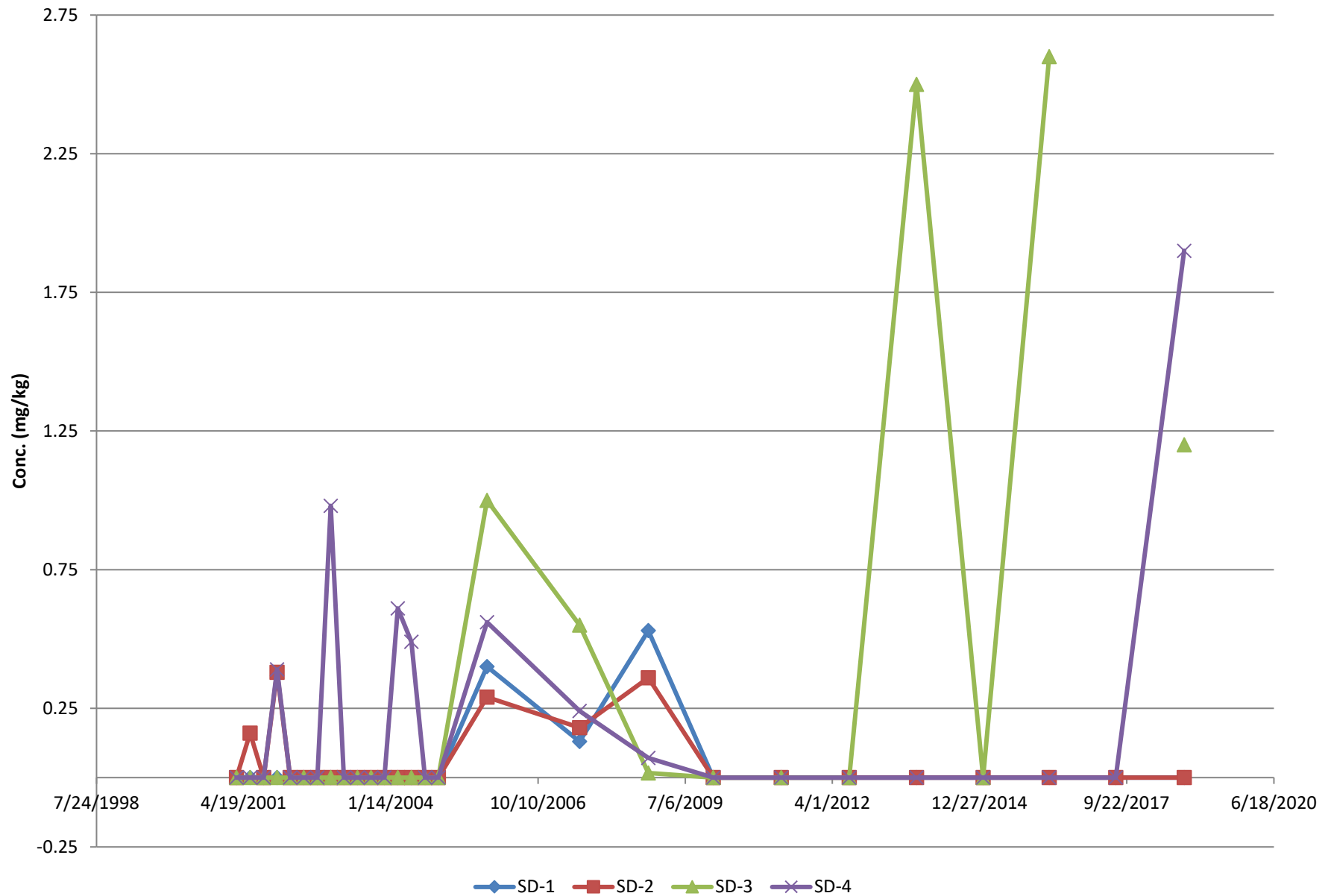
NYSDOT Harrison Landfill - Surface Water - Total VOCs



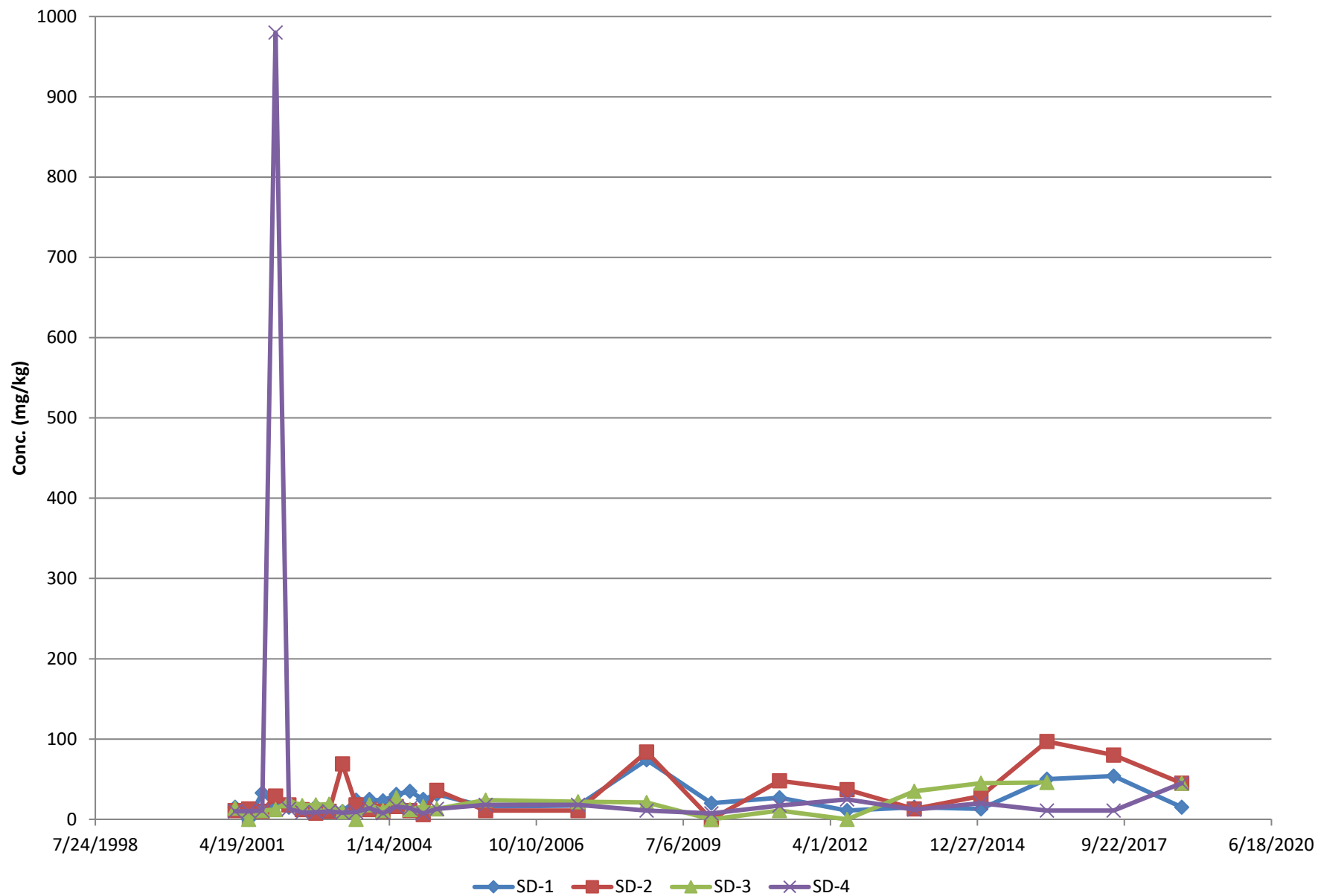
NYSDOT Harrison Landfill - Surface Water - Total SVOCs



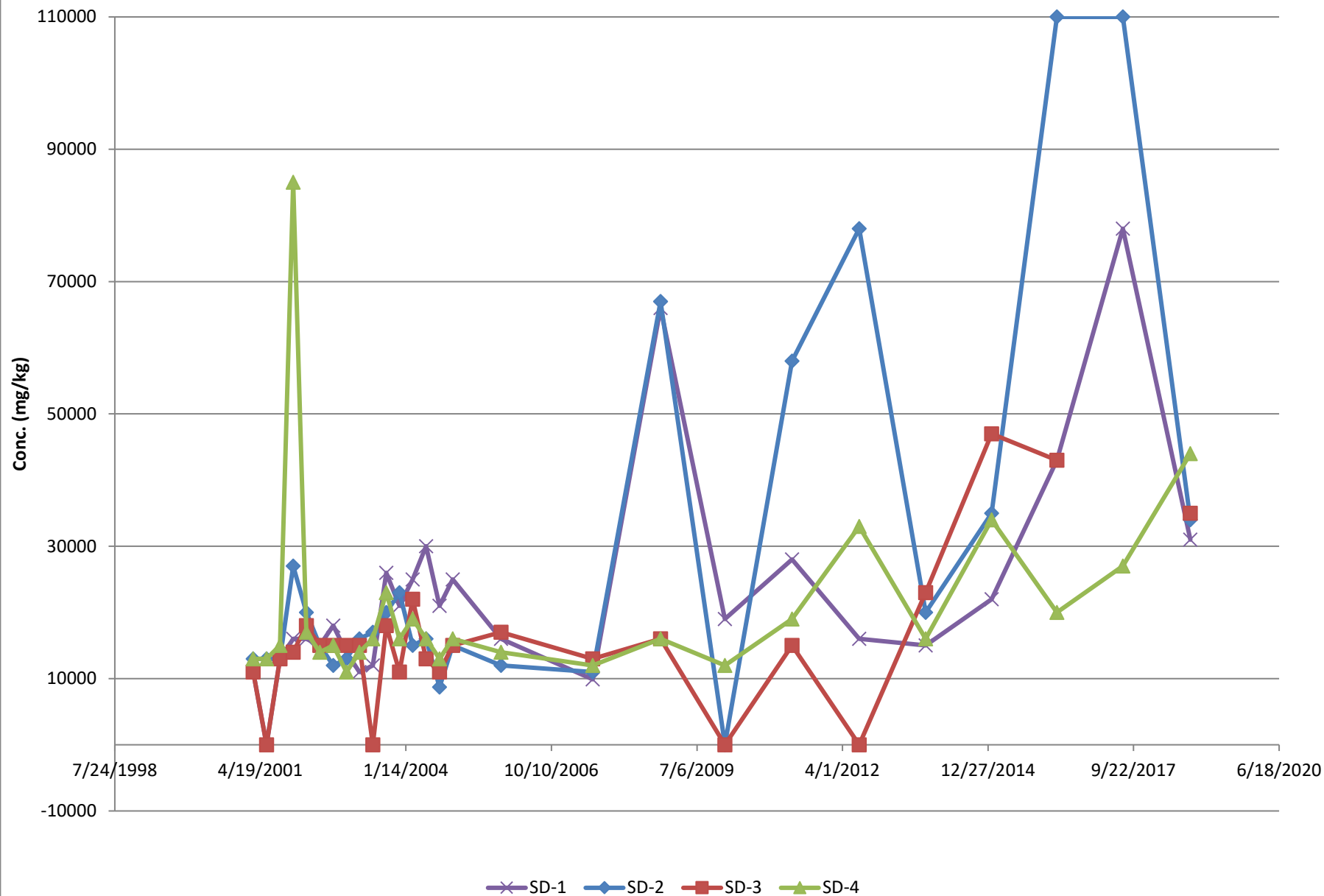
NYSDOT Harrison Landfill - Sediment - Cadmium (Cd)



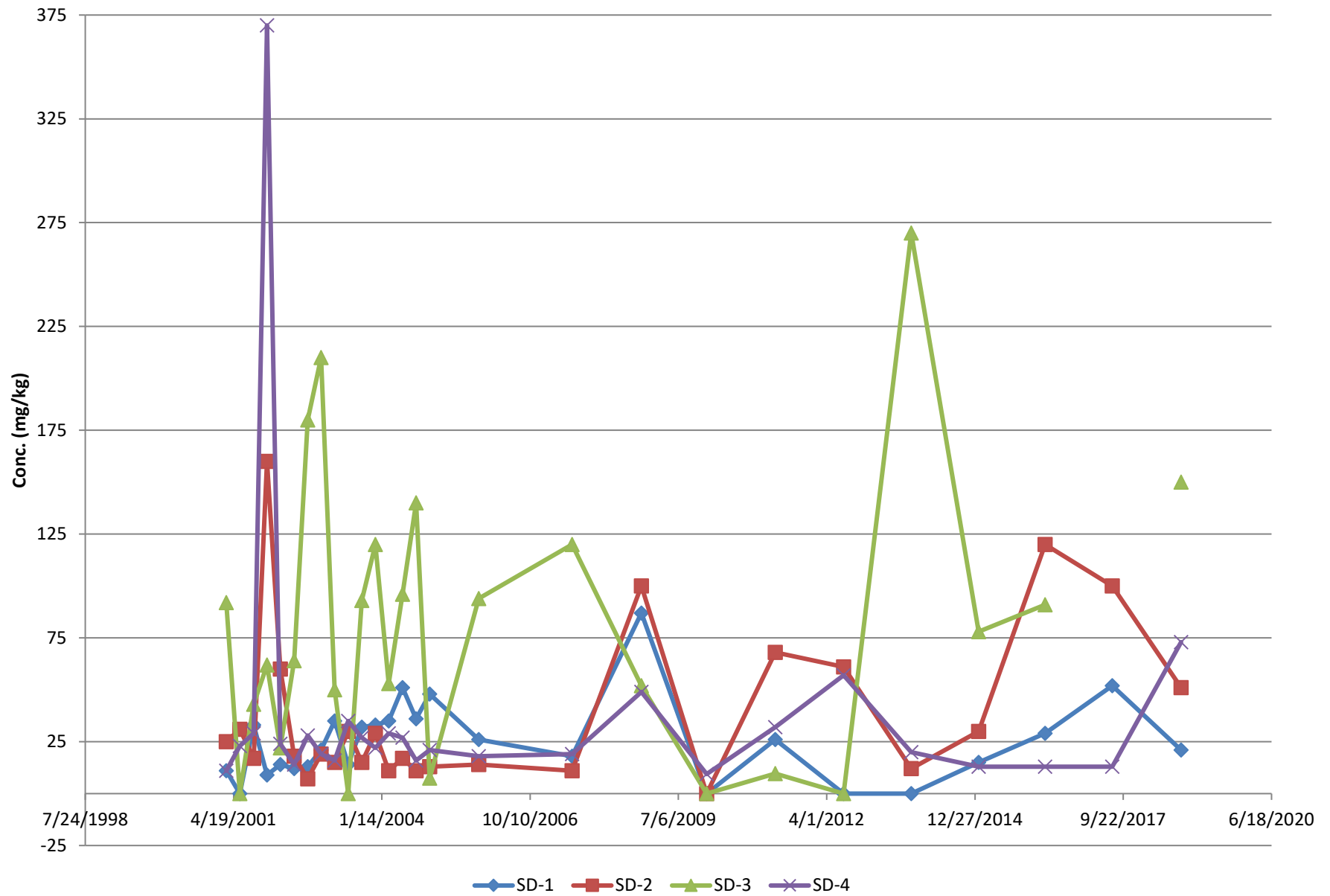
NYSDOT Harrison Landfill - Sediment - Copper (Cu)



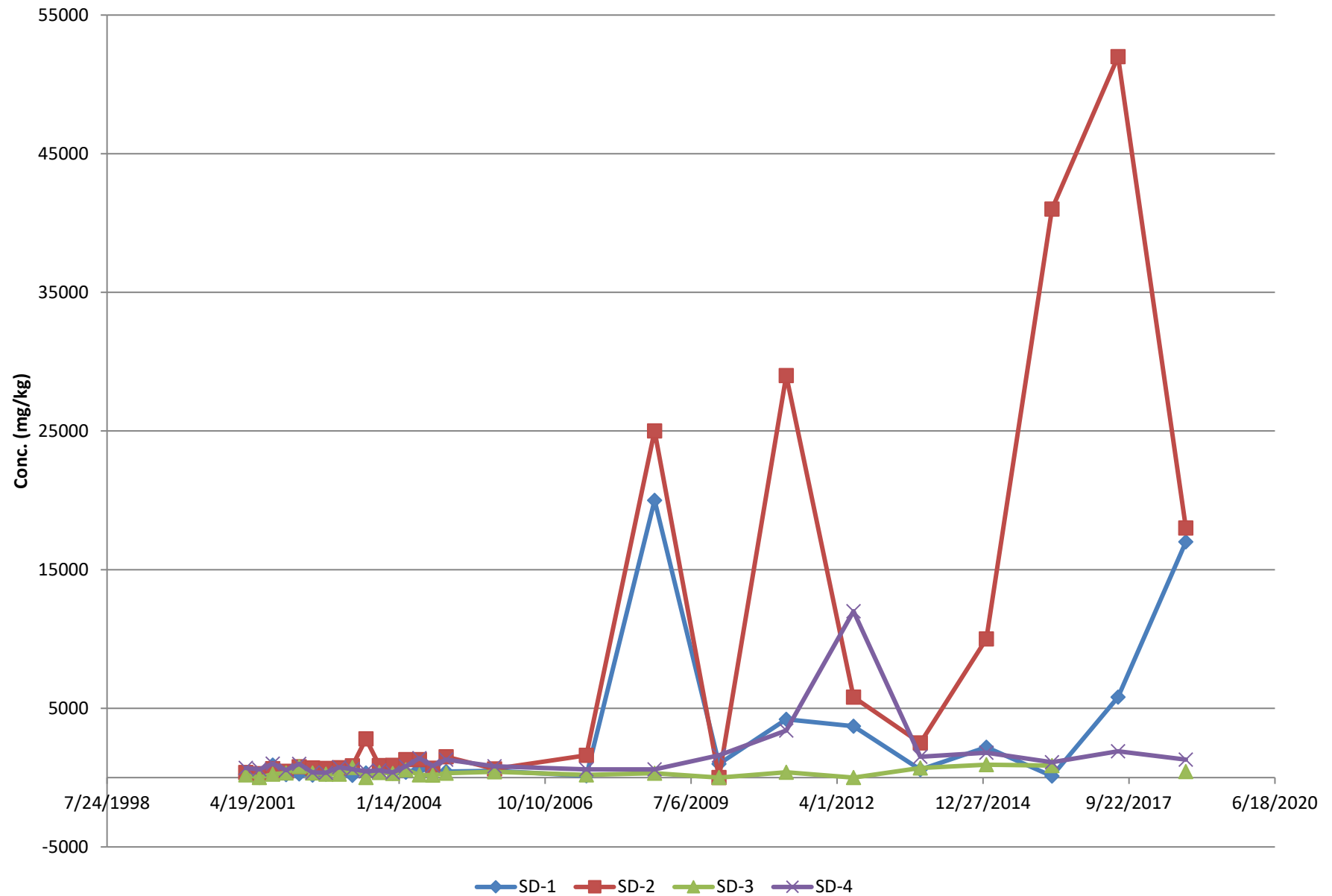
NYS DOT Harrison Landfill - Sediment - Iron (Fe)



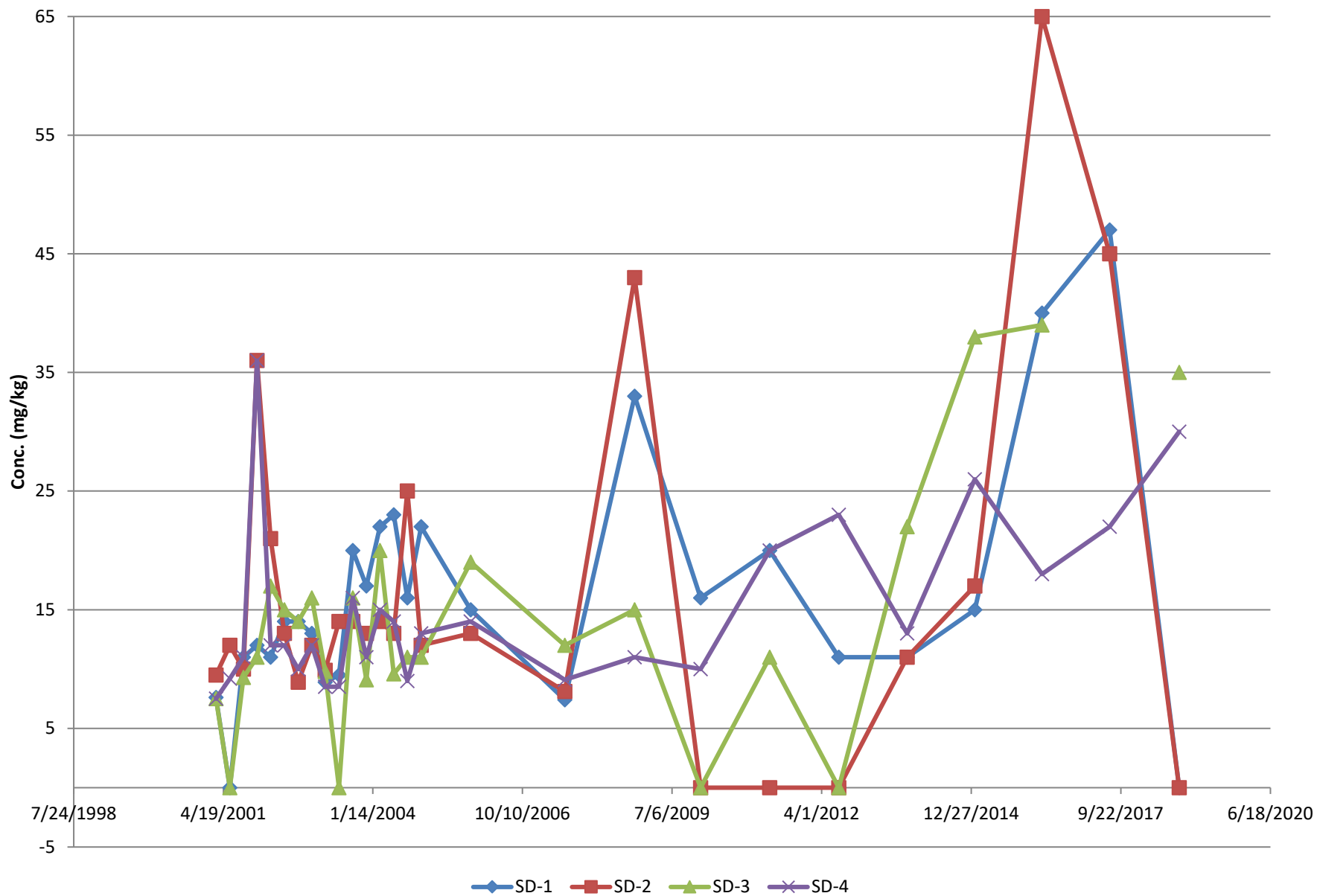
NYSDOT Harrison Landfill - Sediment - Lead (Pb)



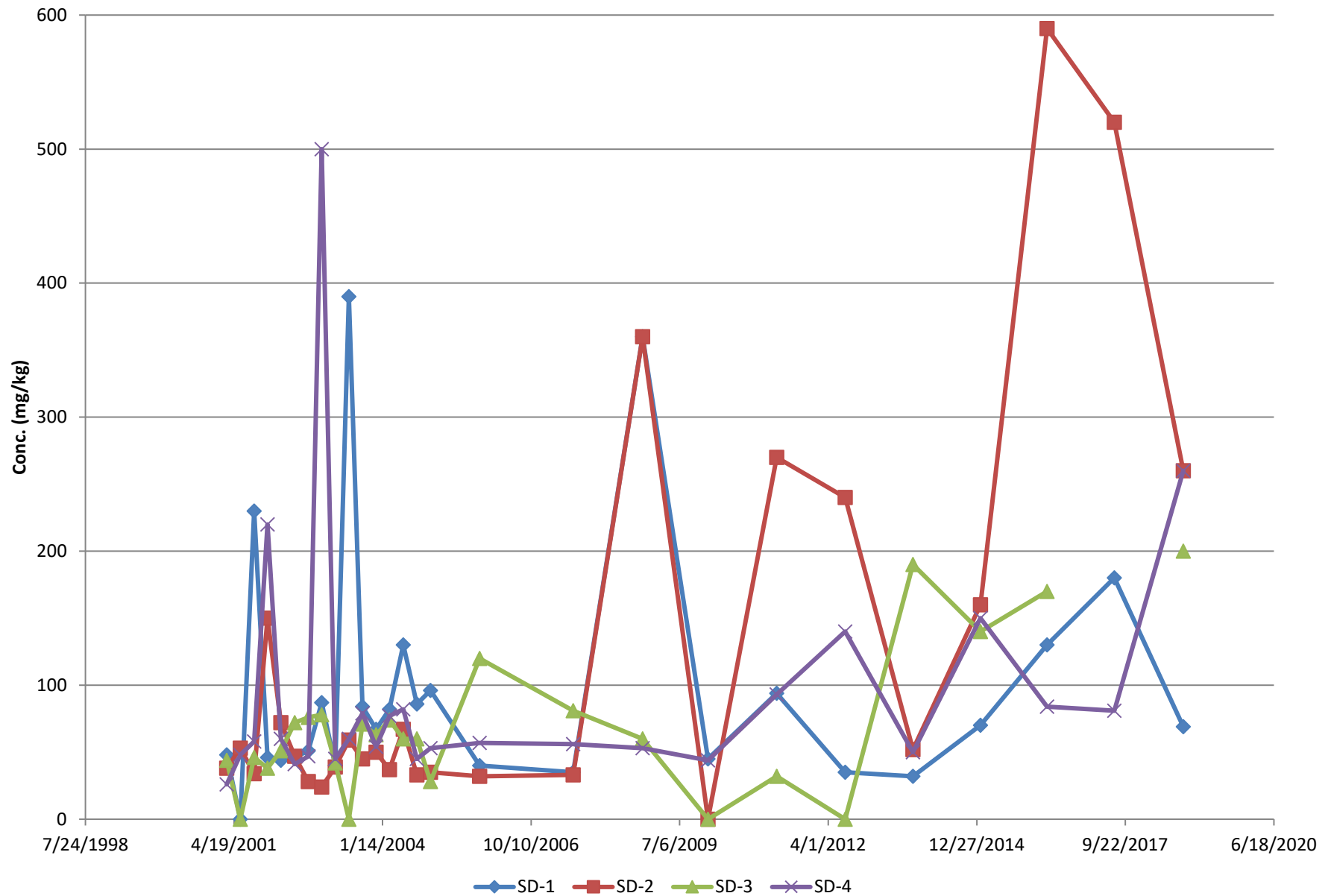
NYSDOT Harrsion Landfill - Sediment - Manganese (Mn)



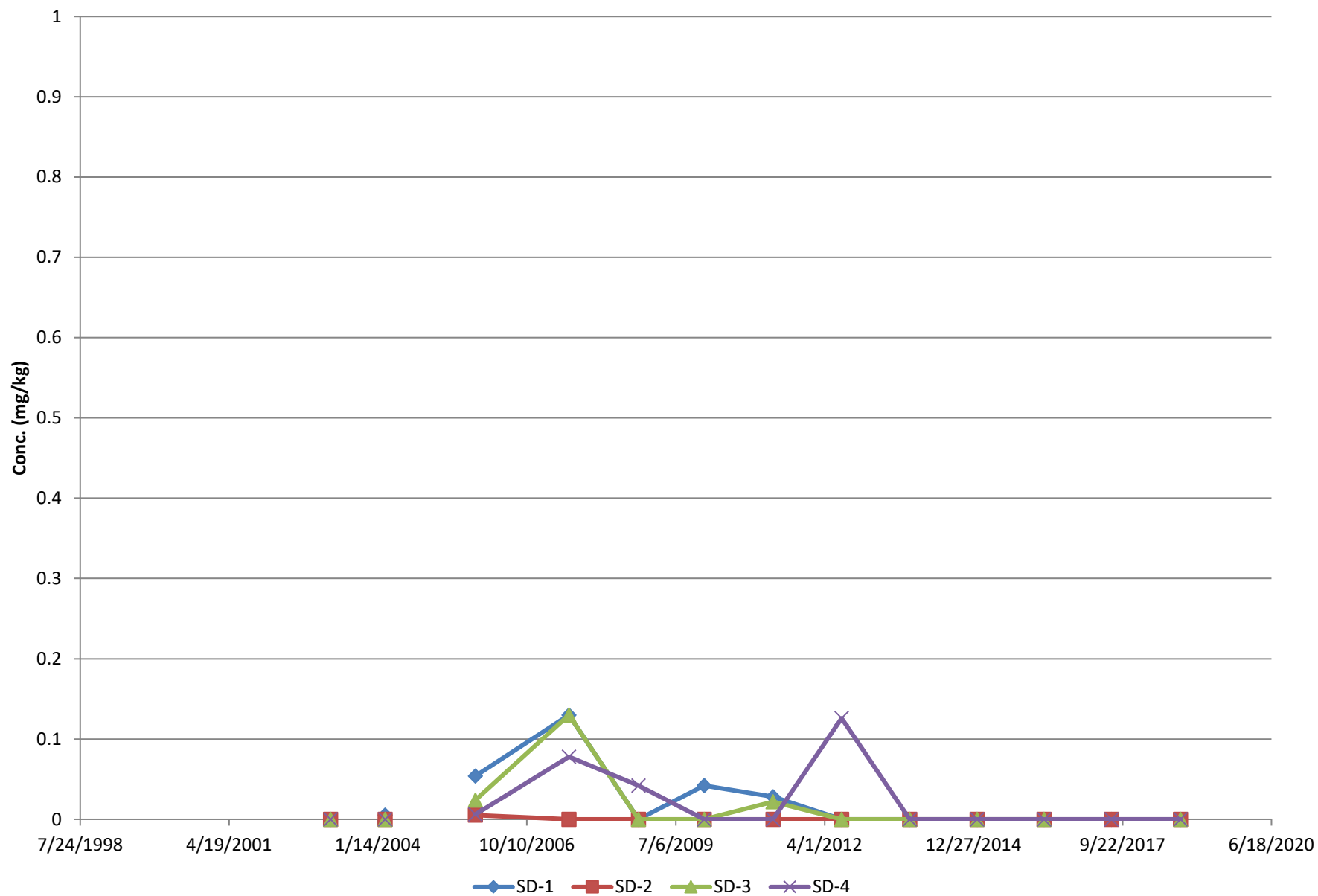
NYSDOT Harrison Landfill - Sediment - Nickel (Ni)



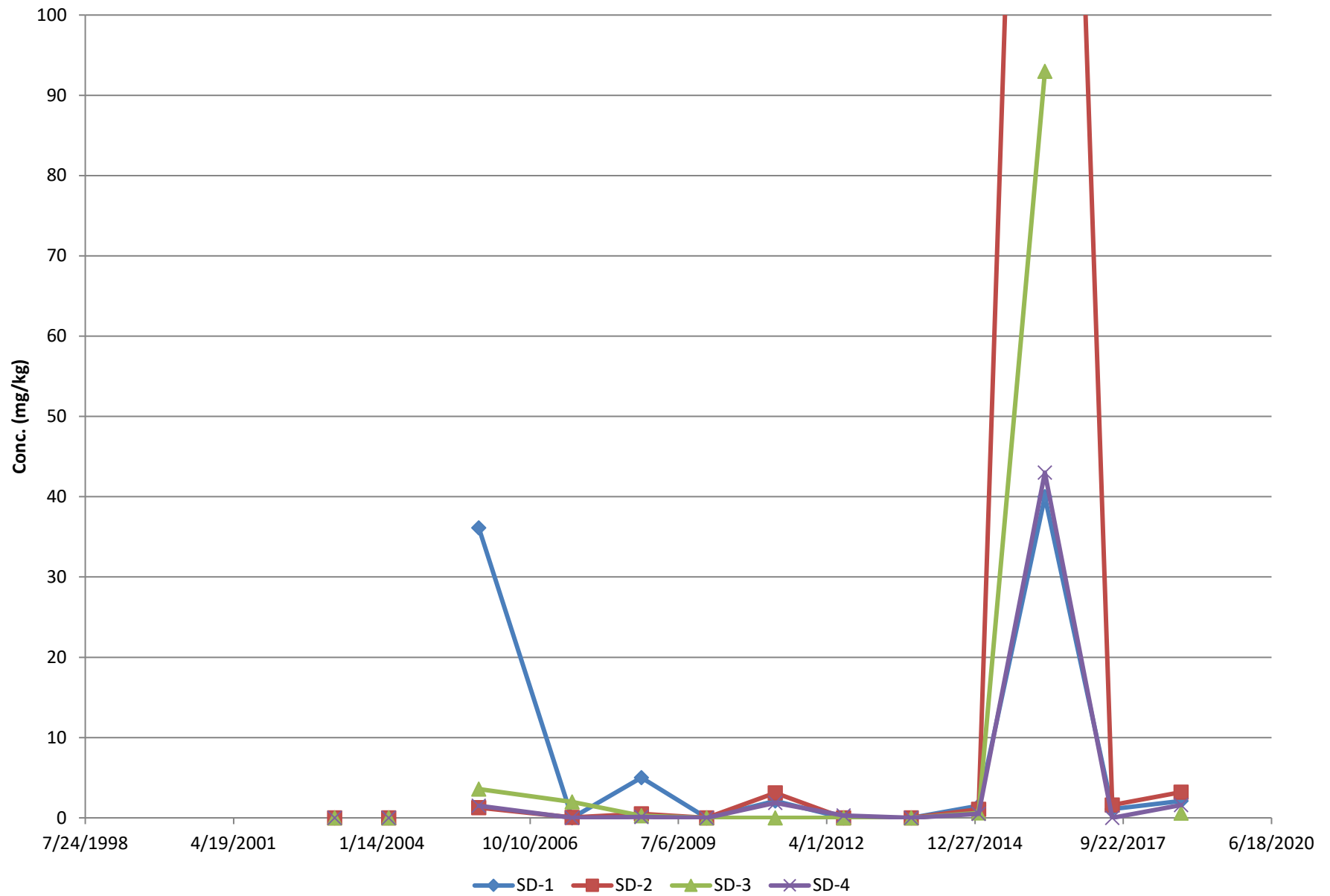
NYSDOT Harrison Landfill - Sediment - Zinc (Zn)



NYSDOT Harrison Landfill - Sediment - VOCs



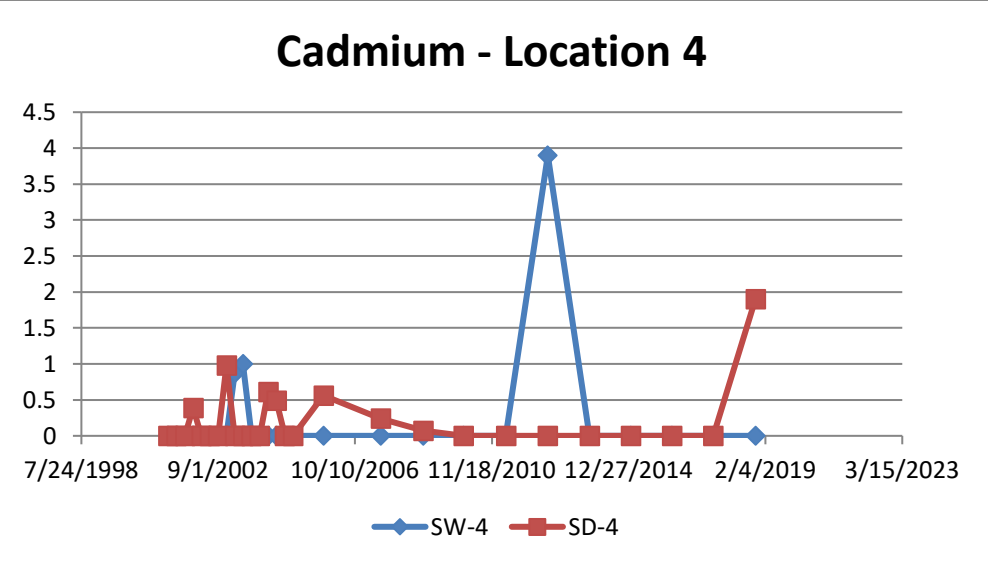
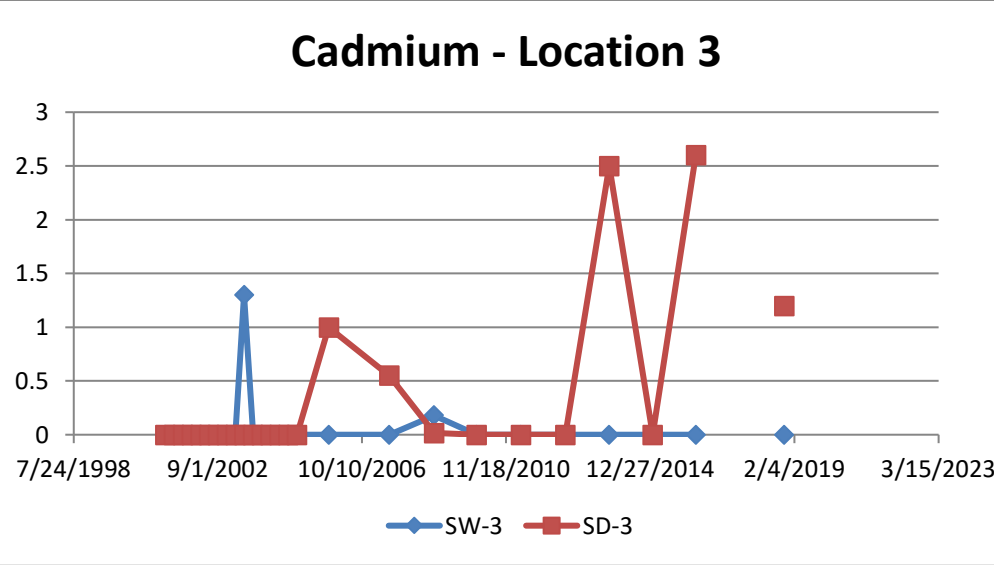
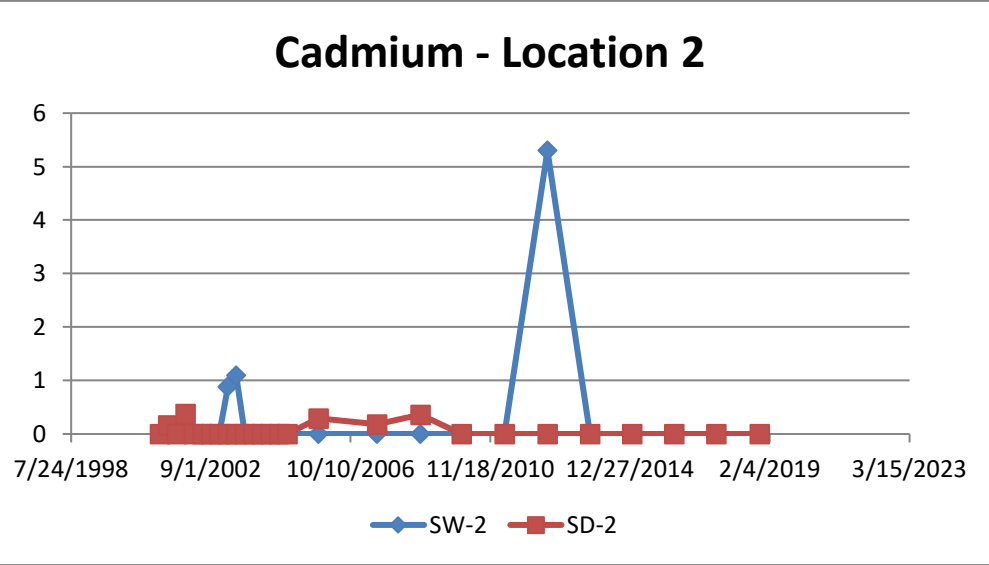
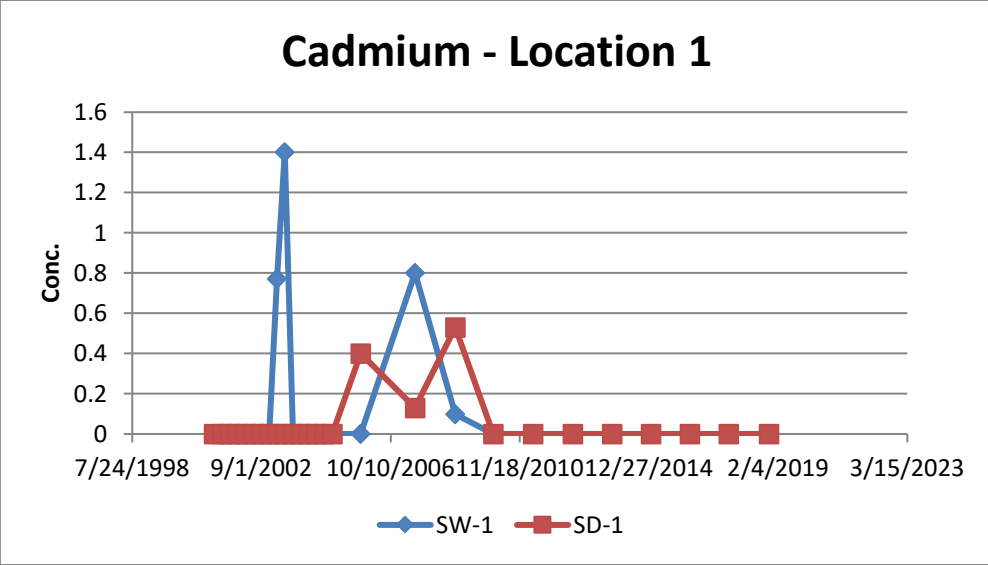
NYSDOT Harrison Landfill - Sediment - SVOCs



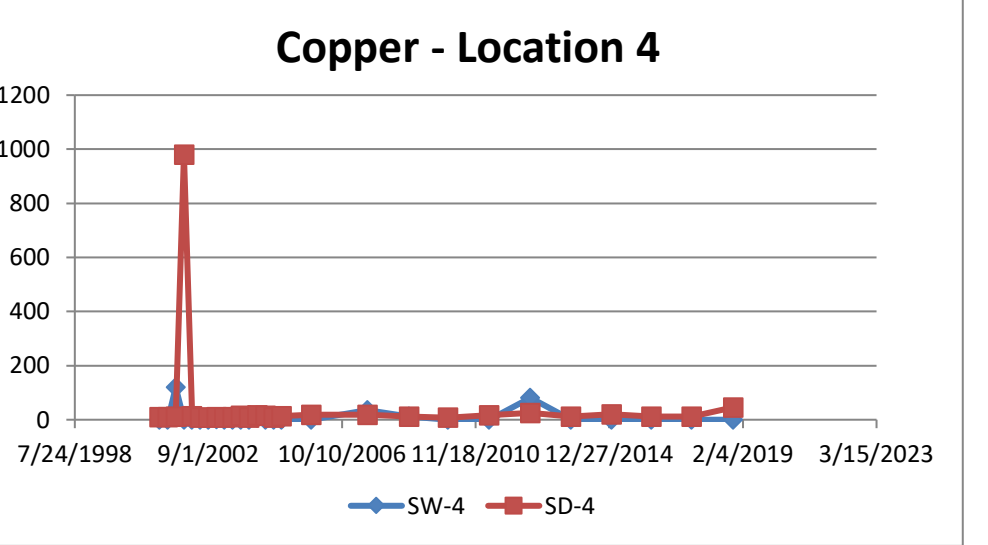
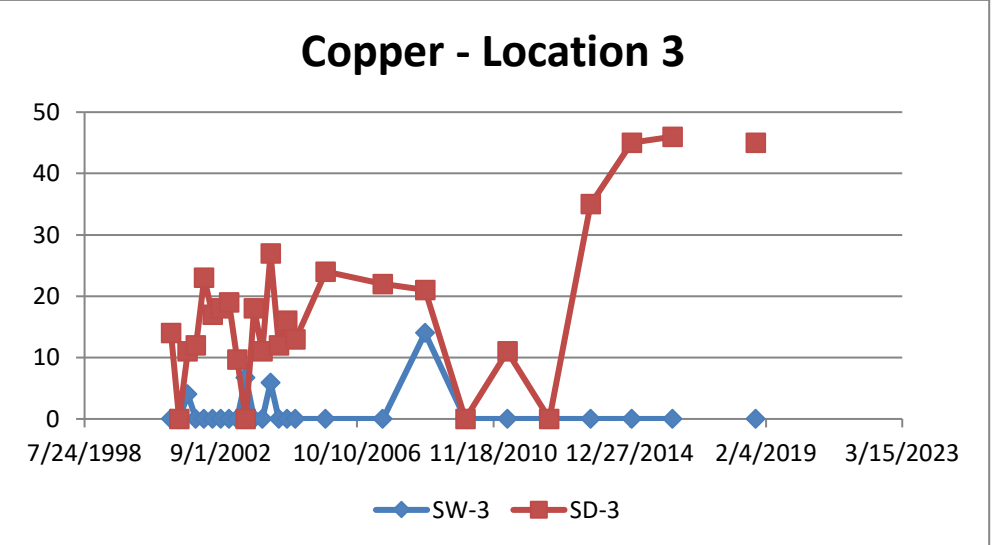
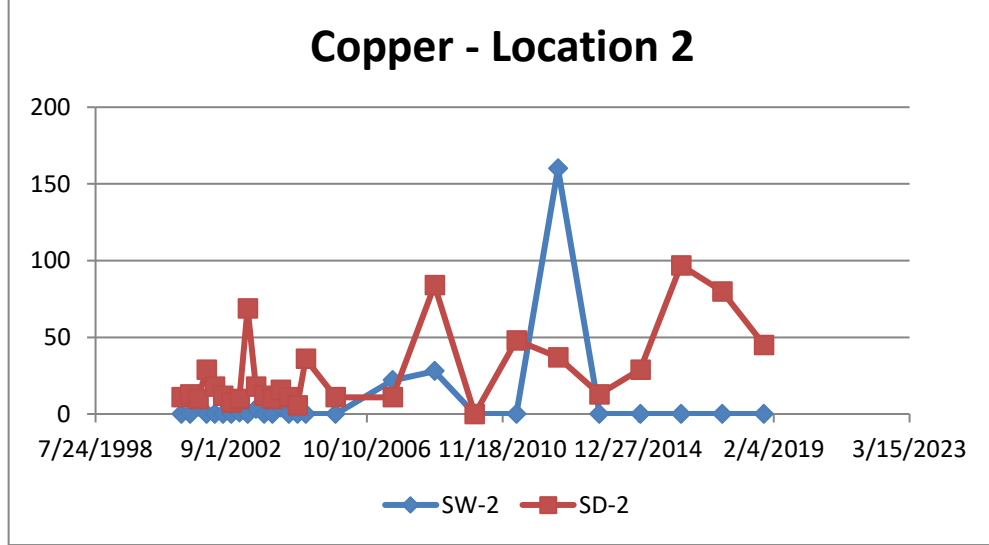
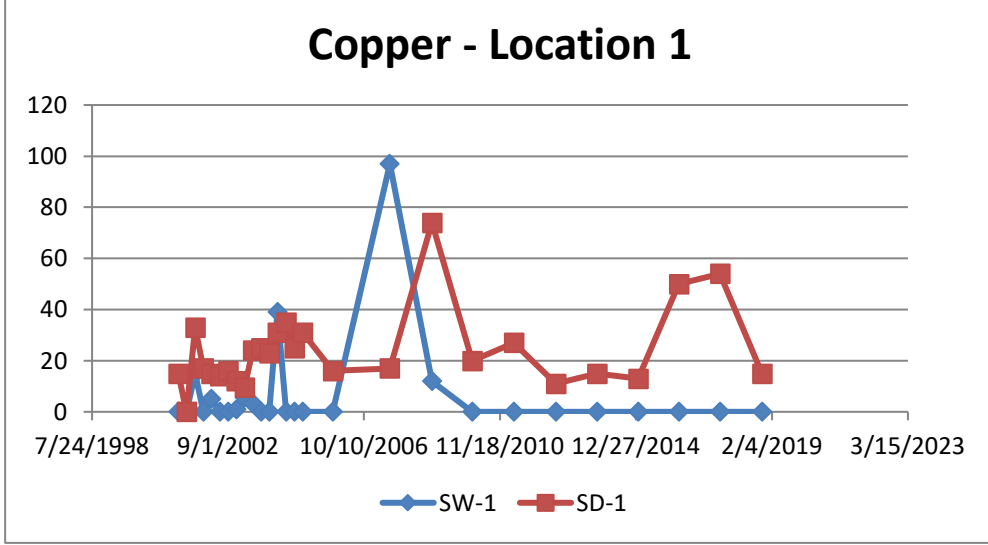
NYSDOT HARRISON LANDFILL

SURFACE WATER/SEDIMENT

Cadmium	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/13/2016	7/10/2017	10/17/2018
SW-1	ND	ND	ND	ND	ND	ND	ND	ND	0.77	1.4	ND	ND	ND	ND	ND	ND	ND	0.8	0.098	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	ND	*	ND	ND	ND	ND	ND	ND	0.88	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	ND	5.3	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*	*	1.3	*	*	ND	ND	ND	ND	ND	*	0.18	*	ND	*	*	ND	ND	ND	ND
SW-4	ND	ND	ND	ND	ND	ND	ND	ND	0.87	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND
SD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.40	0.13	0.53	ND	ND	ND	ND	ND	ND	ND	ND
SD-2	ND	0.16	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.29	0.18	0.36	*	ND	ND	ND	ND	ND	ND	ND
SD-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.00	0.55	0.017	*	ND	*	2.5	ND	2.6		1.2
SD-4	ND	ND	ND	0.39	ND	ND	ND	0.98	ND	ND	ND	ND	0.61	0.49	ND	ND	0.56	0.24	0.071	ND	ND	ND	ND	ND	ND	ND	1.9

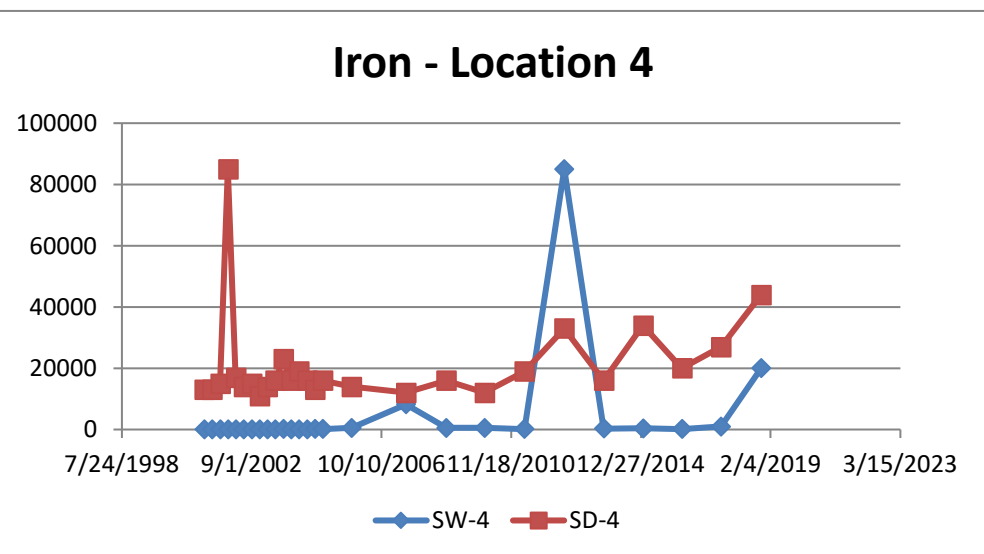
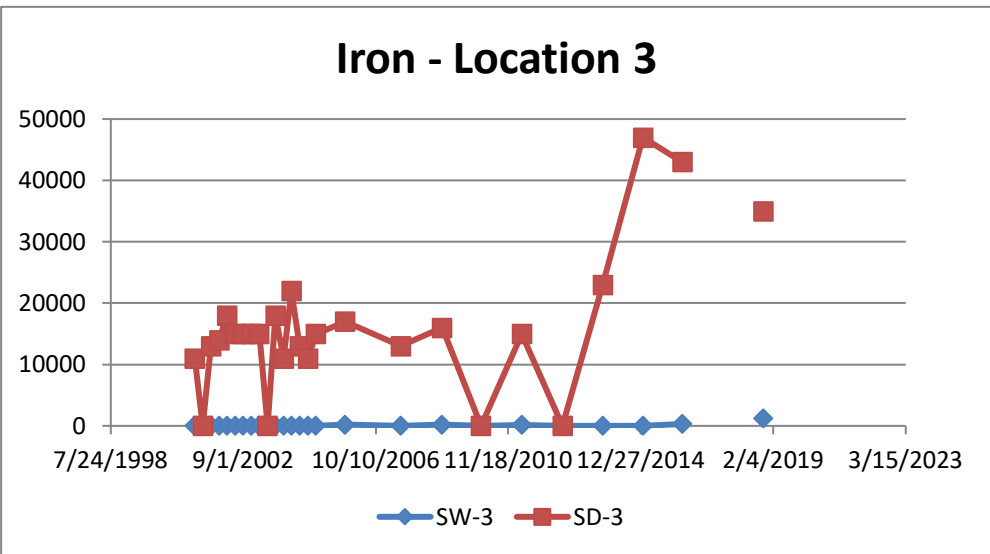
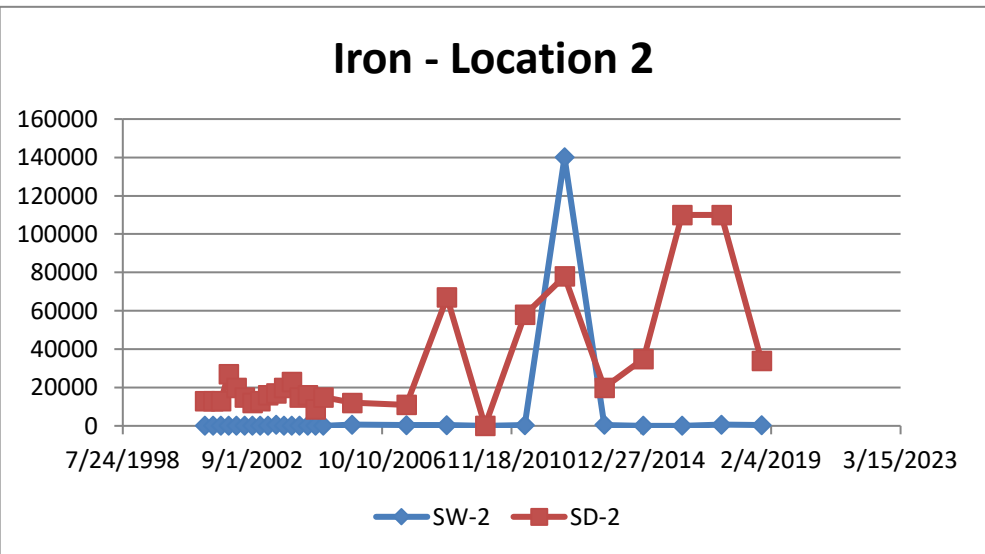
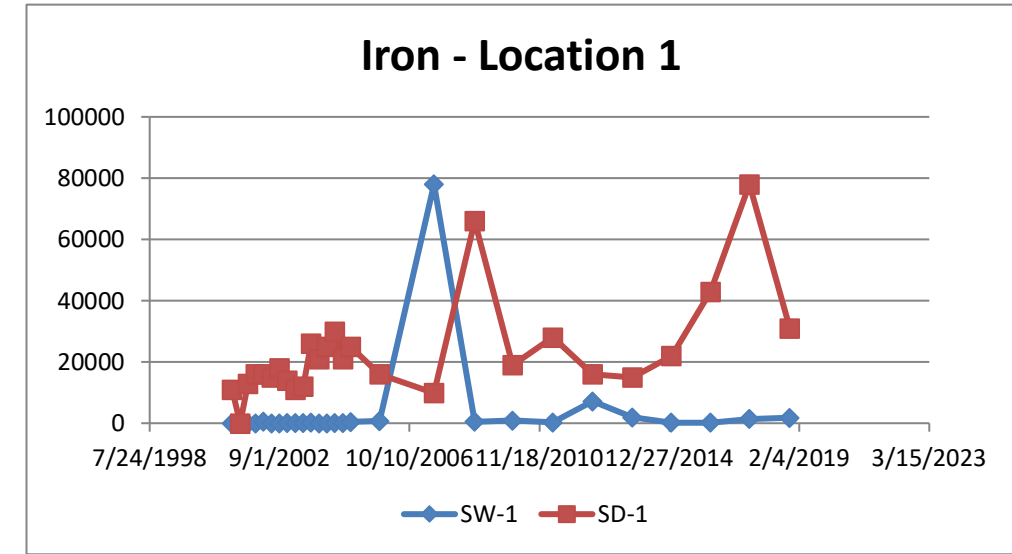


Copper	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/13/2016	7/10/2017	10/17/2018
SW-1	ND	ND	15	ND	5.1	ND	ND	0.88	5.7	3.3	ND	ND	39	ND	ND	ND	ND	97	12	ND	ND	ND	ND	ND	ND	ND	
SW-2	ND	*	4.7	ND	ND	ND	ND	0.9	ND	3.2	ND	ND	4.1	ND	ND	ND	ND	22	28	*	ND	160	ND	ND	ND	ND	ND
SW-3	*	*	4	*	*	ND	*	*	*	6.7	*	*	5.9	ND	ND	ND	ND	*	14	*	ND	*	*	ND	ND	ND	ND
SW-4	ND	ND	120	ND	ND	ND	ND	0.61	ND	ND	ND	ND	5.4	ND	ND	ND	ND	35	12	ND	ND	81	ND	ND	ND	ND	ND
SD-1	15	*	33	17	15	14	16	12	9.6	24	25	23	31	35	25	31	16	17	74	20	27	11	15	13	50	54	15
SD-2	11	13	10	29	18	12	7.6	10	69	18	12	10	16	11	5.8	36	11	11	84	*	48	37	13	29	97	80	45
SD-3	14	*	11	12	23	17	18	19	9.7	*	18	11	27	12	16	13	24	22	21	*	11	*	35	45	46	45	45
SD-4	10	10	11	980	13	8.5	8.7	10	8.1	9	14	7.8	16	14	7.5	13	18	18	11	7.4	17	25	12	20	11	11	45



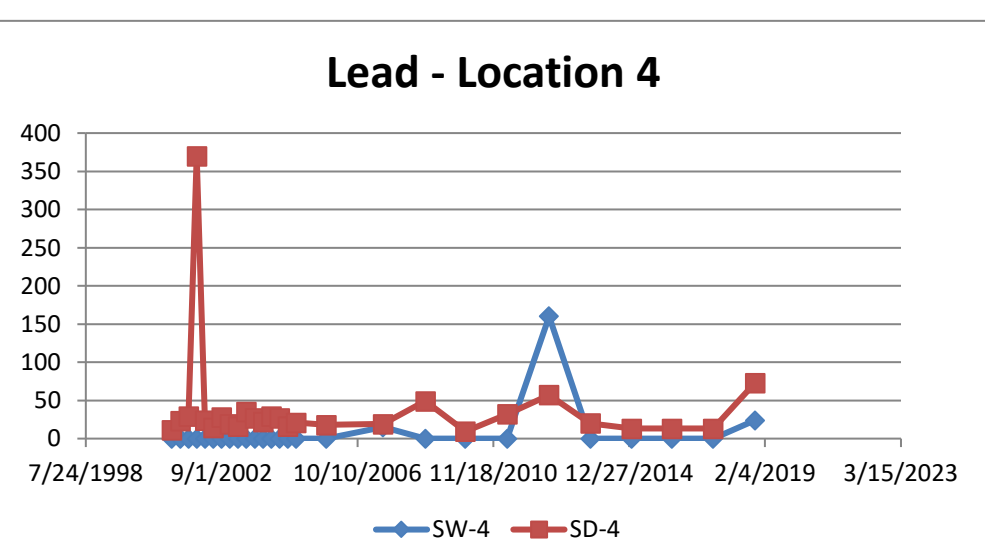
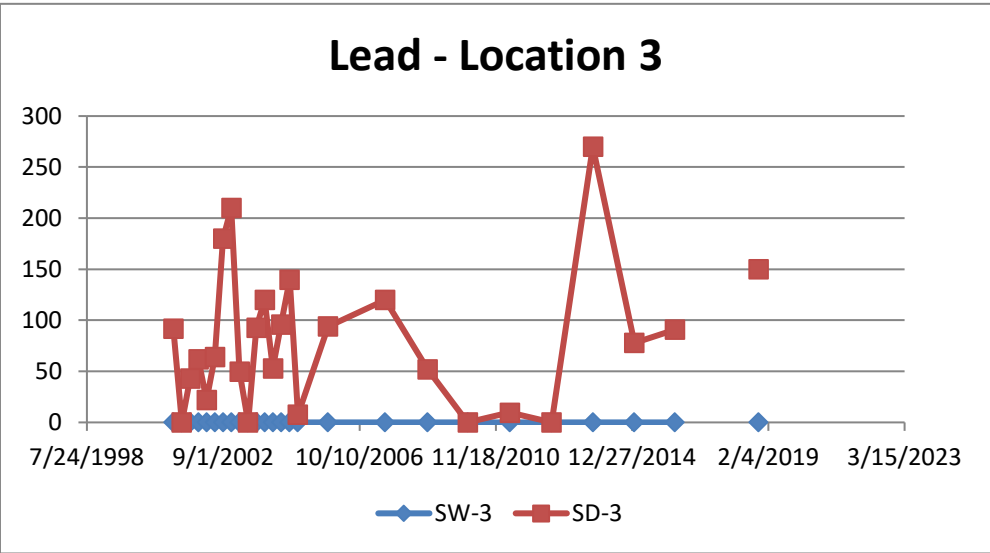
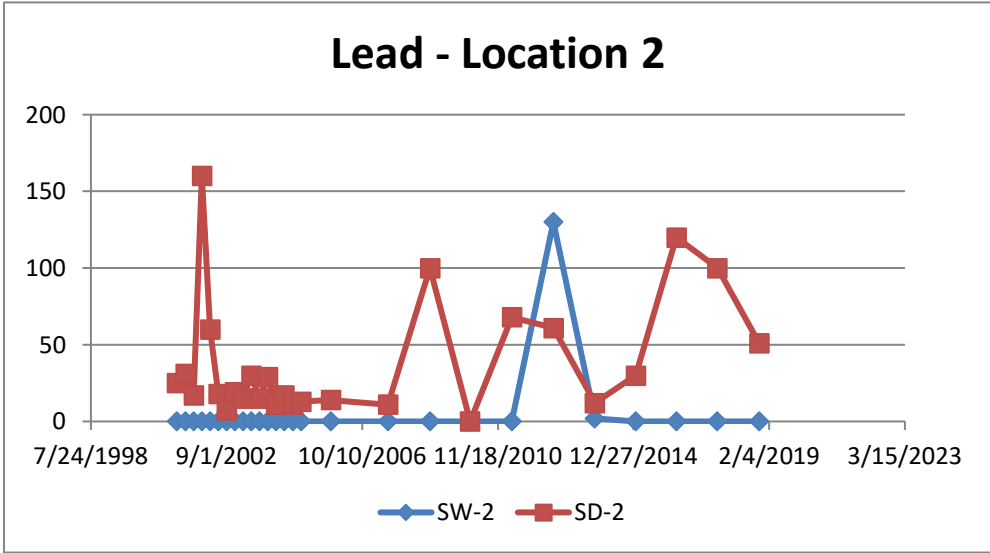
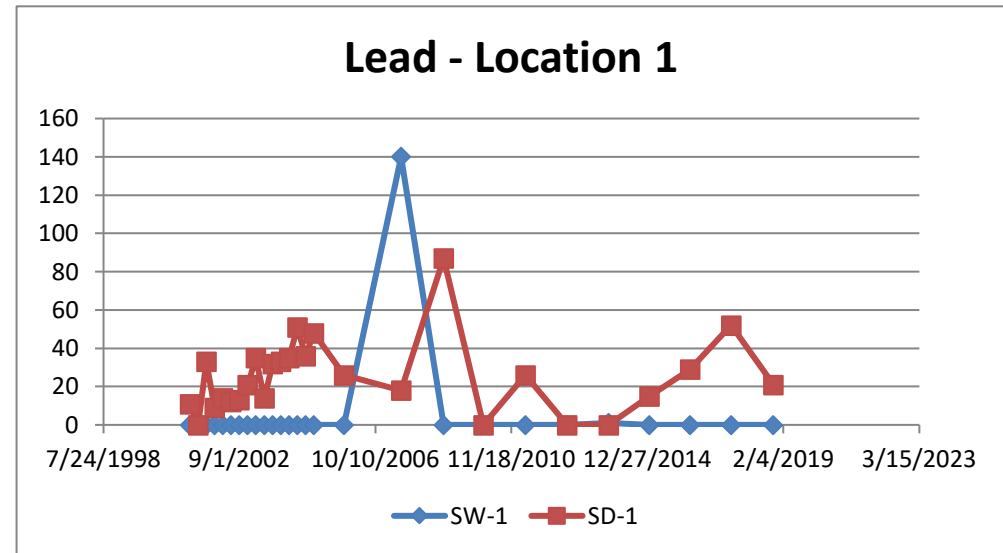
Iron

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/13/2016	7/10/2017	10/17/2018
SW-1	ND	69	ND	ND	500	ND	ND	84	80	41	210	ND	ND	120	140	380	700	78000	510	850	310	7,100	1,900	170	200	1,400	1,800
SW-2	ND	*	ND	ND	ND	ND	ND	28	ND	460	80	ND	ND	ND	130	ND	610	450	440	*	410	140,000	520	ND	ND	650	330
SW-3	*	*	ND	*	*	ND	*	*	*	240	ND	*	ND	ND	ND	ND	180	*	190	*	170	*	*	ND	310		1200
SW-4	ND	ND	ND	ND	ND	ND	110	31	40	110	190	ND	ND	ND	160	160	570	8200	530	570	170	85,000	300	380	180	980	20000
SD-1	11000	*	13000	16000	16000	15000	18000	14000	11000	12000	26000	21000	25000	30000	21000	25000	16,000	9900	66000	19,000	28,000	16,000	15,000	22,000	43,000	78,000	31,000
SD-2	13000	13000	13000	27000	20000	15000	12000	13000	16000	17000	20000	23000	15000	16000	8700	15000	12,000	11000	67000	*	58,000	78,000	20,000	35,000	110,000	110,000	34,000
SD-3	11000	*	13000	14000	18000	15000	15000	15000	15000	*	18000	11000	22000	13000	11000	15000	17,000	13000	16000	*	15,000	*	23,000	47,000	43,000		35000
SD-4	13000	13000	15000	85000	17000	14000	15000	11000	14000	16000	23000	16000	19000	16000	13000	16000	14,000	12000	16000	12,000	19,000	33,000	16,000	34,000	20,000	27,000	44,000



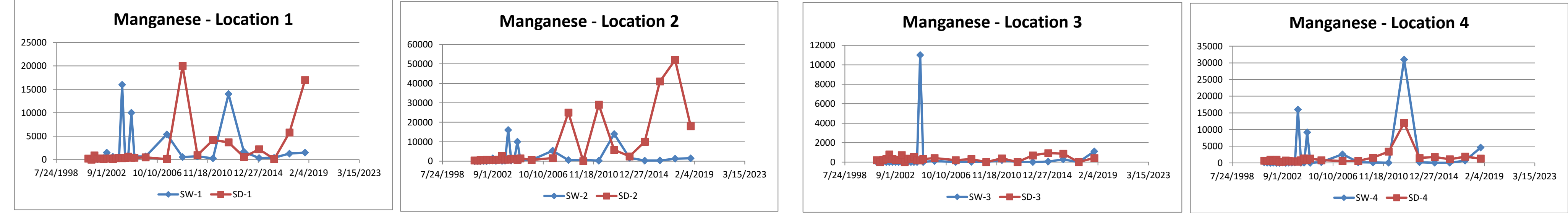
Lead

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/12/2016	7/10/2017	10/17/2018
SW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	ND	ND	ND	ND	1.1	ND	ND	ND	ND
SW-2	ND	*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*	ND	130	1.9	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*	*	ND	*	*	ND	ND	ND	ND	ND	*	ND	*	ND	*	*	ND	ND	ND	ND
SW-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	160	ND	ND	ND	ND	24
SD-1	11	*	33	8.9	14	12	13	21	35	14	32	33	35	51	36	48	26	18	87	ND	26	ND	ND	15	29	52	21
SD-2	25	31	17	160	60	18	7.1	19	15	30	15	29	11	17	11	13	14	11	100	*	68	61	12	30	120	100	51
SD-3	92	*	43	62	22	64	180	210	50	*	93	120	53	96	140	7.5	94	120	52	*	9.7	*	270	78	91		150
SD-4	11	23	29	370	24	14	28	19	16	35	27	22	29	27	16	21	18	19	49	9.4	32	57	20	13	13	13	73



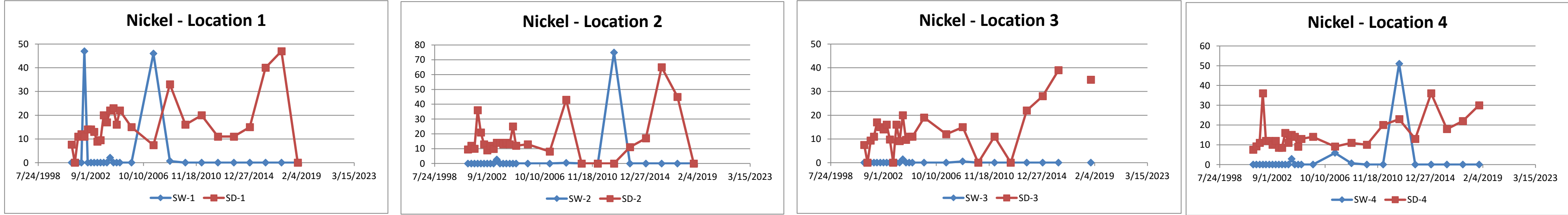
Manganese

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/13/2016	7/10/2017	10/17/2018
SW-1	65	99	46	95	80	340	1500	160	620	95	260	16000	330	820	10000	660	670	5400	550	700	260	14,000	1,700	340	400	1,300	1,500
SW-2	8.3	*	15	30	ND	12	460	2	8.7	6.5	22	15000	ND	16	10000	19	500	520	220	*	210	33,000	340	41	25	370	280
SW-3	ND	*	ND	*	*	11	*	*	*	99	*	*	ND	11	11000	12	110	*	21	*	210	*	*	62	280	*	1100
SW-4	150	59	22	61	27	16	110	9.7	64	55	120	16000	25	63	9200	26	240	2600	180	130	50	31,000	230	70	60	700	4600
SD-1	240	*	910	220	270	180	250	280	170	330	410	320	380	650	440	430	490	130	20000	990	4,200	3,700	580	2,200	110	5,800	17,000
SD-2	360	290	650	450	780	700	660	720	850	2800	870	880	1300	1300	670	1500	630	1600	25000	*	29,000	5,800	2,500	10,000	41,000	52,000	18,000
SD-3	200	*	240	340	800	330	240	250	730	*	370	300	550	200	180	310	420	200	310	*	390	*	700	930	870	*	430
SD-4	690	600	1000	540	990	370	350	740	610	450	530	370	820	1400	850	1300	810	590	600	1,600	3,400	12,000	1,500	1,800	1,100	1,900	1,300



Nickel

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/13/2016	7/10/2017	10/17/2018
SW-1	ND	ND	ND	ND	47	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	46	0.66	ND	ND	ND	ND	ND	ND	ND	
SW-2	ND	*	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	0.37	*	ND	75	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*	*	ND	*	*	1.4	ND	ND	ND	ND	*	0.54	*	ND	*	ND	ND	ND	ND	ND
SW-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND	5.9	0.66	ND	ND	51	ND	ND	ND	ND	ND
SD-1	7.6	*	11	12	11	14	14	13	8.9	9.5	20	17	22	23	16	22	15	7.4	33	16	20	11	11	15	40	47	ND
SD-2	9.5	12	10	36	21	13	8.9	12	9.9	14	14	13	14	13	25	12	13	8.1	43	*	ND	ND	11	17	65	45	ND
SD-3	7.5	*	9.3	11	17	15	14	16	9.8	*	16	9.1	20	9.6	11	11	19	12	15	*	11	*	22	28	39		35
SD-4	7.5	9.2	11	36	12	12	10	12	8.5	8.5	16	11	15	14	9	13	14	9.1	11	10	20	23	13	36	18	22	30



Zinc	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015	4/12/2016	7/10/2017	10/17/2018
SW-1	ND	ND	25	17	16	ND	ND	9.6	13	120	ND	ND	41	64	ND	51	57	270	ND	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	ND	*	4.1	18	10	ND	ND	ND	9.8	37	ND	ND	29	ND	ND	ND	5.8	ND	ND	*	ND	ND	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	53	*	*	*	19	*	*	40	54	ND	ND	7.1	*	ND	*	ND	ND	ND	ND	ND	ND	ND
SW-4	ND	ND	4.1	11	7.2	ND	ND	ND	ND	ND	ND	ND	37	61	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	110
SD-1	48	*	230	46	44	46	51	87	40	390	84	67	82	130	86	96	40	35	360	45	94	35	32	70	130	180	69
SD-2	38	53	34	150	72	47	28	24	39	59	45	50	37	67	33	35	32	33	360	*	270	240	52	160	590	520	260
SD-3	44	*	46	38	51	72	76	78	42	*	71	63	74	60	60	28	120	81	60	*	32	*	190	140	170		200
SD-4	26	48	58	220	60	41	47	500	45	60	79	54	77	82	45	53	57	56	53	44	93	140	50	150	84	81	260

