JM Sorge, Inc.
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July 18, 2018

Via e-mail: daniel.lanners@dec.ny.gov

Daniel R. Lanners, P.E.
Project Manager
NYSDEC, Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Re: Soil and Groundwater Supplemental Investigations Report
70 Nardozzi Place
New Rochelle, New York
Section 2, Block 564, Lot 2
JMS Project # 2015.191

Dear Mr. Lanners:

This letter report presents the findings of the Supplemental Investigations performed by JM Sorge, Inc. (JMS), on behalf of 70 Nardozzi LLC c/o Simone Development Companies (70 Nardozzi LLC) at the above-referenced property known as 70 Nardozzi Place, New Rochelle, New York (Site). The objective of the investigation was to further characterize impacts present at the Property prior to initiating the development at the Site.

The following sections of this summary report include the Soil Investigation, Groundwater Investigation, Conclusions and Recommendations.

Soil Sampling

In response to comments provided by the New York State Department of Environmental Conservation (NYSDEC) pertaining to the Brownfield Cleanup Program (BCP) Application for the Site, JMS issued a response letter to Ms. Bernadette Anderson (NYSDEC) dated July 6, 2017. The letter provided details pertaining to subsequent soil sampling that would be conducted at the Site.

On January 29, 2018, Hawk Drilling, under the direction of JMS, installed four (4) soil borings at the Site to investigate the southern portion of the lot that is not currently planned for development (i.e., asphalt or concrete cap) and collect samples for a complete Target Compound List / Target Analyte List (TCL/TAL) analysis. Four (4) borings (SB-101 through SB-104) were installed using a track-mounted direct-push drill rig to depths ranging from 0.5 feet below the ground surface (bgs) to 20 feet bgs. The soil cores extracted from each borehole were field screened with a calibrated photo-ionization detector (PID) and visually inspected for any evidence of contamination. Fill material was observed in recovered soils. No PID readings were observed in the soil borings.

Two (2) soil samples were collected from soil borings SB-101 and SB-102 from surface soils and at the bottom of the borings. One surfice grab sample was collected from each SB-103 and SB-104 (surface soils are defined as 0-3 inches below grade). Soil samples were analyzed for TCL/TAL. All samples were sent for analysis to Test America Laboratories, Inc. of Edison, NJ (Lab ID 11666).

The soil boring locations are illustrated on Figure 1 and soil boring logs are provided as an Attachment.

Soil Analytical Results

The analytical results are compared to NY Industrial Soil Cleanup Criteria (ISCC) and NY Commercial Soil Cleanup Criteria (CSCC). Benzo[a]pyrene was detected above ISCC in samples SB-102A, SB-102B and SB-103A.

Metals, specifically arsenic, barium, copper, and lead, were detected above the ISCC and CSCC. No VOCs, PCBs or Pesticides were identified at concentrations in excess of ISCC or CSCC. The soil analytical results are presented on Table 1.

The associated laboratory report and data usability summary report is provided as an Attachment.

Ground Water Investigation

In response to a June 1, 2018 email from Mr. Dan Lanners (NYSDEC) requesting additional groundwater sampling at the Site, JMS prepared a groundwater sampling workplan and submitted it to Mr. Lanners for review on June 5, 2018. The sampling plan was approved on June 7, 2018.

On June 8, 2018, JMS conducted groundwater sampling at the five (5) existsing groundwater monitoring wells at the Site for TCL/TAL, per- and polyfluoroalkyl substances (PFAS), low level SIM 1,4-Dioxane. Filtered samples were also analyzed for dissolved semivolatiles and dissolved metals to determine the impact of the sample turbidity on the total concentrations. Field and trip blanks, MS/MSD, and one additional duplicate sample were also collected for QA/QC purposes. All monitoring wells (MW-1 through MW-5) are illustrated on Figure 2.

Prior to sampling, depth to water level measurements and PID readings were collected at all wells. Groundwater in the five monitoring wells was observed between 0.73 to 6.3 feet bgs and no PID readings or odors were encountered. Each monitoring well was purged via a low-flow purge and sampling (LFPS) method, and all sampling equipment and sampling containers were confirmed to be compliant with sampling for PFAs.

The following procedures were followed for low-flow purging. The monitoring wells were purged with a LFPS method using a Peristaltic® pump with new dedicated high density polyethylene (HDPE) tubing. The wells were evacuated at a rate of less than one-eighth of a

gallon per minute with flow rates determined by measuring purge water in a graduated cylinder over a set period of time. JMS used a calibrated Horiba U-52 to measure analyze-immediately parameters (pH, temperature, dissolved oxygen, turbidity and specific conductance). The Horiba U-52 was calibrated in the field prior to the day's events and again during the sampling event as necessary. The parameters were recorded in the field to evaluate when the parameters stabilized. After stabilization of water quality parameters, samples were collected directly from the dedicated tubing or using a disposable Teflon™ bailer. Low-flow sampling sheets are provided as an Attachment.

Each sample collected for laboratory analysis was clearly labeled and placed in a cooler at 4°C and preserved with ice for transport to a New Jersey-certified laboratory (Test America, Lab ID 11666). Strict chain-of-custody protocol was employed to ensure the validity of data generated by the sampling activities. All samples were analyzed for TCL/TAL, PFAS, 1,4-Dioxane, and dissolved semivolatiles organic compounds (SVOCs) and dissolved metals.

Ground Water Analytical Results

The TCL/TAL analytical results are compared to NY Water Quality Standards (WQS). The PFAs were evaluated based on guidance values for other state agencies, but NY criteria were not available for comparison. PCBs were not detected in any of the wells sampled and VOC or Pesticide were not detected above the NY WQS in any of the groundwater samples. Analytical results for SVOCs, PFAs and metals are discussed below.

Of the SVOCs, only one compound was detected above the WGS. Although 2,6-Dinitrotoluene was detected above the WQS in the filtered (dissolved) sample from every well, the total concentration (unfiltered) was reported as non detect for every well. This suggests that the compound was introduced to the sample during the filtering process (we are waiting for an explanation from the laboratory) and the results from the filtered analysis should be disregarded.

PFAs were detected in all wells and field blanks. As noted above, however, there are no applicable WQS for this group of compounds. In lieu of site specific NYS guidance values for PFAs, the Site results were compared to Table 4-1 (Standards and guidance values for PFAS in groundwater, drinking water, and surface water/effluent) from the ITRC PFAS Regulations, Guidance and Advisories Fact Sheet. Based on this assessment, there do not appear to be any concerns associated with this group of compounds.

Several metals were identified above the WQS in all of the samples. These metals include antimony, arsenic, barium, copper, iron, lead, magnesium, manganese and sodium. Arsenic, copper, lead were not found to exceed the WQS in the filtered samples, indicating they are not dissolved in groundwater. Of the remaining metals:

- Antimony was detected in one filtered (dissolved) sample at 5 ug/l, as compared to the 3 ug/l WQS;

- Barium was detected in one filtered (dissolved) sample at 1170 ug/l, as compared to the 1000 ug/l WQS;
- Iron was detected in one filtered (dissolved) sample at 1340 ug/l, as compared to the 500 ug/l WQS (total iton results are in the tens of thousands of ug/l, suggesting iron detections are most due to turbidity);
- Magnesium was detected in one filtered (dissolved) sample at 37,200 ug/l, as compared to the 35,000 ug/l WQS;
- Manganese was detected in one filtered (dissolved) sample at 707 ug/l, as compared to the 500 ug/l WQS; and
- Sodium was detected in all wells, in both the total and filtered (dissolved) samples.

The analytical results of monitoring well sampling are summarized on Table 2 and illustrated on Figure 2. The complete laboratory analytical report and data usability summary report is provided as an Attachment.

Conclusions and Recommendations

JMS conducted additional soil and groundwater investigations at the Site, and soil and groundwater exceedances observed during this round of sampling are consistent with previous rounds of sampling and are indicative of the fill material present on the Property and on the adjacent former municipal incinerator site. The remedy proposed in the May 2017 Remedial Action Workplan for the Site consists of the installation of a engineering control (cap) to prevent contact and reduce surface permeability, the use of a suitable gas venting system beneath the proposed asphalt parking area and building, and the establishment of an Enviromental Easement.

The concentrations of PAHs and metals above ISCC and CSCC in the surface samples at SB-103 and SB-104 (southern portion of the Site that is not planned for development) suggests a clean fill cap will be required in this area. It is proposed that a 12 inch layer of clean soil and subsequent landscaping will be applied in this area to prevent exposure to impacted soil. The soil contamination will further be addressed by the establishment of an Environmental Easement for soil.

No VOCs, SVOCs, PCBs, or pesticides were identified above the WQS. PFAs were detected in all site monitoring wells, however, it is believed that they are at levels that will require not further investigation. Groundwater sampling results did confirm the presence of various metals in excess of the NYS WQS, however, many appear to be due to sample turbidity and are at much lower levels in dissolved samples (arsenic, copper, lead, iron), many naturally occurring metals (magnesium, manganese, sodium) and the remaining two (antimony, barium) were

detected marginally above the WQS standard in just one filtered (dissolved) sample. No further investigation or remediation of groundwater at this Site is recommended, however it is anticipated that groundwater contamination will further be addressed by the establishment of an Environmental Easement.

The data gathered as part of this supplemental investigation supports the previously proposed remedy and no further investigation or remediation is recommended in order to implement the proposed remedy.

If you have any questions regarding the investigations or details included herein, please call me at (908) 218-0066 ext. 122 or via email at jvandervliet@jmsorge.com.

Sincerely,

James Vander Vliet, LSRP
Senior Manager

Attachments – (Figure, Tables, Boring Logs, Purge Sheets, Laboratory Reports, Data Usability Summary Report)

Figures

Legend

- Property Boundary
- Proposed Soil Boring Location
- Monitoring Wells

NOTES:
1. Property Boundaries are approximate.

Exceedances:
NY-375-6.8(b) & CP-51 T-1 Industrial Soil Cleanup Criteria (ISCC)
NY-375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Criteria (CSCC)

N

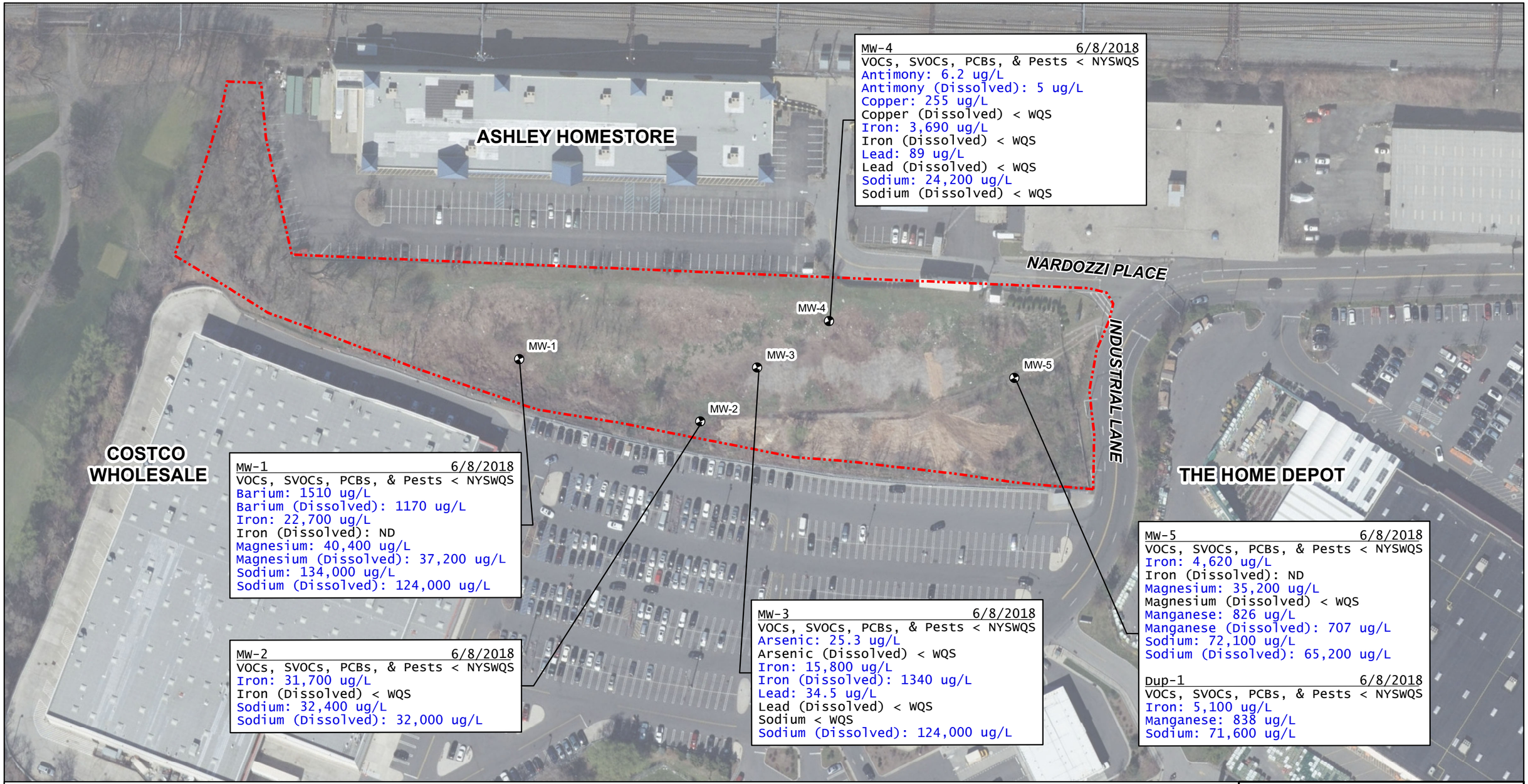
0 40 80 160 Feet

2018 SOIL ANALYTICAL DATA

GSI NEW ROCHELLE
70 NARDOZZI PLACE
NEW ROCHELLE, NEW YORK

PREPARED FOR
G & S INVESTORS

Date: 7/12/2018	JMS # 2015.191.011
JM SORGE, INC.	FIGURE 1



Legend

- Property Boundary
- Monitoring Wells

NOTES:
1. Property Boundaries are approximate.

N

0 40 80 160 Feet

MONITORING WELL LOCATIONS WITH
JUNE 2018 ANALYTICAL RESULTS

GSI NEW ROCHELLE
70 NARDOZZI PLACE
NEW ROCHELLE, NEW YORK

PREPARED FOR
G & S INVESTORS

Date: 7/12/2018	JMS # 2015.191.006
JM SORGE, INC.	FIGURE 2

Tables

Table 1

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

January 2018 Soil Analytical Results

Station Name	NY Commercial Soil Cleanup Criteria (CSCC)	NY Industrial Soil Cleanup Criteria (ISCC)	SB-101	SB-101	SB-102	SB-102	SB-103	SB-104
Field Sample ID			SB-101A	SB-101B	SB-102A	SB-102B	SB-103A	SB-104A
Depth			0 -2 in	15 - 15.5 ft	0 -2 in	15 - 15.5 ft	0 -2 in	0 -2 in
Date			1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018
Lab Sample ID			460-149327-1	460-149327-2	460-149327-3	460-149327-4	460-149327-5	460-149327-6
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals								
Aluminum	NS	NS	6160	8800	9060	20300	14600	10900
Antimony	NS	NS	ND	ND	2.4 J	18.1	4.8 J	1.9 J
Arsenic	16	16	2.7 J	1.6 J	9	4.5 J	6.4	**22.1**
Barium	400	10000	141	75.4	**440**	**524**	305	154
Beryllium	590	2700	0.37 J	0.55	0.52	0.28 J	0.83	0.62 J
Cadmium	9.3	60	0.6 J	ND	2.3	6	3.6	2.2
Calcium	NS	NS	39700	1740	15900	24500	16100	19100
Chromium	NS	NS	17	24.2	35.5	143	58.2	41
Cobalt	NS	NS	5.1 J	8.7 J	9.2 J	14.9 J	10 J	8.9 J
Copper	270	10000	38.9	15.9	**300**	**955**	**420**	60.3
Iron	NS	NS	11300	14800	45900	148000	63600	27100
Lead	1000	3900	78.2	5.8	763	**1680**	803	166
Magnesium	NS	NS	10400 F1	4440	6710	3850	5360	7200
Manganese	10000	10000	345 F1	139	405	969	634	399
Mercury	2.8	5.7	0.076	0.017 J	0.54	0.66	0.57	0.14
Nickel	310	10000	15.4 J	30.7	49.4	164	65	31.5
Potassium	NS	NS	1370 J	1930	2110	1110 J	2460	2900
Selenium	1500	6800	ND	ND	ND	ND	ND	ND
Silver	1500	6800	ND	ND	1.5 J	5 J	3.8	ND
Sodium	NS	NS	ND	171 J	245 J	562 J	476 J	201 J
Thallium	NS	NS	ND	ND	ND	ND	ND	ND
Vanadium	NS	NS	26.4	26.1	47.2	58.2	42.7	39.8
Zinc	10000	10000	161	62.1	989	3270	1460	351
Total Cyanide	NS	NS	0.77	ND	ND	0.11 J	0.64	0.88 F1
PCBs								
Aroclor (Total)	1	25	ND	ND	0.23	0.44	0.31	ND
Aroclor-1016	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1221	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1232	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1242	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1248	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1254	NS	NS	ND	ND	0.16	0.31	0.2	ND
Aroclor-1260	NS	NS	ND	ND	0.074 J	0.13	0.11	ND
Aroclor-1262	NS	NS	ND	ND	ND	ND	ND	ND
Aroclor-1268	NS	NS	ND	ND	ND	ND	ND	ND
Pesticides								
4,4'-DDD	92	180	ND	ND	ND	ND	ND	ND
4,4'-DDE	62	120	ND	ND	ND	0.02	0.013	ND
4,4'-DDT	47	94	ND	ND	ND	ND	ND	0.018
Aldrin	0.68	1.4	ND	ND	ND	ND	ND	ND
Alpha-BHC	3.4	6.8	ND	ND	ND	ND	ND	ND
Beta-BHC	3	14	ND	ND	ND	ND	ND	ND
cis-chlordane	24	47	0.014 J N	ND	ND	0.029 N	0.023 N	ND
Delta-BHC	500	1000	ND	ND	ND	ND	ND	ND
Dieldrin	1.4	2.8	ND	ND	ND	ND	ND	ND
Endosulfan I	200	920	ND	ND	ND	ND	ND	ND
Endosulfan II	200	920	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	200	920	ND	ND	ND	ND	ND	ND
Endrin	89	410	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	NS	NS	ND	ND	ND	ND	ND	ND
Endrin Ketone	NS	NS	ND	ND	ND	ND	ND	ND
Gamma-BHC	9.2	23	ND	ND	ND	ND	ND	ND
Heptachlor	15	29	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	NS	NS	ND	ND	ND	ND	ND	ND
Methoxychlor	NS	NS	ND	ND	ND	ND	ND	ND
Toxaphene	NS	NS	ND	ND	ND	ND	ND	ND
trans-Chlordane	NS	NS	0.013 J	ND	ND	0.031	0.025	ND

Notes:

F1:MS and/or MSD recovery exceeds control limits

ND: Not Detected

J: Estimated Value

NS: No Standard

N: presumptive evidence of a compound

Table 1

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

January 2018 Soil Analytical Results

Station Name	NY Commercial Soil Cleanup Criteria (CSCC)	NY Industrial Soil Cleanup Criteria (ISCC)	SB-101	SB-101	SB-102	SB-102	SB-103	SB-104
Field Sample ID			SB-101A	SB-101B	SB-102A	SB-102B	SB-103A	SB-104A
Depth			0 -2 in	15 - 15.5 ft	0 -2 in	15 - 15.5 ft	0 -2 in	0 -2 in
Date			1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018
Lab Sample ID			460-149327-1	460-149327-2	460-149327-3	460-149327-4	460-149327-5	460-149327-6
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Semi-VOAs								
1,1'-Biphenyl	NS	NS	ND	ND	0.022 J	0.069 J	ND	ND
1,2,4,5-Tetrachlorobenzene	NS	NS	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	NS	NS	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	NS	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NS	NS	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	NS	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NS	NS	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NS	NS	ND	ND	0.065 J	0.15 J	0.092 J	0.018 J
2-Methylphenol	500	1000	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NS	NS	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NS	NS	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	NS	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NS	NS	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NS	NS	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	NS	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NS	NS	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NS	NS	ND	ND	ND	ND	ND	ND
4-Methylphenol	NS	NS	ND	0.013 J	0.017 J	0.012 J	ND	ND
4-Nitroaniline	500	1000	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NS	NS	ND	ND	ND	ND	ND	ND
Acenaphthene	NS	NS	ND	ND	0.077 J	0.19 J	0.27 J	ND
Acenaphthylene	500	1000	0.036 J	ND	0.13 J	0.21 J	0.12 J	0.13 J
Acetophenone	500	1000	ND	ND	ND	0.034 J	0.066 J	ND
Anthracene	NS	NS	0.046 J	ND	0.36 J	0.62	0.64 J	0.15 J
Atrazine	500	1000	ND	ND	ND	ND	ND	ND
Benzaldehyde	NS	NS	0.13 J	ND	0.054 J	0.052 J	0.097 J	0.12 J
Benzo(a)anthracene	5.6	11	0.28	ND	1.3	2.1	2	0.65
Benzo(a)pyrene	1	1.1	0.33	ND	1.4	2	1.9	0.67
Benzo(b)fluoranthene	5.6	11	0.49	ND	2.1	2.7	2.9	1.1
Benzo(g,h,i)perylene	500	1000	0.23 J	ND	0.65	0.82	0.77 J	0.32 J
Benzo(k)fluoranthene	56	110	0.17	ND	0.78	1.1	1	0.33
bis(2-Chloroethoxy)methane	NS	NS	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	NS	NS	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	NS	NS	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	NS	NS	0.066 J	ND	0.22 J	3.4	0.41 J	0.35 J
Butyl benzyl phthalate	NS	NS	ND	ND	0.052 J	0.17 J	0.097 J	0.094 J
Caprolactam	NS	NS	ND	ND	ND	ND	ND	ND
Carbazole	NS	NS	ND	ND	0.15 J	0.17 J	0.35 J	0.047 J
Chrysene	56	110	0.33 J	ND	1.6	2.2	2	0.7
Dibenz(a,h)anthracene	0.56	1.1	0.098	ND	0.22	0.27	0.3	0.13
Dibenzofuran	350	1000	ND	ND	0.082 J	0.21 J	0.19 J	ND
Diethylphthalate	NS	NS	ND	ND	ND	0.035 J	ND	ND
Dimethyl phthalate	NS	NS	ND	ND	ND	ND	ND	ND
Di-N-Butyl phthalate	NS	NS	0.025 J	ND	0.035 J	0.042 J	0.028 J	0.034 J
Di-N-Octyl phthalate	NS	NS	ND	ND	ND	ND	ND	ND
Fluoranthene	500	1000	0.47 J	ND	2.4	3.8	3.6	1.2
Fluorene	500	1000	ND	ND	0.11 J	0.36 J	0.28 J	0.021 J
Hexachlorobenzene	6	12	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NS	NS	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	NS	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	NS	ND	ND	ND	ND	ND	ND

Notes:

F1:MS and/or MSD recovery exceeds control limits

ND: Not Detected

J: Estimated Value

NS: No Standard

N: presumptive evidence of a compound

Table 1

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

January 2018 Soil Analytical Results

Station Name	NY Commercial Soil Cleanup Criteria (CSCC)	NY Industrial Soil Cleanup Criteria (ISCC)	SB-101	SB-101	SB-102	SB-102	SB-103	SB-104
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Depth			0 -2 in	15 - 15.5 ft	0 -2 in	15 - 15.5 ft	0 -2 in	0 -2 in
Date			1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018
Lab Sample ID			460-149327-1	460-149327-2	460-149327-3	460-149327-4	460-149327-5	460-149327-6
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Semi-VOAs (continued)								
Indeno(1,2,3-cd)pyrene	5.6	11	0.29	ND	0.88	1.1	1.1	0.44
Isophorone	NS	NS	ND	ND	ND	ND	ND	ND
Naphthalene	500	1000	ND	ND	0.12 J	0.22 J	0.21 J	0.027 J
Nitrobenzene	69	140	ND	ND	ND	ND	ND	ND
N-Nitroso-di-N-propylamine	NS	NS	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS	NS	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	500	1000	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	55	ND	ND	ND	ND	ND	ND
Phenanthrene	500	1000	0.13 J	ND	1.3	2.8	2.4	0.29 J
Phenol	500	1000	ND	ND	ND	ND	ND	ND
Pyrene	500	1000	0.44 J	ND	2.3	4	3.3	1.1
Total TIC, Semi-Volatile	NS	NS	23.74 J	17.36 J	7.76 J	10.61 J	15.74 J	35.13 J
VOAs								
1,1,1-Trichloroethane	500	1000	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	NS	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	NS	ND	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	NS	NS	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	480	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	500	1000	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NS	NS	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	NS	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	NS	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	500	1000	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	30	60	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	NS	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	280	560	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	130	250	ND	ND	ND	ND	ND	ND
1,4-Dioxane	130	250	ND	ND	ND	ND	ND	ND
2-Hexanone	NS	NS	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	NS	ND	ND	ND	ND	ND	ND
Acetone	NS	NS	ND	0.068	0.026	0.069	ND	ND
Benzene	500	1000	ND	ND	ND	ND	ND	ND
Bromochloromethane	44	89	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	NS	ND	ND	ND	ND	ND	ND
Bromoform	NS	NS	ND	ND	ND	ND	ND	ND
Bromomethane	NS	NS	ND	ND	ND	ND	ND	ND
Carbon disulfide	22	44	ND	0.00072 J	ND	ND	ND	ND
Carbon tetrachloride	500	1000	ND	ND	ND	ND	ND	ND
Chlorobenzene	NS	NS	ND	ND	ND	ND	ND	ND
Chloroethane	NS	NS	ND	ND	ND	ND	ND	ND
Chloroform	NS	NS	ND	ND	ND	ND	ND	ND
Chloromethane	350	700	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NS	NS	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	500	1000	ND	ND	ND	ND	ND	ND
Cyclohexane	NS	NS	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NS	NS	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NS	NS	ND	ND	ND	ND	ND	ND
Ethylbenzene	NS	NS	ND	ND	ND	ND	ND	ND
Ethylene dibromide	390	780	ND	ND	ND	ND	ND	ND
Isopropyl benzene	NS	NS	ND	ND	ND	ND	ND	ND
m,p-Xylene	NS	NS	ND	0.00035 J	ND	0.00022 J	ND	ND
Methyl acetate	NS	NS	ND	ND	0.028	ND	ND	ND
Methyl ethyl ketone	500	1000	ND	0.019	ND	0.0074	ND	ND
Methyl tert butyl ether	NS	NS	ND	ND	ND	ND	ND	ND
Methylcyclohexane	500	1000	ND	ND	ND	ND	ND	ND
Methylene chloride	NS	NS	0.041	0.0067	0.0093	0.0048	0.014	0.022

Notes:

F1:MS and/or MSD recovery exceeds control limits

ND: Not Detected

J: Estimated Value

NS: No Standard

N: presumptive evidence of a compound

Table 1

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

January 2018 Soil Analytical Results

Station Name	NY Commercial Soil Cleanup Criteria (CSCC)	NY Industrial Soil Cleanup Criteria (ISCC)	SB-101	SB-101	SB-102	SB-102	SB-103	SB-104
Field Sample ID			SB-101A	SB-101B	SB-102A	SB-102B	SB-103A	SB-104A
Depth			0 -2 in	15 - 15.5 ft	0 -2 in	15 - 15.5 ft	0 -2 in	0 -2 in
Date			1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018	1/29/2018
Lab Sample ID			460-149327-1	460-149327-2	460-149327-3	460-149327-4	460-149327-5	460-149327-6
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOAs								
o-Xylene	NS	NS	ND	0.00015 J	ND	ND	ND	ND
Styrene	NS	NS	ND	ND	ND	ND	ND	ND
Tetrachloroethene	150	300	ND	ND	0.00044 J	0.0053	ND	ND
Toluene	500	1000	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	500	1000	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	NS	ND	ND	ND	ND	ND	ND
Trichloroethene	200	400	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NS	NS	ND	ND	0.00094 J	ND	ND	ND
Vinylchloride	13	27	ND	ND	ND	ND	ND	ND
Xylene (Total)	NS	NS	ND	0.0005	ND	0.00022	ND	ND
Total TIC, Volatile	NS	NS	0.037 J N	0	0.011 J N	0.2624 J N	0	0

Notes:

ND: Not Detected

NS: No Standard

F1:MS and/or MSD recovery exceeds control limits

J: Estimated Value

N: presumptive evidence of a compound

Table 2

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

June 2018 Groundwater Analytical Results

Station Name	NYS AWQSG (ppb)	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-5	MW-5	Dup-1 (MW-5)	FB-B	FB-P	TB
Field Sample ID		MW-1	MW-1 (dissolved)	MW-2	MW-2 (dissolved)	MW-3	MW-3 (dissolved)	MW-4	MW-4 (dissolved)	MW-5	MW-5 (dissolved)	Dup-1	FB-B	FB-P	TB
Lab Sample ID		460-157993-4	460-157993-4	460-157993-7	460-157993-7	460-157993-8	460-157993-8	460-157993-9	460-157993-9	460-157993-5	460-157993-5	460-157993-6	460-157993-2	460-157993-1	460-157993-3
Date		6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018
Matrix		Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Water	Water	Water
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Metals															
Aluminum	NS	ND	ND	36 J	ND	146	29.6 J	285	34.3 J	19.9 J	ND	28.3 J	ND	ND	NA
Antimony	3	ND	ND	2.8	1.4 J	1.7 J	1.2 J	6.2	5	0.72 J	ND	ND	ND	ND	NA
Arsenic	25	1.1 J	ND	5.7	1.4 J	25.3	4.8	6	3.2	7.2	1.1 J	5.8	ND	ND	NA
Barium	1,000	1510	1170	854	653	256	125	249	218	222	201	268	ND	ND	NA
Beryllium	3	ND	ND	ND	ND	0.76 J	ND	ND	ND	ND	ND	ND	ND	ND	NA
Cadmium	4	ND	ND	ND	ND	ND	ND	0.63 J	ND	0.61 J	ND	ND	ND	ND	NA
Calcium	NS	162000	180000	181000	200000	118000	145000	123000	135000	207000	220000	179000	ND	ND	NA
Chromium	49	ND	ND	2.8 J	ND	2.4 J	1.3 J	3.3 J	1.5 J	ND	ND	ND	ND	ND	NA
Cobalt	NS	ND	ND	ND	ND	ND	ND	ND	ND	4.9	2.4 J	4.5	ND	ND	NA
Copper	200	ND	ND	13.9	3.6 J	43.2	25	255	102	25	16.1	28.1	ND	ND	NA
Iron	500	22700	ND	31700	72.4 J	15800	1340	3690	367	4620	ND	5100	ND	ND	NA
Lead	25	0.68 J	ND	24.4	ND	34.5	1.5	89	5.4	4.5	ND	4.9	ND	ND	NA
Magnesium	35,000	40400	37200	24900	23400	17200	18700	17200	16700	35200	32000	32500	ND	ND	NA
Manganese	500	426	381	484	438	180	178	96.8	58.7	826	707	838	ND	ND	NA
Mercury	0.7	ND	ND	ND	ND	ND	ND	0.27	ND	ND	ND	ND	ND	ND	NA
Nickel	100	ND	ND	27.3	18.9	9.6	8.1	25.7	18.8	10.3	8.5	9.7	ND	ND	NA
Potassium	NS	41700	43600	124000	130000	85400	101000	49000	51200	49300	49600	45100	ND	ND	NA
Selenium	10	ND	ND	ND	ND	1 J	0.69 J	0.81 J	ND	ND	ND	ND	ND	ND	NA
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Sodium	20,000	134000	124000	32400	32000	18800	20200	24200	15200	72100	65200	71600	266	270	NA
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Vanadium	NS	ND	ND	2.6 J	ND	8.5	2.5 J	3.6 J	1.7 J	1.7 J	ND	1.6 J	ND	ND	NA
Zinc	2,000	ND	ND	255	72.1	143	85.5	295	197	230	165	200	ND	ND	NA
Other															
PFOS (ng/L)	NS	4.73	NA	5.76	NA	6.03	NA	37	NA	3.71	NA	3.64	0.42 J	0.41 J	NA
Total Cyanide (mg/L)	200	ND	NA	0.0037 J	NA	0.0036 J	NA	0.0032 J	NA	ND	NA	ND	ND	ND	NA
PCBs															
Aroclor (Total)	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1016	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1221	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1232	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1242	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1248	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1254	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1260	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1262	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aroclor-1268	0.09	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Pesticides															
4,4'-DDD	0.30	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
4,4'-DDE	0.20	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
4,4'-DDT	0.20	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Aldrin	ND	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Alpha-BHC	0.01	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Beta-BHC	0.04	0.027	NA	ND	NA	0.018 J	NA	ND	NA	ND	NA	ND	ND	ND	NA
Delta-BHC	0.04	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Dieldrin	0.004	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endosulfan I	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endosulfan II	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endosulfan Sulfate	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endrin	ND	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endrin Aldehyde	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Endrin Ketone	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Gamma-BHC	0.05	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Heptachlor	0.04	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Heptachlor Epoxide	0.03	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Methoxychlor	35	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Technical Chlordane	0.05	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
Toxaphene	0.06	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
PFAS (ng/L)															
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	NS	ND	NA	0.65 B,J	NA	0.61 B,J	NA	0.78 B,J	NA	ND	NA	0.61 B,J	ND	0.67 B,J	NA
6:2 FTS	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NS	0.59 J	NA	ND	NA	0.56 J	NA	0.51 J	NA	0.57 J	NA	ND	ND	0.62 J	NA
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NS	ND	NA	ND	NA	ND	NA	0.62 J	NA	0.66 J	NA	0.7 J	0.66 J	0.72 J	NA
Perfluoroheptanesulfonic Acid (PFHpS)	NS	0.52 J	NA	ND	NA	0.5 J	NA	0.61 J	NA	ND	NA	0.56 J	ND	ND	NA
PFBA	NS	39.3 B	NA	13 B	NA	16.7 B	NA	26.4 B	NA	32.3 B	NA	42.6 B	0.64 B,J	ND	NA
PFBS	NS	5.81	NA	6.94	NA	7.74	NA	6.39	NA	4.71	NA	7.72	ND	ND	NA
PFDA	NS	0.52 J	NA	0.62 J	NA	0.39 J	NA	0.89 J	NA	0.49 J	NA	ND	ND	ND	NA
PFDoA	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
PFDS	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
PFHpA	NS	3.35 B	NA	1.83 B	NA	3.75 B	NA	4.39 B	NA	2.86 B	NA	2.63 B	0.53 B,J	0.41 B,J	NA
PFHxA	NS	4.22 B	NA	1.92 B	NA	5.69 B	NA	4.79 B	NA	4.75 B	NA	4.29 B	0.98 B,J	0.82 B,J	NA
PFHxS	NS	2.88 B	NA	2.68 B	NA	1.35 B,J	NA	2.55 B	NA	2.73 B	NA	2.5 B	1.13 B,J	1.15 B,J	NA
PFNA	NS	1.24 B,J	NA	1.8 B	NA	2.46 B	NA	2.51 B	NA	1.55 B,J	NA	1.66 B,J	0.74 B,J	0.67 B,J	NA
PFOA	NS	18.4 B	NA	7.66 B	NA	8.73 B	NA	12 B	NA	11.2 B	NA	13 B	1.1 B,J	1.02 B,J	NA
PFOSA	NS	0.62 B,J	NA	0.57 B,J	NA	0.59 B,J	NA	0.58 B,J	NA	0.61 B,J	NA	0.57 B,J	ND	0.68 B,J	NA
PFPeA	NS	25.5 B	NA	12 B	NA	2.4 B	NA	3.24 B	NA	16 B	NA	7.55 B	0.9 B,J	1.25 B,J	NA
PFTeDA	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
PFTrDA	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	NA
PFUnA	NS	ND	NA	ND	NA	0.39 B,J	NA	ND	NA	ND	NA	ND	ND	ND	NA

Notes:

NA: Not Analyzed

ND: Not Detected

NS: No Standard

N: presumptive evidence of a compound

J: Estimated value

B: Analyte detected in blank and sample

Table 2

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

June 2018 Groundwater Analytical Results

Station Name	NYS AWQSG (ppb)	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-5	MW-5	Dup-1 (MW-5)	FB-B	FB-P	TB
Field Sample ID		MW-1	MW-1 (dissolved)	MW-2	MW-2 (dissolved)	MW-3	MW-3 (dissolved)	MW-4	MW-4 (dissolved)	MW-5	MW-5 (dissolved)	Dup-1	FB-B	FB-P	TB
Lab Sample ID		460-157993-4	460-157993-4	460-157993-7	460-157993-7	460-157993-8	460-157993-8	460-157993-9	460-157993-9	460-157993-5	460-157993-5	460-157993-6	460-157993-2	460-157993-1	460-157993-3
Date		6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018
Matrix		Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Water	Water	Water
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Semi-VOAs															
1,1'-Biphenyl	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2,4,5-Tetrachlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,3,4,6-Tetrachlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4,5-Trichlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4,6-Trichlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dichlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dimethylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dinitrophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2,6-Dinitrotoluene	5	ND	140	ND	87	ND	7.4	ND	82	ND	90	ND	ND	ND	NA
2-Chloronaphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2-Chlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2-Methylnaphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2-Methylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2-Nitroaniline	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
2-Nitrophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
3,3'-Dichlorobenzidine	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
3-Nitroaniline	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4,6-Dinitro-2-methylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Chloroaniline	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Methylphenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Nitroaniline	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
4-Nitrophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Acenaphthene	20	3.4 J	3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Acenaphthylene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Acetophenone	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Anthracene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Atrazine	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Benzaldehyde	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1 J	2.1 J	NA
Benzo(a)anthracene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Benzo(a)pyrene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Benzo(b)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Benzo(g,h,i)perylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Chloroethoxy)methane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Chloroethyl)ether	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Chloroisopropyl)ether	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Ethylhexyl)phthalate	5	ND	ND	1.8 J	ND	2.7	3.8	ND	2.4	2	ND	ND	ND	ND	NA
Butyl benzyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Caprolactam	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Carbazole	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Chrysene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Dibenz(a,h)anthracene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Dibenzofuran	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Diethylphthalate	50	ND	10	ND	6.9 J	ND	1.1 J	ND	5.6 J	ND	6.9 J	ND	ND	ND	NA
Dimethyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Di-N-Butyl phthalate	50	ND	2 J	ND	2.9 J	ND	ND	ND	3.4 J	ND	1.5 J	ND	ND	ND	NA
Di-N-Octyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Fluoranthene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Fluorene	50	2.3 J	2.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Hexachlorobutadiene	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Hexachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Indeno(1,2,3-cd)pyrene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Isophorone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Nitrobenzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
N-Nitroso-di-N-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
N-Nitrosodiphenylamine	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
p-Chloro-m-cresol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Pentachlorophenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Phenanthrene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Phenol	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Pyrene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Total TIC, Semi-Volatile	NS	0	NA	0	NA	0	NA	0	NA	0	NA	0	0	0	NA
VOAs															
1,1,1-Trichloroethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND

Notes:

NA: Not Analyzed

ND: Not Detected

NS: No Standard

N: presumptive evidence of a compound

J: Estimated value

B: Analyte detected in blank and sample

Table 2

G S New Rochelle

70 Nardozzi Place, New Rochelle, NY

June 2018 Groundwater Analytical Results

Station Name	NYS AWQSG (ppb)	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-5	MW-5	Dup-1 (MW-5)	FB-B	FB-P	TB
Field Sample ID		MW-1	MW-1 (dissolved)	MW-2	MW-2 (dissolved)	MW-3	MW-3 (dissolved)	MW-4	MW-4 (dissolved)	MW-5	MW-5 (dissolved)	Dup-1	FB-B	FB-P	TB
Lab Sample ID		460-157993-4	460-157993-4	460-157993-7	460-157993-7	460-157993-8	460-157993-8	460-157993-9	460-157993-9	460-157993-5	460-157993-5	460-157993-6	460-157993-2	460-157993-1	460-157993-3
Date		6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018	6/8/2018
Matrix		Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Water	Water	Water
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOAs (continued)															
1,2-Dichloroethane	0.6	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
1,4-Dioxane	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
2-Hexanone	50	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Acetone	50	11	NA	15	NA	9.8	NA	27	NA	ND	NA	ND	5.6	6	ND
Benzene	1	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Bromochloromethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Bromodichloromethane	50	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Bromoform	50	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Bromomethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Carbon disulfide	NS	ND	NA	0.25 J	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Carbon tetrachloride	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Chlorobenzene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Chloroethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Chloroform	7	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Chloromethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Cyclohexane	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Dibromochloromethane	50	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Ethylbenzene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Ethylene dibromide	6 x 10^-4	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Isopropyl benzene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
m,p-Xylene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Methyl acetate	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Methyl ethyl ketone	50	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Methyl tert butyl ether	10	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Methylcyclohexane	NS	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Methylene chloride	5	0.57 J	NA	0.64 J	NA	1	NA	NA	0.78 J	ND	NA	ND	1.8	1.9	0.77 J
o-Xylene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Styrene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Tetrachloroethene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Toluene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	1.1	1.2	1.1
trans-1,2-Dichloroethene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Trichloroethene	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Vinylchloride	2	ND	NA	ND	NA	0.38 J	NA	ND	NA	ND	NA	ND	ND	ND	ND
Xylene (Total)	5	ND	NA	ND	NA	ND	NA	ND	NA	ND	NA	ND	ND	ND	ND
Total TIC, Volatile	NS	6.7 J N	NA	0	NA	0	NA	0	NA	0	NA	5.5 J N	0	0	0

Notes:

NA: Not Analyzed

ND: Not Detected

NS: No Standard

N: presumptive evidence of a compound

J: Estimated value

B: Analyte detected in blank and sample

Boring Logs

JM Sorge, Inc.
environmental consultants

SB-101

(Page 1 of 1)

Project Adddress: 70 Nardozzi Place New Rochelle, NY	Date Started	: 01/29/2018	Drilling Company	: Hawk
	Date Completed	: 01/29/2018	Driller Name	: Mike V.
	Hole Diameter	: 2 in.	Driller Method	: Direct Push
Project Name: GSI New Rochelle	Sampling Method	: Grab	Project Manager	: J. Vander Vliet
Project # 2015.191	Depth to Groundwater	: N/A	JMS Inspector	: J. Yost

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Moisture	PID Reading (ppm)	REMARKS
0			Topsoil with organic matter	Moist	0.0	0-5 ft bgs 4 ft recovery SB-101A @ 0.0-2.0 in bgs 09:20
1	ML		Dark brown, SANDY SILT WITH GRAVEL			
	SW		Tan, SAND, coarse grained			
2			Dark brownish black, SILTY GRAVEL WITH SAND, some wood debris	Moist	0.0	
3						
4				Moist	0.0	
5	GM					5-10 ft bgs 2 ft recovery
6				Moist	0.0	
7						
8			Dark brownish black, LEAN CLAY, traces of gravel	Moist	0.0	
9						
10	CL			Wet	0.0	10-15 ft bgs 4.5 ft recovery
11						
12			Medium brown, LEAN CLAY, traces of fine sand	Moist	0.0	
13						
14	CL			Moist	0.0	
15						15-20 ft bgs 3 ft recovery SB-101B @ 15.0-15.5 ft bgs 09:30
16			Gray, CLAYEY SAND, coarse grained	Moist	0.0	
17						
18	SM			Moist	0.0	
19						
20			End of Boring @ 20 ft bgs			

JM Sorge, Inc.
environmental consultants

SB-102

(Page 1 of 1)

Project Adddress:
70 Nardozzi Place
New Rochelle, NY

Project Name: GSI New Rochelle

Project # 2015.191

Date Started	: 01/29/2018	Drilling Company	: Hawk
Date Completed	: 01/29/2018	Driller Name	: Mike V.
Hole Diameter	: 2 in.	Driller Method	: Direct Push
Sampling Method	: Grab	Project Manager	: J. Vander Vliet
Depth to Groundwater	: N/A	JMS Inspector	: J. Yost

Depth in Feet	USCS	GRAPHIC	Legend: / DESCRIPTION	Moisture	PID Reading (ppm)	REMARKS	Depth in Feet
0	SM		Medium brown, SILTY SAND, fill (brick, plastic, wood, gravel, glass)	Dry	0.0	0-5 ft bgs 3 ft recovery SB-102A @ 0.0-2.0 in bgs 10:45	0
1							1
2				Dry	0.0		2
3							3
4				Dry	0.0		4
5						5-10 ft bgs 3.5 ft recovery	5
6				Dry	0.0		6
7							7
8				Dry	0.0		8
9							9
10				Dry	0.0	10-15 ft bgs 4.5 ft recovery	10
11							11
12				Dry	0.0		12
13							13
14				Dry	0.0		14
15						SB-102B @ 15.0-15.5 ft bgs 10:55	15
16			End of Boring @ 15.5 ft bgs (refusal)				16

Purge Sheets

LOW FLOW SAMPLING
DATA SHEET

SHEET 1 of 1

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 70° Clear

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____
Signature

MONITOR WELL #: MW-1 WELL DEPTH: 12' SCREENED/OPEN INTERVAL: 2'-12'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 9.2 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 3.3 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
10:34	X		6.88	NA	4.32	NA	-121	NA	16.47	NA	11	NA	25	NA	150	3.23
10:37	X		6.86	0.02	1.89	56%	-130	9	0.40	98%	6.9	37%	25.32	1%	150	3.23
10:40	X		6.8	0.06	1.88	1%	-131	1	0.00	100%	6.7	3%	22.09	13%	150	3.23
10:43	X		6.82	0.02	1.92	2%	-132	1	0.00	0%	5.6	16%	22.47	2%	150	3.23
10:46	X		6.81	0.01	1.94	1%	-131	1	0.00	0%	4.4	21%	21.18	6%	150	3.23
10:49	X		6.81	0	1.96	1%	-131	0	0.00	0%	2.8	36%	20	6%	150	3.23
10:52	X		6.82	0.01	1.96	0%	-131	0	0.00	0%	2.7	4%	19.86	1%	150	3.23
10:55	X		6.82	0	1.89	4%	-131	0	0.00	0%	5.3	96%	21.53	8%	150	3.23
10:58	X		6.83	0.01	1.87	1%	-131	0	0.00	0%	6.8	28%	22.55	5%	150	3.23
11:01	X		6.85	0.02	1.86	1%	-131	0	0.00	0%	6.3	7%	22.94	2%	150	3.23
11:04	X		6.87	0.02	1.84	1%	-130	1	0.00	0%	6.2	2%	22.46	2%	150	3.23
11:07	X		6.86	0.01	1.84	0%	-130	0	0.00	0%	6.5	5%	22.37	0%	150	3.23
11:10		X														

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____

Date: _____

LOW FLOW SAMPLING
DATA SHEET

SHEET 1 of 1

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 80° Sunny

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____ Signature

MONITOR WELL #: MW-2 WELL DEPTH: 13.4' SCREENED/OPEN INTERVAL: 3.4'-13.4'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 8.4 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 3.3 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
12:09	X		6.74	NA	1.51	NA	4	NA	7.78	NA	49	NA	30.68	NA	190	7.27
12:12	X		6.61	0.13	1.45	4%	-27	31	0.39	95%	32	35%	29.91	3%	150	7.27
12:15	X		6.61	0.00	1.46	1%	-35	8	0.00	100%	29	9%	29.51	1%	150	7.27
12:18	X		6.61	0.00	1.46	0%	-46	9	0.00	0%	29	0%	29.17	1%	150	7.25
12:21	X		6.61	0.00	1.47	1%	-56	10	0.00	0%	31	7%	28.89	1%	150	7.25
12:24	X		6.61	0.00	1.47	0%	-61	5	0.00	0%	32	3%	28.84	0%	150	7.25
12:27	X		6.61	0.00	1.47	0%	-68	7	0.00	0%	30	6%	28.64	1%	150	7.25
12:30	X		6.62	0.01	1.48	1%	-76	8	0.00	0%	30	0%	28.61	0%	150	7.25
12:33	X		6.62	0.00	1.49	1%	-82	6	0.00	0%	31	3%	28.64	0%	150	7.25
12:36	X		6.62	0.00	1.49	0%	-87	5	0.00	0%	32	3%	28.63	0%	150	7.25
12:39	X		6.63	0.01	1.5	1%	-90	3	0.00	0%	28	13%	28.58	0%	150	7.25
12:42	X		6.63	0.00	1.49	1%	-95	5	0.00	0%	27	4%	28.43	1%	150	7.25
12:45	X		6.63	0.00	1.5	1%	-98	3	0.00	0%	25	7%	28.42	0%	150	7.25
12:48		X														

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____

Date: _____

LOW FLOW SAMPLING
DATA SHEET

SHEET 1 of 1

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 70° Clear

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____ Signature

MONITOR WELL #: MW-3 WELL DEPTH: 13' SCREENED/OPEN INTERVAL: 3'-13'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 8 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 6.6 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
13:43	X		6.76	NA	0.733	NA	-78	NA	3.7	NA	48	NA	31.35	NA	150	6.67
13:46	X		6.64	0.12	0.737	1%	-90	12	0.00	100%	33	31%	29.24	7%	150	6.67
13:49	X		6.62	0.02	0.745	1%	-93	3	0.00	0%	24	27%	27.75	5%	150	6.67
13:52	X		6.62	0	0.75	1%	-96	3	0.00	0%	19	21%	27.12	2%	150	6.67
13:55	X		6.62	0	0.753	0%	-97	1	0.00	0%	19	0%	26.63	2%	150	6.67
13:58	X		6.62	0	0.756	0%	-98	1	0.00	0%	16	16%	26.35	1%	150	6.67
14:01	X		6.62	0	0.763	1%	-99	1	0.00	0%	17	6%	26.2	1%	150	6.67
14:04	X		6.61	0.01	0.764	0%	-99	0	0.00	0%	18	6%	25.98	1%	150	6.67
14:07		X														

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____

Date: _____

LOW FLOW SAMPLING
DATA SHEET

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 80° Sunny

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____ Signature

MONITOR WELL #: MW-4 WELL DEPTH: 12' SCREENED/OPEN INTERVAL: 2'-12'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 9.4 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 7.1 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
14:00	X		7.17	NA	0.547	NA	151	NA	1.98	NA	345	NA	37.45	NA	200	7.25
14:05	X		7.08	0.09	0.556	2%	147	4	2.51	27%	240	30%	31.86	15%	200	7.25
14:10	X		6.96	0.12	0.568	2%	133	14	2.37	6%	113	53%	28.28	11%	200	7.35
14:15	X		6.9	0.06	0.585	3%	121	12	2.32	2%	108	4%	26.5	6%	200	7.37
14:20	X		6.81	0.09	0.626	7%	113	8	2.19	6%	39.5	63%	25.38	4%	200	7.41
14:25	X		6.69	0.12	0.612	2%	116	3	1.82	17%	21.2	46%	26.92	6%	200	7.43
14:30	X		6.68	0.01	0.63	3%	118	2	1.77	3%	20.2	5%	25.6	5%	200	7.5
14:35	X		6.67	0.01	0.625	1%	115	3	1.44	19%	14.6	28%	26.27	3%	200	7.5
14:40	X		6.71	0.04	0.645	3%	107	8	1.16	19%	12.6	14%	25.36	3%	200	7.55
14:45	X		6.74	0.03	0.65	1%	104	3	1.00	14%	21.4	70%	24.88	2%	200	7.55
14:50	X		6.8	0.06	0.651	0%	103	1	0.84	16%	15.2	29%	25.16	1%	200	7.55
14:55	X		6.87	0.07	0.649	0%	98	5	0.72	14%	14.5	5%	25.37	1%	200	7.55
15:00	X		6.92	0.05	0.644	1%	86	8	0.60	17%	17.1	18%	25.22	1%	200	7.55
15:05	X		6.95	0.03	0.65	1%	79	7	0.6	0%	15.7	8%	24.74	2%	200	7.55

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____

Date: _____

LOW FLOW SAMPLING
DATA SHEET

SHEET 2 of 2

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 80° Sunny

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____ Signature

MONITOR WELL #: MW-4 WELL DEPTH: 12' SCREENED/OPEN INTERVAL: 2'-12'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 9.4 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 7.1 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
				NA		NA		NA		NA		NA		NA		
15:05	X		6.95	0.03	0.65	1%	79	7	0.6	0%	15.7	8%	24.74	2%	200	7.55
15:10	X		6.98	0.03	0.661	2%	73	6	0.41	32%	14.8	6%	24.15	2%	200	7.55
15:15	X		6.99	0.01	0.668	1%	75	2	0.34	17%	19.5	32%	23.66	2%	200	7.55
15:20	X		7.01	0.02	0.677	1%	75	0	0.30	12%	23.5	21%	23.71	0%	200	7.55
15:25	X		7.04	0.03	0.689	2%	80	5	0.26	13%	14.1	40%	23.68	0%	200	7.55
15:30	X		7.08	0.04	0.678	2%	81	1	0.24	8%	6.6	53%	23.71	0%	200	7.55
15:35	X		7.12	0.04	0.685	1%	78	3	0.22	8%	6.8	3%	24.04	1%	200	7.55
15:40	X		7.15	0.03	0.689	1%	75	3	0.21	5%	6.8	0%	23.91	1%	200	7.55
15:45		X														

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____
Date: _____

LOW FLOW SAMPLING
DATA SHEET

SHEET 1 of 1

JOB NUMBER: 2015.191
DATE: 6/8/2018
WEATHER: 80° Sunny

CONSULTING FIRM/LABORATORY: **JM Sorge, Inc. - NJDEP Lab Cert # 18012**
SAMPLER: _____ Signature

MONITOR WELL #: MW-5 WELL DEPTH: 12' SCREENED/OPEN INTERVAL: 2'-12'
WELL PERMIT #: _____ WELL DIAMETER: 4"

PID/FID READINGS (ppm):
BACKGROUND: 0.00
BENEATH OUTER CAP: 0.00
BENEATH INNER CAP: 0.00

PUMP INTAKE DEPTH: 10 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION: 8.85 ft below TOC

TIME	PURGING	SAMPLING	pH (pH Units) SM-4500-HB		Specific Conductivity (mS/cm) EPA 120.1		Redox Potential (mv)		Dissolved Oxygen (mg/L) SM-4500-OG		Turbidity (NTU) EPA 180.1		TEMPERATURE (degrees C) SM 2550-B		PUMPING RATE (ml/min) low flow	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
10:40	X		7.02	NA	1.25	NA	122	NA	0.73	NA	9.6	NA	27.15	NA	200	8.8
10:45	X		7.02	0.00	1.32	6%	-31	150	0.00	100%	6.5	32%	25.26	7%	200	9.04
10:50	X		7.03	0.01	1.38	5%	-41	10	0.00	0%	5.1	22%	24.87	2%	200	9.13
10:55	X		7.04	0.01	1.4	1%	-45	4	0.00	0%	5	2%	24.79	0%	250	9.19
11:00	X		7.06	0.02	1.43	2%	-50	5	0.00	0%	2.6	48%	24.79	0%	250	9.25
11:05	X		7.07	0.01	1.45	1%	-54	4	0.00	0%	7.7	196%	24.65	1%	250	9.3
11:10	X		7.1	0.03	1.44	1%	-51	3	0.00	0%	1.9	75%	24.93	1%	250	9.3
11:15	X		7.09	0.01	1.44	0%	-51	0	0.00	0%	1.9	0%	24.7	1%	250	9.33
11:20	X		7.08	0.01	1.42	1%	-51	0	0.00	0%	2.1	11%	24.58	0%	250	9.35
11:25		X	7.08	0.00	1.43	1%	-52	1	0.00	0%	2.2	5%	24.35	1%	250	9.35

COMMENTS:

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: +/- 0.1 for pH; +/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity.

Laboratory Manager: _____

Date: _____

Data Usability Summary Report

July 18, 2018

Mr. James Vander Vliet
J.M. Sorge, Inc.
57 Fourth Street
Somerville, NJ 08876

Re: Data Usability Summary Report –Test America – Edison and Burlington– Aqueous Samples

Dear Mr. Vander Vliet:

The evaluation of analytical data for organic and inorganic analysis parameters, by Test America – Edison, for six aqueous samples, two field blanks and one trip blank from the GIS New Rochelle Site, which were reported in a single data package under Job No. 460-157993-1, has been completed. The data package was received by ddms, inc. (ddms) for review, and the following samples were reported:

FB-P	FB-B	TB	MW-1	MW-5
Dup-1	MW-2	MW-3	MW-4	

Analyses were performed in accordance with USEPA Methods 8260C (Volatile Organic Compounds), 8270D (Semivolatile Organic Compounds), full scan and Selective Ion Monitoring (SIM), 8081B (Organochlorine Pesticides), 8082A (Polychlorinated Biphenyls [PCBs]), 6010C (metals), 7471B (Mercury), 9012B (total cyanide) and Modified EPA Method 537 (PFCs). ddms' review was performed, to the extent possible, in accordance with the analytical methods and "DER-10/Technical Guidance for Site Investigation and Remediation". Professional judgment was applied as necessary and appropriate. Qualifiers consistent with those defined by EPA Region 2 were applied as necessary and appropriate.

Samples were analyzed by TestAmerica Edison and Burlington Laboratories for the following analyses:

- 8260C (Volatile Organic Compounds),
- 8270D (Semivolatile Organic Compounds),
- 8081B (Organochlorine Pesticides),
- 8082A (Polychlorinated Biphenyls [PCBs]),
- 6010C (Metals), and 7471B (Mercury),
- 9012B (Total Cyanide) and
- Modified 537 (Perfluorinated Compounds)

Below is the Data Usability Summary Report (DUSR) associated with these samples.

	Data Usability Summary Report	
1.	Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	No – See Documentation Section
2.	Have all holding times been met?	Yes
3.	Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See Following Sections
4.	Have all of the data been generated using established and agreed upon analytical protocols?	See Documentation Section
5.	Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Yes
6.	Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes
7.	Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes

Based on the data review effort, results are usable, with the following qualifications:

- Methylene chloride and acetone in MW-1, MW-2, MW-3 and MW-4 were qualified as not detected (U) at the reporting limit, or reported value, whichever is greater due to blank contamination.

- The results for bromomethane in all samples were qualified as estimated (UJ) due to low response in the continuing calibration (CC).

- The results for hexachlorocyclopentadiene in MW-1, MW-2, MW-3, MW-4 and MW-5 (total and dissolved), and hexachlorocylcopentadiene and 2,4-dinitrophenol in FB-P and DUP-1 were qualified as estimated (UJ) due to low response in the CC.

- Sample results for semi-volatile organics were qualified as estimated (J-, UJ) due to low surrogate recoveries. Please refer to the table in Section B.2.

- Sample results for semi-volatile organics were qualified as estimated (J-, UJ) due to low LCS recoveries. Please refer to Section B.3.

- Sample results for semi-volatile organics were qualified as estimated (J or J-, UJ) due to low MS recoveries and/or imprecision between MS and MSD. Please refer to Section B.4.

- Based on professional judgment, the results for 2,6-dinitrotoluene in the dissolved fraction of MW-1, MW-2, MW-3, MW-4 and MW-5 were qualified as not detected (U) at the reporting limit due to poor spectral match.

- Based on professional judgment, the results for diethyl phthalate and di-n-butyl phthalate in the dissolved fraction of all samples were qualified as not detected (U) at the reporting limit or reported value, whichever is greater due to possible laboratory contamination.

- Based on professional judgment, the results for all dissolved BNAs in MW-1, MW-2, MW-3, MW-4 and MW-5 were qualified as estimated (J, UJ).

- The results for 1,4-dioxane in MW-1 and MW-5 were qualified as estimated (J) and presumptively present (N) because the ion ratio was outside the acceptance window.

- The results for all pesticide compounds in MW-3 were qualified as estimated (J-, UJ) due to low surrogate recoveries.

- The result for beta-BHC in MW-3 was qualified as tentatively identified (N) and estimated (J) based on high RPD between the two analytical column measurements.

- Results for all Aroclors in MW-2 and MW-3 were qualified as estimated (J-) due to low surrogate recoveries on both analytical columns.

- The results for total and dissolved calcium and potassium in MW-3 were qualified as estimated (J) because the dissolved concentration exceeded the total by more than ten percent.

- The results for cyanide in MW-2, MW-3 and MW-4 were qualified as estimated (J+) and may be biased high due to high recovery in the LCS.

- Based on professional judgment, the results for the compounds below, in all samples, were qualified as estimated (J, UJ) due to unacceptable percent differences in the low-level CC:

    - Perfluorobutanoic acid [PFBA]
    - Perfluorohexanoic acid [PFHxA]
    - Perfluorohexanesulfonic acid [PFHxS]
    - Perfluorodecanoic acid [PFDA]
    - Perfluorooctane Sulfonamide [PFOSA]
    - Perfluorotetradecanoic acid [PFTeA] D

- The result for perfluorobutanoic acid (PFBA) in MW-2 was qualified as estimated (J-) due to low recovery in the corresponding labeled surrogate recovery.

- The results for perfluorobutanesulfonic acid [PFBS] and perfluoropentanoic acid [PFPeA] in all site samples were qualified as estimated (J, UJ) due to imprecision between field duplicate samples.

All qualifiers are reflected on the laboratory Form Is included as Attachment A to this report. Only the pages documenting qualification of data have been included in this report. Region II qualifier definitions are also provided in the attachment. A copy of the chain of custody record is provided in Attachment B. Pages from the data package illustrating the exceedances and issues described in this validation report are included as Attachment C.

Review of TICs (tentatively identified compounds) was not performed as part of the Level 2B validation. These compounds are understood to be tentatively identified and associated concentrations are estimated, calculated using an assumed response factor of one. No reference standards were analyzed by the laboratory for the TICs associated with the site samples.

Documentation: A completeness review of the data package was performed, and the data package was determined to be a complete CLP-like data package for organics analyses. Issues observed during the review are detailed below:

- The chain of custody (COC) form provide does not specify reference methods, therefore, the validator assumed that the methods run by the laboratory were the requested methods.
- Initial calibration verification standards (ICVs) were included in the runlogs provided with the data package, however, no summary forms or raw data were provided for these ICVs. No assessment of the IC standard accuracy could be made against a second source.
- Based on the documentation for the dissolved semi-volatile organics, the filtration batch, prep log and prep batch QC association summary forms indicate that the method blank, LCS and LCSD were not filtered. Please refer to discussion below in the semi-volatile organic 'Total vs Dissolved' section.

Holding Times, Preservation, Sample Integrity:

A copy of the applicable chain of custody (COC) record was included in the data package, documenting a collection date of June 8, 2018. The samples were received by the laboratory on the same day as sample collection. All analytical method required holding times were met.

Field Duplicates

DUP-1 was submitted as a field duplicate of MW-5. Precision between paired samples was acceptable (RPD<30 for analytes 2X the reporting limit for organics and 5X the reporting limit for inorganics_ with the exception of perfluorobutanesulfonic acid (PFBS) [RPD=48] and perfluoropentanoic acid (PFPeA) [RPD=72]. The results for PFBS and PFPeA in all site samples were qualified as estimated (J, UJ) due to imprecision between field duplicate samples.

In the remaining sections of this report, only those quality excursions resulting in qualified data are discussed below. Quality control excursions having no impact to sample results are not discussed.

A. Volatile Organic Compounds

1. Calibration:

Initial (IC) and continuing calibrations (CC) were acceptable with the exception of bromomethane (22%D) in the CC analyzed on June 13, 2018. The response for bromomethane represents a decrease in instrument sensitivity. The results for bromomethane in all samples were qualified as estimated (UJ) due to low response in the CC.

According to the run log an initial calibration verification standard was analyzed, however, no data or summary forms were provided, therefore, the accuracy of the IC assessed against a second source could not be evaluated.

2. Blanks:

One method blank (MB) was prepared and analyzed with the site samples. No target analytes were detected in the MB. Two field blanks and one trip blank were submitted with the samples. The table below summarized the target analytes detected in the blanks. Sample results five times or less than the associated blank concentration were qualified as not detected (U) at the reporting limit, or reported value, whichever is greater.

Blank	Compound	Concentration (ug/L)	Samples Affected
Trip Blank (TB)	Methylene chloride	0.77	MW-1
Field Blank (FB-P)		1.9	MW-2
Field Blank (FB-B_		1.8	MW-3
			MW-4
Trip Blank (TB)	Toluene	1.1	none
Field Blank (FB-P)		1.2	
Field Blank (FB-B_		1.1	
Field Blank (FB-P)	Acetone	6.0	MW-1
Field Blank (FB-B)		5.6	MW-2
			MW-3
			MW-4

B. Semi-volatile Organic Compounds (Total and Dissolved)

1. Calibration:

Initial (IC) and continuing calibrations (CCs) were acceptable with the exception of those noted in the table below.

CC	Compound	%D	Samples Affected
BNAMS17 6/12/2018	Hexachlorocyclopentadiene	39	FB-P
	2,4-Dinitrophenol	22	DUP-1

BNAMS17 6/14/2018	Hexachlorocyclopentadiene	37	MW-1 (Total) MW-5 (Total) MW-2 (Total) MW-3 (Total) MW-4 (Total)
BNAMS18 6/12/2018	Hexachlorocyclopentadiene	29	MW-1 (Dissolved) MW-5 (Dissolved) MW-2 (Dissolved) MW-3 (Dissolved) MW-4 (Dissolved)

In all cases, the %D represents a decrease in instrument sensitivity. Results for these compounds were qualified as estimated (UJ) due low response in the associated CC.

2. Surrogates:

Six surrogates (fluorophenol-d_5 [2FP], phenol-d_5 [PHL], nitrobenzene-d_5 [NBZ], 2-fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], terphenyl-d_{14} [TPHL]) were used. The laboratory's acceptance limits are excessively wide and low; therefore, recoveries were assessed against validation criteria of 70-130%. Exceedances are detailed below:

Sample	**Surrogate**					
	Fluoro-biphenyl	**2-Fluoro-phenol**	**Phenol-d_5**	**2,4,6-Tribromo-phenol**	**Nitro-benzene-d_5**	**Terphenyl-d_{14}**
FB-B	a	42	23	a	a	a
FB-P	a	37	23	a	a	a
MW-1	a	45	29	a	a	a
MW-5	a	37	24	a	a	a
DUP-1	a	41	21	a	a	a
MW-2	a	38	24	a	a	a
MW-3	66	35	23	a	a	a
MW-4	68	36	23	a	a	a
MW-1 (Dissolved)	a	52	30	a	a	a
MW-5 (Dissolved)	a	43	29	a	a	a
MW-2 (Dissolved)	a	45	63	a	a	a
MW-3 (Dissolved)	51	31	19	46	62	56
MW-4 (Dissolved)	a	40	26	a	a	a

a-acceptable

The results for all acid extractable compounds in all samples noted above were qualified as estimated (J, UJ) because two or more surrogates recovered low, outside acceptance limits. The results for all compounds in MW-3 (Dissolved) were qualified as estimated (J-, UJ) because all six surrogates recovered low, outside acceptance limits. The results for the following compounds in MW-3 and MW-4 (Total) were qualified as estimated (J-, UJ) because the recovery of fluorobiphenyl was low, outside acceptance limits:

hexachlorobutadiene	2-methylnaphthalene	hexachlorocyclopentadiene
biphenyl	2-chloronaphthalene	2-nitroaniline
diethyl phthalate	2,6-dinitrotoluene	acenaphthylene
3-nitroaniline	acenaphthene	dibenzofuran
2,4-dinitrotoluene	dimethyl phthalate	fluorene
4-chlorophenylphenyl ether	4-nitroaniline	n-nitrosodiphenylamine

3. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

Sample results for one LCS associated with the sample analyses were reported in the data package. Percent recoveries were acceptable (70-130%R) with the exceptions below:

LCS/LCSD	Compound	LCS %R	LCSD %R	Samples Affected
460-527511/2+3	4-Nitrophenol	46		FB-B MW-1 MW-2 MW-3 MW-4 MW-5
	4-Methylphenol	68		
	Hexachlorocyclopentadiene	56		
	Hexachloroethane	68		
	Phenol	45		
	Caprolactam	23		
LCS 460-527098/2+3	2-Methylphenol	58		MW-1 (Dissolved) MW-2 (Dissolved) MW-3 (Dissolved) MW-4 (Dissolved) MW-5 (Dissolved)
	4-Methylphenol	52		
	4-Nitrophenol	36		
	Hexachlorocyclopentadiene	55		
	Phenol	33		
	Caprolactam	23		
LCS 527177/2+3	2-Methylphenol	68	62	FB-P DUP-1
	4-Methylphenol	59	54	
	4-Nitrophenol	36	31	
	Hexachlorocyclopentadiene	69	66	
	Phenol	36	31	
	Caprolactam	20	19	

Sample results were qualified as estimated (J-, UJ) due to low LCS and/or LCSD recoveries.

4. Matrix Spike/Matrix Spike Duplicate:

MS/MSD analyses were performed on MW-5 (total and dissolved). Percent recoveries and relative percent differences (RPDs) were acceptable (70-130%R, RPD,30) with the exceptions below:

Compound	MS %R	MSD %R	MS/MSD RPD
(Total)			
3,3'-Dichlorobenzidene	33	59	56
2-Methylphenol	a	66	a
3-Nitroaniline	68	a	a
4-Chloroaniline	62	66	a
4-Methylphenol	65	60	a
4-Nitrophenol	38	36	a
Atrazine	13	13	a
Benzaldehyde	0	0	a
Caprolactam	22	22	a
Hexachlorocyclopentadiene	63	60	a
Phenol	37	34	a
(Dissolved)			
2-Methylphenol	68	65	a
3,3'-Dichlorobenzidene	67	66	a
4-Methylphenol	56	50	a
4-Nitrophenol	35	30	a
Caprolactam	28	26	a
Hexachlorocyclopentadiene	65	57	a
Phenol	37	29	a
2-Chlorophenol	a	67	a

a = acceptable

Sample results were qualified as estimated (J-, UJ) due to low MS and/or MSD recoveries and/or high MS/MSD RPD. The results for benzaldehyde in the total fraction for all samples except the field blanks were rejected (R) because this compound was not recovered in the MS or MSD.

5. Total vs Dissolved

MW-1, MW-2, MW-3, MW-4 and MW-5 were submitted for total and dissolved base-neutral and acid extractable compounds (BNA). As discussed in the 'Documentation' section of this report, the documentation indicates that the quality control (QC) samples (method blank and LCS/LCSD) were not filtered. The laboratory was contacted and replied that the QC samples were filtered. The laboratory was requested to revise the analytical report to accurately document this, but has not provided the requested revision as of the writing of this report. As a result, the laboratory has not satisfactorily demonstrated that the QC samples were handled in the same manner as the samples; therefore, based on professional judgment, the results for all dissolved BNAs in MW-1, MW-2, MW-3, MW-4 and MW-5 were qualified as estimated (J, UJ).

Total vs dissolved concentrations exceeded with the following exceptions:

- 2,6-Dintrotoluene was reported in the dissolved fraction of all samples, but was not-detected in the total fraction. A review of the mass spectrum indicates poor spectral match. The laboratory was requested to delete the false positive, but did not agree that the reported detections were false positives. Based on professional judgment, the results for 2,6-

dinitrotoluene in all samples were qualified as not detected (U) at the reporting limit due to poor spectral match.

- Diethyl phthalate and di-n-butyl phthalate were detected in the dissolved fraction for all samples, but not detected in the corresponding total fraction. Additionally, the chromatograms for the dissolved fractions indicate non-target peaks that are not present in the corresponding total fraction. In the absence of confirmation that a filtered laboratory blank was performed and based on professional judgment, the results for diethyl phthalate and di-n-butyl phthalate in the dissolved fraction of all samples were qualified as not detected (U) at the reporting limit or reported value, whichever is greater due to possible laboratory contamination.

If the dissolved concentration exceeds the total concentration by less than ten percent (for analytes ≥2X the reporting limit), this difference can be attributed to experimental error and no qualification of sample results is warranted. Total vs dissolved concentrations, following the qualifications documented above, were acceptable.

C. Semi-volatile Organic Compounds - 1,4-Dioxane only

1. Target Compound Identification

For SIM analysis, reference ion ratios are determined during initial calibration using the integrated areas for the primary and secondary peaks at the established retention times. Identification in samples is made by verifying the ratio of the secondary ion to the primary. The results for 1,4-dioxane in MW-1 and MW-5 were qualified as estimated (J) and presumptively present (N) because the ion ratio was outside the acceptance window.

D. Chlorinated Pesticides

1. Surrogates:

The laboratory's acceptance limits are excessively wide and low; therefore, recoveries were assessed against validation criteria of 70-130%. Surrogate recoveries were acceptable, with the exception of DCBP and TCMX on both analytical columns in MW-3 (18-38%R). The results for all pesticide compounds in MW-3 were qualified as estimated (J-, UJ) due to low surrogate recoveries.

2. Compound Identification:

Compound identification is based upon agreement between analytical columns. The results for beta-BHC in MW-3 exceeded the validation criteria for dual-column agreement (25%RPD) and were qualified as tentatively identified (N) and estimated (J) based on high RPD between the two analytical column measurements. The 'J' qualifier takes precedence over the 'J-'qualifier applied due to low surrogate recoveries.

3. Compound Quantitation:

Compounds were correctly identified based on comparison of peak RTs with the reference standards.

E. Polychlorinated Biphenyls (PCBs) as Aroclors

1. Surrogates:

The laboratory's acceptance limits are excessively wide and low; therefore, recoveries were assessed against validation criteria of 70-130%. Surrogate recoveries were acceptable, with the following exceptions:

Sample	DCBP1	DCBP2
MW-2	57	59
MW-3	23	24

Results for all Aroclors in MW-2 and MW-3 were qualified as estimated (J-) due to low surrogate recoveries on both analytical columns.

F. Metals

1. Total vs Dissolved

If the dissolved concentration exceeds the total concentration by less than ten percent (for analytes ≥2X the reporting limit), this difference can be attributed to experimental error and no qualification of sample results is warranted. The total concentrations exceeded the dissolved concentrations in all samples with the exception of calcium (20%) and potassium in (17%) in Mw-3. The results for total and dissolved calcium and potassium in MW-3 were qualified as estimated (J) because the dissolved concentration exceeded the total by more than ten percent.

G. Cyanide

2. Laboratory Control Sample (LCS)

The recovery of cyanide in the LCS (118%) was outside acceptance limits (85-115%R). The results for cyanide in MW-2, MW-3 and MW-4 were qualified as estimated (J+) and may be biased high due to high recovery in the LCS.

H. Perfluorinated Compounds

1. Calibration

Initial (IC) and continuing calibrations (CC) were acceptable with the exception of the %D in the low-level CC standard for the following:

- Perfluorobutanoic acid [PFBA] - 27%D

- Perfluorohexanoic acid [PFHxA] - 38%D
- Perfluorohexanesulfonic acid [PFHxS] – 49%D
- Perfluorodecanoic acid [PFDA] – 23%D
- Perfluorooctane Sulfonamide [PFOSA] - 25%D
- Perfluorotetradecanoic acid [PFTeA] – 35%D

The low-level CC standard is used to demonstrate the viability of the reporting limit for each target compound. Based on professional judgment, the results for the compounds listed above, in all samples where the sample concentration is less than five times the reporting limit or non-detect, were qualified as estimated (J, UJ). Based on the variability of the low-level CC, the reporting limit may be higher or lower than reported.

2. Blanks

One MB was prepared and analyzed with the site samples. Two field blanks were submitted with the samples. The table below summarized the target analytes detected in the blanks. Sample results five times or less than the associated blank concentration were qualified as not detected (U) at the reporting limit, or reported value, whichever is greater. Where the sample concentration is greater than five that of the method blank, the validator removed the 'B' qualifier applied by the laboratory.

Blank	Analyte	Concentration (ng/L)	Samples Affected
Method Blank	Perfluorobutanoic acid (PFBA)	1.476	FB-B
	Perfluoroheptanoic acid (PFHpA)	0.351	FB-P FB-B
	Perfluorohexanesulfonic acid (PFHxS)	1.146	FB-P FB-B MW-1 MW-5 DUP-1 MW-2 MW-3 MW-4
	Perfluorohexanoic acid (PFHxA)	0.811	FB-P FB-B MW-2
	Perfluorononanoic acid (PFNA)	0.374	FB-P FB-B MW-1 MW-5 DUP-1 MW-2
	Perfluorooctane Sulfonamide (PFOSA)	0.686	FB-P MW-1

			MW-5 DUP-1 MW-2 MW-3 MW-4
	Perfluorooctanoic acid (PFOA)	0.659	FB-P FB-B
	Perfluoropentanoic acid (PFPeA)	0.893	FB-P FB-B MW-3 MW-4
	Perfluoroundecanoic acid (PFUnA)	0.465	MW-3 MW-4
	1H,1H,2H,2H-perfluorodecanesulfonic (8:2)	0.856	FB-P DUP-1 MW-2 MW-3 MW-4
FB-P	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.62	MW-1
FB-B		0.54	MW-5 MW-3 MW-4
FB-P	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.72	MW-5 MW-4DUP-1

3. Surrogate (Isotope Dilution Analyte) Recovery

Eighteen (18) isotopically labeled target analyte analogs were spiked into each field and quality control sample. The recovery of the labeled compound (surrogates) is used to quantitate the unlabeled target compound. Based on professional judgment, the result for perfluorobutanoic acid (PFBA) in MW-2 was qualified as estimated (J-) because the recovery of 13C4 PFBA (9%) was less than ten.

4. Matrix Spike/Matrix Spike Duplicate:

MS/MSD analyses were performed on MW-5. Percent recoveries and relative percent differences (RPDs) were acceptable (70-130%R, RPD,30) with the exceptions below:

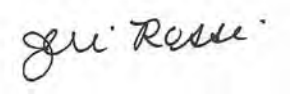
Compound	**MS %R**	**MSD %R**	**Corresponding Target Compound**	**Samples Affected**
Perfluorobutanesulfonic acid (PFBS)	138	138	Perfluorobutanesulfonic acid (PFBS)	DUP-1 MW-1 MW-2
Perfluoropentanoic acid (PFPeA)	63	63	Perfluoropentanoic acid (PFPeA)	MW-3 MW-4 MW-5

Sample results were qualified as estimated (J- or J+, UJ) due to MS/MSD recoveries outside acceptance limits.

Please feel free to contact me at (908) 370-3431 or jrossi@ddmsinc.com if you have any questions regarding this data package review report or need further information.

Sincerely,

de maximis Data Management Solutions, Inc.



Jeri L Rossi, CEAC
Sr. Environmental Chemist

ATTACHMENT A

ANNOTATED FORM 1s
Laboratory Job No. J157993

Client Sample ID: FB-P
Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 11:52	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 11:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 11:52	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 11:52	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 11:52	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 11:52	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 11:52	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 11:52	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 11:52	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 11:52	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 11:52	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 11:52	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 11:52	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 11:52	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 11:52	1
Acetone	6.0		5.0	5.0	ug/L			06/13/18 11:52	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 11:52	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 11:52	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 11:52	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 11:52	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 11:52	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 11:52	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 11:52	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 11:52	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 11:52	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 11:52	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 11:52	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 11:52	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 11:52	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 11:52	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 11:52	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 11:52	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 11:52	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 11:52	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 11:52	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 11:52	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 11:52	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 11:52	1
Methylene Chloride	1.9		1.0	0.32	ug/L			06/13/18 11:52	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 11:52	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 11:52	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 11:52	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 11:52	1
Toluene	1.2		1.0	0.38	ug/L			06/13/18 11:52	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 11:52	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 11:52	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 11:52	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 11:52	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 11:52	1

Client Sample ID: FB-P
Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 11:52	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 11:52	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 11:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 11:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*		*06/13/18 11:52*	*1*
4-Bromofluorobenzene	*101*		*77 - 124*		*06/13/18 11:52*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*06/13/18 11:52*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/13/18 11:52*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.21	0.017	ug/L		06/12/18 14:56	06/13/18 14:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*28*		*10 - 150*	*06/12/18 14:56*	*06/13/18 14:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:00	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/12/18 13:43	06/13/18 02:00	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/12/18 13:43	06/13/18 02:00	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:00	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		06/12/18 13:43	06/13/18 02:00	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		06/12/18 13:43	06/13/18 02:00	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Methylphenol	0.24	U	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/12/18 13:43	06/13/18 02:00	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/12/18 13:43	06/13/18 02:00	1
Acenaphthene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:00	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/12/18 13:43	06/13/18 02:00	1

Client Sample ID: FB-P
Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	0.79	U	10	0.79	ug/L		06/12/18 13:43	06/13/18 02:00	1
Anthracene	0.63	U	10	0.63	ug/L		06/12/18 13:43	06/13/18 02:00	1
Atrazine	1.3	U	2.0	1.3	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzaldehyde	2.1	J	10	0.59	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/12/18 13:43	06/13/18 02:00	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/12/18 13:43	06/13/18 02:00	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:00	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/12/18 13:43	06/13/18 02:00	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		06/12/18 13:43	06/13/18 02:00	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/12/18 13:43	06/13/18 02:00	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/12/18 13:43	06/13/18 02:00	1
Carbazole	0.68	U	10	0.68	ug/L		06/12/18 13:43	06/13/18 02:00	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/12/18 13:43	06/13/18 02:00	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/12/18 13:43	06/13/18 02:00	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:00	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/12/18 13:43	06/13/18 02:00	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/12/18 13:43	06/13/18 02:00	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/12/18 13:43	06/13/18 02:00	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/12/18 13:43	06/13/18 02:00	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/12/18 13:43	06/13/18 02:00	1
Fluorene	0.91	U	10	0.91	ug/L		06/12/18 13:43	06/13/18 02:00	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/12/18 13:43	06/13/18 02:00	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/12/18 13:43	06/13/18 02:00	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/12/18 13:43	06/13/18 02:00	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		06/12/18 13:43	06/13/18 02:00	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/12/18 13:43	06/13/18 02:00	1
Isophorone	0.80	U	10	0.80	ug/L		06/12/18 13:43	06/13/18 02:00	1
Naphthalene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:00	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/12/18 13:43	06/13/18 02:00	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/12/18 13:43	06/13/18 02:00	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/12/18 13:43	06/13/18 02:00	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 13:43	06/13/18 02:00	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/12/18 13:43	06/13/18 02:00	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 13:43	06/13/18 02:00	1
Pyrene	1.6	U	10	1.6	ug/L		06/12/18 13:43	06/13/18 02:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/12/18 13:43*	*06/13/18 02:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*26 - 139*	*06/12/18 13:43*	*06/13/18 02:00*	*1*
2-Fluorobiphenyl	*92*		*45 - 107*	*06/12/18 13:43*	*06/13/18 02:00*	*1*
2-Fluorophenol (Surr)	*42*		*25 - 58*	*06/12/18 13:43*	*06/13/18 02:00*	*1*
Nitrobenzene-d5 (Surr)	*92*		*51 - 108*	*06/12/18 13:43*	*06/13/18 02:00*	*1*
Phenol-d5 (Surr)	*23*		*14 - 39*	*06/12/18 13:43*	*06/13/18 02:00*	*1*
Terphenyl-d14 (Surr)	*110*		*40 - 148*	*06/12/18 13:43*	*06/13/18 02:00*	*1*

Client Sample ID: FB-P

Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:04	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:04	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:04	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:04	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 03:04	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:04	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 03:04	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:04	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:04	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:04	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 03:04	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:04	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:04	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:04	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:04*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:04*	*1*
Tetrachloro-m-xylene	*98*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:04*	*1*
Tetrachloro-m-xylene	*96*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:14	1
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:14	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*91*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:14*	*1*
DCB Decachlorobiphenyl	*90*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:14*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.62	J	1.77	0.53	ng/L		06/14/18 12:00	06/20/18 06:58	1

Client Sample ID: FB-P
Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.72	J	1.77	0.53	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorobutanesulfonic acid (PFBS)	0.78	U	1.77	0.78	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorobutanoic acid (PFBA)	0.39	UJ	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorodecanesulfonic acid (PFDS)	0.39	U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorodecanoic acid (PFDA)	0.39	UJ	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorododecanoic acid (PFDoA)	0.39	U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.39	U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluoroheptanoic acid (PFHpA)	1.77	~~0.41 JB~~ U	1.77	0.26	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorohexanesulfonic acid (PFHxS)	1.77	~~1.45 JB~~ UJ	1.77	0.25	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorohexanoic acid (PFHxA)	1.77	~~0.82 JB~~ UJ	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorononanoic acid (PFNA)	1.77	~~0.67 JB~~ U	1.77	0.23	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorooctane Sulfonamide (PFOSA)	1.77	~~0.68 JB~~ UJ	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorooctanesulfonic acid (PFOS)	0.41	J	1.77	0.27	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorooctanoic acid (PFOA)	1.77	~~1.62 JB~~ U	1.77	0.42	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluoropentanoic acid (PFPeA)	1.77	~~1.25 JB~~ U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorotetradecanoic acid (PFTeA)	0.39	UJ	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluorotridecanoic Acid (PFTriA)	0.39	U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
Perfluoroundecanoic acid (PFUnA)	0.39	U	1.77	0.39	ng/L		06/14/18 12:00	06/20/18 06:58	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.77	~~0.67 JB~~ U	1.77	0.53	ng/L		06/14/18 12:00	06/20/18 06:58	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.53	U	1.77	0.53	ng/L		06/14/18 12:00	06/20/18 06:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*93*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C2 PFDoA	*77*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C2 PFHxA	*109*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C2 PFUnA	*93*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C2-PFTeDA	*62*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C3-PFBS	*99*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C4 PFBA	*64*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C4 PFOA	*94*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C4 PFOS	*81*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C4-PFHpA	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C5 PFNA	*94*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C5-PFPeA	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
13C8 FOSA	*48*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
18O2 PFHxS	*88*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
d3-NMeFOSAA	*56*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
d5-NEtFOSAA	*68*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
M2-6:2FTS	*137*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*
M2-8:2FTS	*93*		*25 - 150*	*06/14/18 12:00*	*06/20/18 06:58*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		06/10/18 18:50	06/11/18 19:12	2

Client Sample ID: FB-P

Date Collected: 06/08/18 09:15
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-1
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.62	U	2.0	0.62	ug/L		06/10/18 18:50	06/11/18 19:12	2
Arsenic	0.77	U	2.0	0.77	ug/L		06/10/18 18:50	06/11/18 19:12	2
Barium	1.1	U	4.0	1.1	ug/L		06/10/18 18:50	06/11/18 19:12	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/10/18 18:50	06/11/18 19:12	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/10/18 18:50	06/11/18 19:12	2
Calcium	67.6	U	200	67.6	ug/L		06/10/18 18:50	06/11/18 19:12	2
Chromium	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:12	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:12	2
Copper	1.9	U	4.0	1.9	ug/L		06/10/18 18:50	06/11/18 19:12	2
Iron	45.7	U	120	45.7	ug/L		06/10/18 18:50	06/11/18 19:12	2
Lead	0.37	U	1.2	0.37	ug/L		06/10/18 18:50	06/11/18 19:12	2
Magnesium	65.7	U	200	65.7	ug/L		06/10/18 18:50	06/11/18 19:12	2
Manganese	2.7	U	8.0	2.7	ug/L		06/10/18 18:50	06/11/18 19:12	2
Nickel	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:12	2
Potassium	64.9	U	200	64.9	ug/L		06/10/18 18:50	06/11/18 19:12	2
Selenium	0.69	U	10.0	0.69	ug/L		06/10/18 18:50	06/11/18 19:12	2
Silver	1.4	U	2.0	1.4	ug/L		06/10/18 18:50	06/11/18 19:12	2
Sodium	270		200	75.7	ug/L		06/10/18 18:50	06/11/18 19:12	2
Thallium	0.24	U	0.80	0.24	ug/L		06/10/18 18:50	06/11/18 19:12	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/10/18 18:50	06/11/18 19:12	2
Zinc	5.4	U	16.0	5.4	ug/L		06/10/18 18:50	06/11/18 19:12	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		06/13/18 20:11	06/14/18 10:55	1

Client Sample ID: FB-B

Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 12:17	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 12:17	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 12:17	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 12:17	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 12:17	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 12:17	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 12:17	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 12:17	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 12:17	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 12:17	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 12:17	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 12:17	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 12:17	1

Client Sample ID: FB-B
Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 12:17	1
Acetone	5.6		5.0	5.0	ug/L			06/13/18 12:17	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 12:17	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 12:17	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 12:17	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 12:17	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 12:17	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 12:17	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 12:17	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 12:17	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 12:17	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 12:17	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 12:17	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 12:17	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 12:17	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 12:17	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 12:17	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 12:17	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 12:17	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 12:17	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 12:17	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 12:17	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 12:17	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 12:17	1
Methylene Chloride	1.8		1.0	0.32	ug/L			06/13/18 12:17	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 12:17	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 12:17	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 12:17	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 12:17	1
Toluene	1.1		1.0	0.38	ug/L			06/13/18 12:17	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 12:17	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 12:17	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 12:17	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 12:17	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 12:17	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 12:17	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 12:17	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 12:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 12:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*		*06/13/18 12:17*	*1*
4-Bromofluorobenzene	*101*		*77 - 124*		*06/13/18 12:17*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*06/13/18 12:17*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*06/13/18 12:17*	*1*

Client Sample ID: FB-B

Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017	U	0.21	0.017	ug/L		06/12/18 14:56	06/13/18 15:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*30*		*10 - 150*	*06/12/18 14:56*	*06/13/18 15:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 08:06	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 08:06	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/13/18 16:32	06/14/18 08:06	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 08:06	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 08:06	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		06/13/18 16:32	06/14/18 08:06	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/13/18 16:32	06/14/18 08:06	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/13/18 16:32	06/14/18 08:06	1
Acenaphthene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 08:06	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/13/18 16:32	06/14/18 08:06	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 08:06	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 08:06	1
Atrazine	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzaldehyde	2.1	J	10	0.59	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 08:06	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 08:06	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/13/18 16:32	06/14/18 08:06	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 08:06	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		06/13/18 16:32	06/14/18 08:06	1
Butyl benzyl phthalate	0.85	U J	10	0.85	ug/L		06/13/18 16:32	06/14/18 08:06	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/13/18 16:32	06/14/18 08:06	1

Client Sample ID: FB-B
Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 08:06	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 08:06	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 08:06	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 08:06	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 08:06	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 08:06	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 08:06	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 08:06	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 08:06	1
Fluorene	0.91	U	10	0.91	ug/L		06/13/18 16:32	06/14/18 08:06	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 08:06	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 08:06	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/13/18 16:32	06/14/18 08:06	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 08:06	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 08:06	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 08:06	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 08:06	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 08:06	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 08:06	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 08:06	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/13/18 16:32	06/14/18 08:06	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 08:06	1
Phenol	0.29	U J	10	0.29	ug/L		06/13/18 16:32	06/14/18 08:06	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 08:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 08:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*26 - 139*	*06/13/18 16:32*	*06/14/18 08:06*	*1*
2-Fluorobiphenyl	*73*		*45 - 107*	*06/13/18 16:32*	*06/14/18 08:06*	*1*
2-Fluorophenol (Surr)	*37*		*25 - 58*	*06/13/18 16:32*	*06/14/18 08:06*	*1*
Nitrobenzene-d5 (Surr)	*85*		*51 - 108*	*06/13/18 16:32*	*06/14/18 08:06*	*1*
Phenol-d5 (Surr)	*23*		*14 - 39*	*06/13/18 16:32*	*06/14/18 08:06*	*1*
Terphenyl-d14 (Surr)	*110*		*40 - 148*	*06/13/18 16:32*	*06/14/18 08:06*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:17	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:17	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:17	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:17	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 03:17	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:17	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 03:17	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:17	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:17	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:17	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:17	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:17	1

Client Sample ID: FB-B
Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:17	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:17	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:17	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 03:17	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:17	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:17	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:17	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:17*	*1*
DCB Decachlorobiphenyl	*60*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:17*	*1*
Tetrachloro-m-xylene	*98*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:17*	*1*
Tetrachloro-m-xylene	*96*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:30	1
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:30	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:30*	*1*
DCB Decachlorobiphenyl	*75*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:30*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.54	U	1.79	0.54	ng/L		06/14/18 12:00	06/20/18 07:14	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.66	J	1.79	0.54	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorobutanesulfonic acid (PFBS)	0.79	U	1.79	0.79	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorobutanoic acid (PFBA)	1.79 ~~0.64 J B~~	U J	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorodecanesulfonic acid (PFDS)	0.40	U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorodecanoic acid (PFDA)	0.40	U J	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorododecanoic acid (PFDoA)	0.40	U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.40	U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluoroheptanoic acid (PFHpA)	1.79 ~~0.53 J B~~	U	1.79	0.26	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorohexanesulfonic acid (PFHxS)	1.79 ~~1.43 J B~~	U J	1.79	0.25	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorohexanoic acid (PFHxA)	1.79 ~~0.98 J B~~	U J	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorononanoic acid (PFNA)	1.79 ~~0.74 J B~~	U	1.79	0.23	ng/L		06/14/18 12:00	06/20/18 07:14	1

Client Sample ID: FB-B
Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctane Sulfonamide (PFOSA)	0.40	U J	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorooctanesulfonic acid (PFOS)	0.42	J	1.79	0.27	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorooctanoic acid (PFOA)	1.79	~~4.10 JB~~ U	1.79	0.42	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluoropentanoic acid (PFPeA)	1.79	~~8.00 JB~~ U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorotetradecanoic acid (PFTeA)	0.40	U J	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluorotridecanoic Acid (PFTriA)	0.40	U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
Perfluoroundecanoic acid (PFUnA)	0.40	U	1.79	0.40	ng/L		06/14/18 12:00	06/20/18 07:14	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.54	U	1.79	0.54	ng/L		06/14/18 12:00	06/20/18 07:14	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.54	U	1.79	0.54	ng/L		06/14/18 12:00	06/20/18 07:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*106*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C2 PFDoA	*85*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C2 PFHxA	*127*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C2 PFUnA	*95*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C2-PFTeDA	*69*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C3-PFBS	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C4 PFBA	*89*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C4 PFOA	*102*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C4 PFOS	*89*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C4-PFHpA	*109*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C5 PFNA	*103*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C5-PFPeA	*119*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
13C8 FOSA	*46*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
18O2 PFHxS	*88*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
d3-NMeFOSAA	*69*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
d5-NEtFOSAA	*77*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
M2-6:2FTS	*146*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*
M2-8:2FTS	*96*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:14*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		06/10/18 18:50	06/11/18 19:15	2
Antimony	0.62	U	2.0	0.62	ug/L		06/10/18 18:50	06/11/18 19:15	2
Arsenic	0.77	U	2.0	0.77	ug/L		06/10/18 18:50	06/11/18 19:15	2
Barium	1.1	U	4.0	1.1	ug/L		06/10/18 18:50	06/11/18 19:15	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/10/18 18:50	06/11/18 19:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/10/18 18:50	06/11/18 19:15	2
Calcium	67.6	U	200	67.6	ug/L		06/10/18 18:50	06/11/18 19:15	2
Chromium	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:15	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:15	2
Copper	1.9	U	4.0	1.9	ug/L		06/10/18 18:50	06/11/18 19:15	2
Iron	45.7	U	120	45.7	ug/L		06/10/18 18:50	06/11/18 19:15	2
Lead	0.37	U	1.2	0.37	ug/L		06/10/18 18:50	06/11/18 19:15	2
Magnesium	65.7	U	200	65.7	ug/L		06/10/18 18:50	06/11/18 19:15	2
Manganese	2.7	U	8.0	2.7	ug/L		06/10/18 18:50	06/11/18 19:15	2
Nickel	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:15	2

Client Sample ID: FB-B

Date Collected: 06/08/18 09:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-2
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	64.9	U	200	64.9	ug/L		06/10/18 18:50	06/11/18 19:15	2
Selenium	0.69	U	10.0	0.69	ug/L		06/10/18 18:50	06/11/18 19:15	2
Silver	1.4	U	2.0	1.4	ug/L		06/10/18 18:50	06/11/18 19:15	2
Sodium	266		200	75.7	ug/L		06/10/18 18:50	06/11/18 19:15	2
Thallium	0.24	U	0.80	0.24	ug/L		06/10/18 18:50	06/11/18 19:15	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/10/18 18:50	06/11/18 19:15	2
Zinc	5.4	U	16.0	5.4	ug/L		06/10/18 18:50	06/11/18 19:15	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		06/13/18 20:11	06/14/18 10:56	1

Client Sample ID: TB

Date Collected: 06/08/18 09:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 12:42	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 12:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 12:42	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 12:42	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 12:42	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 12:42	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 12:42	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 12:42	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 12:42	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 12:42	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 12:42	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 12:42	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 12:42	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 12:42	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 12:42	1
Acetone	5.0	U	5.0	5.0	ug/L			06/13/18 12:42	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 12:42	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 12:42	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 12:42	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 12:42	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 12:42	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 12:42	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 12:42	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 12:42	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 12:42	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 12:42	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 12:42	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 12:42	1

Client Sample ID: TB

Date Collected: 06/08/18 09:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 12:42	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 12:42	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 12:42	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 12:42	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 12:42	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 12:42	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 12:42	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 12:42	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 12:42	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 12:42	1
Methylene Chloride	0.77	J	1.0	0.32	ug/L			06/13/18 12:42	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 12:42	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 12:42	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 12:42	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 12:42	1
Toluene	1.1		1.0	0.38	ug/L			06/13/18 12:42	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 12:42	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 12:42	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 12:42	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 12:42	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 12:42	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 12:42	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 12:42	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 12:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 12:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*		*06/13/18 12:42*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/13/18 12:42*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*06/13/18 12:42*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/13/18 12:42*	*1*

Client Sample ID: MW-1

Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 13:08	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 13:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 13:08	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:08	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 13:08	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 13:08	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 13:08	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 13:08	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 13:08	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:08	1

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 13:08	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 13:08	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 13:08	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 13:08	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 13:08	1
Acetone	11	U	5.0	5.0	ug/L			06/13/18 13:08	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:08	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 13:08	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 13:08	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 13:08	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 13:08	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 13:08	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 13:08	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 13:08	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 13:08	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 13:08	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 13:08	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 13:08	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 13:08	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 13:08	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 13:08	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 13:08	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 13:08	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 13:08	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:08	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 13:08	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 13:08	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 13:08	1
Methylene Chloride	0.57	J U	1.0	0.32	ug/L			06/13/18 13:08	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 13:08	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 13:08	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 13:08	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 13:08	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 13:08	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 13:08	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 13:08	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 13:08	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 13:08	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 13:08	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:08	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:08	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 13:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Indane	*6.7*	*J N*	*ug/L*		*11.86*	*496-11-7*		*06/13/18 13:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*06/13/18 13:08*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/13/18 13:08*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*06/13/18 13:08*	*1*

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		06/13/18 13:08	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.10	J, N	0.21	0.017	ug/L		06/12/18 14:56	06/13/18 15:26	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	24		10 - 150	06/12/18 14:56	06/13/18 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:16	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 04:16	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/13/18 16:32	06/14/18 04:16	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:16	1
3,3'-Dichlorobenzidine	1.4	U J	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:16	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/13/18 16:32	06/14/18 04:16	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/13/18 16:32	06/14/18 04:16	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/13/18 16:32	06/14/18 04:16	1
Acenaphthene	3.4	J	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:16	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/13/18 16:32	06/14/18 04:16	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 04:16	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:16	1
Atrazine	1.3	U J	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzaldehyde	~~0.59~~	~~U~~ R	10	0.59	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:16	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 04:16	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:16	1

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 04:16	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		06/13/18 16:32	06/14/18 04:16	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/13/18 16:32	06/14/18 04:16	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:16	1
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:16	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 04:16	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 04:16	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:16	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 04:16	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 04:16	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:16	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 04:16	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:16	1
Fluorene	2.3	J	10	0.91	ug/L		06/13/18 16:32	06/14/18 04:16	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 04:16	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 04:16	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/13/18 16:32	06/14/18 04:16	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 04:16	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:16	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 04:16	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:16	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 04:16	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 04:16	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 04:16	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/13/18 16:32	06/14/18 04:16	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:16	1
Phenol	0.29	U J	10	0.29	ug/L		06/13/18 16:32	06/14/18 04:16	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 04:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 04:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*26 - 139*	*06/13/18 16:32*	*06/14/18 04:16*	*1*
2-Fluorobiphenyl	*85*		*45 - 107*	*06/13/18 16:32*	*06/14/18 04:16*	*1*
2-Fluorophenol (Surr)	*45*		*25 - 58*	*06/13/18 16:32*	*06/14/18 04:16*	*1*
Nitrobenzene-d5 (Surr)	*96*		*51 - 108*	*06/13/18 16:32*	*06/14/18 04:16*	*1*
Phenol-d5 (Surr)	*29*		*14 - 39*	*06/13/18 16:32*	*06/14/18 04:16*	*1*
Terphenyl-d14 (Surr)	*98*		*40 - 148*	*06/13/18 16:32*	*06/14/18 04:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:13	1
1,2,4,5-Tetrachlorobenzene	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,2'-oxybis[1-chloropropane]	0.63	U J	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:13	1

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	14	U UJ	20	14	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,4-Dinitrotoluene	1.0	U UJ	2.0	1.0	ug/L		06/12/18 09:03	06/13/18 00:13	1
2,6-Dinitrotoluene	2.0 ~~1.0~~	U UJ	2.0	0.39	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Chloronaphthalene	1.2	U UJ	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Chlorophenol	0.38	U UJ	10	0.38	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Methylnaphthalene	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Methylphenol	0.26	U UJ	10	0.26	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Nitroaniline	0.47	U UJ	10	0.47	ug/L		06/12/18 09:03	06/13/18 00:13	1
2-Nitrophenol	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:13	1
3,3'-Dichlorobenzidine	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:13	1
3-Nitroaniline	0.96	U UJ	10	0.96	ug/L		06/12/18 09:03	06/13/18 00:13	1
4,6-Dinitro-2-methylphenol	13	U UJ	20	13	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Bromophenyl phenyl ether	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Chloro-3-methylphenol	0.58	U UJ	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Chloroaniline	1.9	U UJ	10	1.9	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Chlorophenyl phenyl ether	1.3	U UJ	10	1.3	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Methylphenol	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Nitroaniline	0.54	U UJ	10	0.54	ug/L		06/12/18 09:03	06/13/18 00:13	1
4-Nitrophenol	0.69	U UJ	20	0.69	ug/L		06/12/18 09:03	06/13/18 00:13	1
Acenaphthene	3.4 J		10	1.1	ug/L		06/12/18 09:03	06/13/18 00:13	1
Acenaphthylene	0.82	U UJ	10	0.82	ug/L		06/12/18 09:03	06/13/18 00:13	1
Acetophenone	0.79	U UJ	10	0.79	ug/L		06/12/18 09:03	06/13/18 00:13	1
Anthracene	0.63	U UJ	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:13	1
Atrazine	1.3	U UJ	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzaldehyde	0.59	U UJ	10	0.59	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzo[a]anthracene	0.59	U UJ	1.0	0.59	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzo[a]pyrene	0.41	U UJ	1.0	0.41	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzo[b]fluoranthene	1.1	U UJ	2.0	1.1	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzo[g,h,i]perylene	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:13	1
Benzo[k]fluoranthene	0.67	U UJ	1.0	0.67	ug/L		06/12/18 09:03	06/13/18 00:13	1
Bis(2-chloroethoxy)methane	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:13	1
Bis(2-chloroethyl)ether	0.30	U UJ	1.0	0.30	ug/L		06/12/18 09:03	06/13/18 00:13	1
Bis(2-ethylhexyl) phthalate	1.7	U UJ	2.0	1.7	ug/L		06/12/18 09:03	06/13/18 00:13	1
Butyl benzyl phthalate	0.85	U UJ	10	0.85	ug/L		06/12/18 09:03	06/13/18 00:13	1
Caprolactam	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:13	1
Carbazole	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:13	1
Chrysene	0.91	U UJ	2.0	0.91	ug/L		06/12/18 09:03	06/13/18 00:13	1
Dibenz(a,h)anthracene	0.72	U UJ	1.0	0.72	ug/L		06/12/18 09:03	06/13/18 00:13	1
Dibenzofuran	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:13	1
Diethyl phthalate	10 UJ		10	0.98	ug/L		06/12/18 09:03	06/13/18 00:13	1
Dimethyl phthalate	0.77	U UJ	10	0.77	ug/L		06/12/18 09:03	06/13/18 00:13	1
Di-n-butyl phthalate	10 ~~2.0~~	UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:13	1
Di-n-octyl phthalate	4.8	U UJ	10	4.8	ug/L		06/12/18 09:03	06/13/18 00:13	1
Fluoranthene	0.84	U UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:13	1
Fluorene	2.3 J		10	0.91	ug/L		06/12/18 09:03	06/13/18 00:13	1
Hexachlorobenzene	0.40	U UJ	1.0	0.40	ug/L		06/12/18 09:03	06/13/18 00:13	1
Hexachlorobutadiene	0.78	U UJ	1.0	0.78	ug/L		06/12/18 09:03	06/13/18 00:13	1
Hexachlorocyclopentadiene	1.7	U UJ	10	1.7	ug/L		06/12/18 09:03	06/13/18 00:13	1
Hexachloroethane	1.2	U UJ	2.0	1.2	ug/L		06/12/18 09:03	06/13/18 00:13	1

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:13	1
Isophorone	0.80	U J	10	0.80	ug/L		06/12/18 09:03	06/13/18 00:13	1
Naphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:13	1
Nitrobenzene	0.57	U J	1.0	0.57	ug/L		06/12/18 09:03	06/13/18 00:13	1
N-Nitrosodi-n-propylamine	0.43	U J	1.0	0.43	ug/L		06/12/18 09:03	06/13/18 00:13	1
N-Nitrosodiphenylamine	0.89	U J	10	0.89	ug/L		06/12/18 09:03	06/13/18 00:13	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 09:03	06/13/18 00:13	1
Phenanthrene	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:13	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 09:03	06/13/18 00:13	1
Pyrene	1.6	U J	10	1.6	ug/L		06/12/18 09:03	06/13/18 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*26 - 139*	*06/12/18 09:03*	*06/13/18 00:13*	*1*
2-Fluorobiphenyl	*92*		*45 - 107*	*06/12/18 09:03*	*06/13/18 00:13*	*1*
2-Fluorophenol (Surr)	*52*		*25 - 58*	*06/12/18 09:03*	*06/13/18 00:13*	*1*
Nitrobenzene-d5 (Surr)	*119*	*X*	*51 - 108*	*06/12/18 09:03*	*06/13/18 00:13*	*1*
Phenol-d5 (Surr)	*30*		*14 - 39*	*06/12/18 09:03*	*06/13/18 00:13*	*1*
Terphenyl-d14 (Surr)	*105*		*40 - 148*	*06/12/18 09:03*	*06/13/18 00:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:30	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:30	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:30	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:30	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 03:30	1
beta-BHC	0.027		0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:30	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 03:30	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:30	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:30	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 03:30	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 03:30	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 03:30	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 03:30	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 03:30	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:30*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 150*	*06/13/18 07:48*	*06/14/18 03:30*	*1*
Tetrachloro-m-xylene	*92*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:30*	*1*
Tetrachloro-m-xylene	*91*		*12 - 136*	*06/13/18 07:48*	*06/14/18 03:30*	*1*

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:46	1
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/14/18 00:46	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/14/18 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*91*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:46*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 150*	*06/13/18 08:05*	*06/14/18 00:46*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.67 ~~0.58~~	~~J~~ U	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 07:30	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.50	U	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorobutanesulfonic acid (PFBS)	5.81	J+	1.67	0.74	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorobutanoic acid (PFBA)	39.3	~~B~~	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorodecanesulfonic acid (PFDS)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorodecanoic acid (PFDA)	0.52	J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorododecanoic acid (PFDoA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.52	J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluoroheptanoic acid (PFHpA)	3.35	~~B~~	1.67	0.24	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorohexanesulfonic acid (PFHxS)	2.88	~~B~~ UJ	1.67	0.23	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorohexanoic acid (PFHxA)	4.22	~~B~~ J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorononanoic acid (PFNA)	1.67 ~~1.24~~	~~J B~~ U	1.67	0.22	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorooctane Sulfonamide (PFOSA)	1.67 ~~0.62~~	~~J B~~ UJ	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorooctanesulfonic acid (PFOS)	4.73		1.67	0.25	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorooctanoic acid (PFOA)	18.4	~~B~~	1.67	0.39	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluoropentanoic acid (PFPeA)	25.5	~~B~~ J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorotetradecanoic acid (PFTeA)	0.37	UJ	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluorotridecanoic Acid (PFTriA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
Perfluoroundecanoic acid (PFUnA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 07:30	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.50	U	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 07:30	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.50	U	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 07:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*139*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:30*	*1*
13C2 PFDoA	*131*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:30*	*1*
13C2 PFHxA	*42*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:30*	*1*

Client Sample ID: MW-1
Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	134		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C2-PFTeDA	124		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C3-PFBS	59		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C4 PFBA	12		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C4 PFOA	97		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C4 PFOS	112		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C4-PFHpA	69		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C5 PFNA	127		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C5-PFPeA	23		25 - 150	06/14/18 12:00	06/20/18 07:30	1
13C8 FOSA	91		25 - 150	06/14/18 12:00	06/20/18 07:30	1
18O2 PFHxS	87		25 - 150	06/14/18 12:00	06/20/18 07:30	1
d3-NMeFOSAA	110		25 - 150	06/14/18 12:00	06/20/18 07:30	1
d5-NEtFOSAA	129		25 - 150	06/14/18 12:00	06/20/18 07:30	1
M2-6:2FTS	423		25 - 150	06/14/18 12:00	06/20/18 07:30	1
M2-8:2FTS	302		25 - 150	06/14/18 12:00	06/20/18 07:30	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15.0	U	40.0	15.0	ug/L		06/10/18 18:50	06/11/18 19:22	2
Antimony	0.62	U	2.0	0.62	ug/L		06/10/18 18:50	06/11/18 19:22	2
Arsenic	1.1	J	2.0	0.77	ug/L		06/10/18 18:50	06/11/18 19:22	2
Barium	1510		4.0	1.1	ug/L		06/10/18 18:50	06/11/18 19:22	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/10/18 18:50	06/11/18 19:22	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/10/18 18:50	06/11/18 19:22	2
Calcium	162000		200	67.6	ug/L		06/10/18 18:50	06/11/18 19:22	2
Chromium	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:22	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:22	2
Copper	1.9	U	4.0	1.9	ug/L		06/10/18 18:50	06/11/18 19:22	2
Iron	22700		120	45.7	ug/L		06/10/18 18:50	06/11/18 19:22	2
Lead	0.68	J	1.2	0.37	ug/L		06/10/18 18:50	06/11/18 19:22	2
Magnesium	40400		200	65.7	ug/L		06/10/18 18:50	06/11/18 19:22	2
Manganese	426		8.0	2.7	ug/L		06/10/18 18:50	06/11/18 19:22	2
Nickel	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:22	2
Potassium	41700		200	64.9	ug/L		06/10/18 18:50	06/11/18 19:22	2
Selenium	0.69	U	10.0	0.69	ug/L		06/10/18 18:50	06/11/18 19:22	2
Silver	1.4	U	2.0	1.4	ug/L		06/10/18 18:50	06/11/18 19:22	2
Sodium	134000		200	75.7	ug/L		06/10/18 18:50	06/11/18 19:22	2
Thallium	0.24	U	0.80	0.24	ug/L		06/10/18 18:50	06/11/18 19:22	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/10/18 18:50	06/11/18 19:22	2
Zinc	5.4	U	16.0	5.4	ug/L		06/10/18 18:50	06/11/18 19:22	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		06/19/18 14:14	06/19/18 17:28	2
Aluminum	15.0	U	40.0	15.0	ug/L		06/19/18 14:14	06/19/18 17:28	2
Arsenic	0.77	U	2.0	0.77	ug/L		06/19/18 14:14	06/19/18 17:28	2
Barium	1170		4.0	1.1	ug/L		06/19/18 14:14	06/19/18 17:28	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/19/18 14:14	06/19/18 17:28	2
Calcium	180000		200	67.6	ug/L		06/19/18 14:14	06/19/18 17:28	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/19/18 14:14	06/19/18 17:28	2

Client Sample ID: MW-1

Date Collected: 06/08/18 11:10
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-4
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:28	2
Chromium	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:28	2
Copper	1.9	U	4.0	1.9	ug/L		06/19/18 14:14	06/19/18 17:28	2
Iron	45.7	U	120	45.7	ug/L		06/19/18 14:14	06/19/18 17:28	2
Potassium	43600		200	64.9	ug/L		06/19/18 14:14	06/19/18 17:28	2
Magnesium	37200		200	65.7	ug/L		06/19/18 14:14	06/19/18 17:28	2
Manganese	381		8.0	2.7	ug/L		06/19/18 14:14	06/19/18 17:28	2
Sodium	124000		200	75.7	ug/L		06/19/18 14:14	06/19/18 17:28	2
Nickel	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:28	2
Lead	0.37	U	1.2	0.37	ug/L		06/19/18 14:14	06/19/18 17:28	2
Antimony	0.62	U	2.0	0.62	ug/L		06/19/18 14:14	06/19/18 17:28	2
Selenium	0.69	U	10.0	0.69	ug/L		06/19/18 14:14	06/19/18 17:28	2
Thallium	0.24	U	0.80	0.24	ug/L		06/19/18 14:14	06/19/18 17:28	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/19/18 14:14	06/19/18 17:28	2
Zinc	5.4	U	16.0	5.4	ug/L		06/19/18 14:14	06/19/18 17:28	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 16:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/14/18 12:16	06/14/18 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U	0.010	0.0020	mg/L		06/15/18 09:39	06/15/18 11:54	1

Client Sample ID: MW-5

Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 13:33	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 13:33	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:33	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 13:33	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 13:33	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 13:33	1
1,2,4-Trichlorobenzene	0.37	U F1	1.0	0.37	ug/L			06/13/18 13:33	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 13:33	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:33	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 13:33	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 13:33	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 13:33	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 13:33	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 13:33	1
Acetone	5.0	U	5.0	5.0	ug/L			06/13/18 13:33	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:33	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 13:33	1
Bromomethane	1.0	U ~~F2~~ J	1.0	1.0	ug/L			06/13/18 13:33	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 13:33	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 13:33	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 13:33	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 13:33	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 13:33	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 13:33	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 13:33	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 13:33	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 13:33	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 13:33	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 13:33	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 13:33	1
Dichlorodifluoromethane	0.12	U ~~F1~~	1.0	0.12	ug/L			06/13/18 13:33	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 13:33	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 13:33	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:33	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 13:33	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 13:33	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 13:33	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			06/13/18 13:33	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 13:33	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 13:33	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 13:33	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 13:33	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 13:33	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 13:33	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 13:33	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 13:33	1
Trichlorofluoromethane	0.14	U ~~F1~~	1.0	0.14	ug/L			06/13/18 13:33	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 13:33	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:33	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:33	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 13:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 13:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*06/13/18 13:33*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/13/18 13:33*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*06/13/18 13:33*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/13/18 13:33*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.071	J N	0.20	0.016	ug/L		06/12/18 14:56	06/13/18 10:59	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	23		10 - 150	06/12/18 14:56	06/13/18 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 03:13	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 03:13	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/13/18 16:32	06/14/18 03:13	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 03:13	1
3,3'-Dichlorobenzidine	1.4	U ~~F1 F2~~ J	10	1.4	ug/L		06/13/18 16:32	06/14/18 03:13	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/13/18 16:32	06/14/18 03:13	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/13/18 16:32	06/14/18 03:13	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/13/18 16:32	06/14/18 03:13	1
Acenaphthene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 03:13	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/13/18 16:32	06/14/18 03:13	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 03:13	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 03:13	1
Atrazine	1.3	U ~~F1~~ J	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzaldehyde	~~0.59~~	~~U F1~~ R	10	0.59	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 03:13	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 03:13	1
Bis(2-chloroethoxy)methane	0.24	U ~~F1~~	10	0.24	ug/L		06/13/18 16:32	06/14/18 03:13	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 03:13	1
Bis(2-ethylhexyl) phthalate	2.0		2.0	1.7	ug/L		06/13/18 16:32	06/14/18 03:13	1
Butyl benzyl phthalate	0.85	U ~~F1~~	10	0.85	ug/L		06/13/18 16:32	06/14/18 03:13	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/13/18 16:32	06/14/18 03:13	1
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 03:13	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 03:13	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 03:13	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 03:13	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 03:13	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 03:13	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 03:13	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 03:13	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 03:13	1
Fluorene	0.91	U	10	0.91	ug/L		06/13/18 16:32	06/14/18 03:13	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 03:13	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 03:13	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/13/18 16:32	06/14/18 03:13	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 03:13	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 03:13	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 03:13	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 03:13	1
Nitrobenzene	0.57	U F1	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 03:13	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 03:13	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 03:13	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/13/18 16:32	06/14/18 03:13	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 03:13	1
Phenol	0.29	U J	10	0.29	ug/L		06/13/18 16:32	06/14/18 03:13	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 03:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 03:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*26 - 139*	*06/13/18 16:32*	*06/14/18 03:13*	*1*
2-Fluorobiphenyl	*77*		*45 - 107*	*06/13/18 16:32*	*06/14/18 03:13*	*1*
2-Fluorophenol (Surr)	*37*		*25 - 58*	*06/13/18 16:32*	*06/14/18 03:13*	*1*
Nitrobenzene-d5 (Surr)	*84*		*51 - 108*	*06/13/18 16:32*	*06/14/18 03:13*	*1*
Phenol-d5 (Surr)	*24*		*14 - 39*	*06/13/18 16:32*	*06/14/18 03:13*	*1*
Terphenyl-d14 (Surr)	*93*		*40 - 148*	*06/13/18 16:32*	*06/14/18 03:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/12/18 23:11	1
1,2,4,5-Tetrachlorobenzene	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,2'-oxybis[1-chloropropane]	0.63	U F1 J	10	0.63	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,4-Dinitrotoluene	1.0	U J	2.0	1.0	ug/L		06/12/18 09:03	06/12/18 23:11	1
2,6-Dinitrotoluene	2.0 ~~0.80~~	J J	2.0	0.39	ug/L		06/12/18 09:03	06/12/18 23:11	1
2-Chloronaphthalene	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/12/18 23:11	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/12/18 09:03	06/12/18 23:11	1
2-Methylnaphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/12/18 23:11	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/12/18 09:03	06/12/18 23:11	1
2-Nitroaniline	0.47	U J	10	0.47	ug/L		06/12/18 09:03	06/12/18 23:11	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/12/18 23:11	1
3,3'-Dichlorobenzidine	1.4	U F4 J	10	1.4	ug/L		06/12/18 09:03	06/12/18 23:11	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/12/18 09:03	06/12/18 23:11	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Bromophenyl phenyl ether	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Chlorophenyl phenyl ether	1.3	U J	10	1.3	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Nitroaniline	0.54	U J	10	0.54	ug/L		06/12/18 09:03	06/12/18 23:11	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/12/18 09:03	06/12/18 23:11	1
Acenaphthene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/12/18 23:11	1
Acenaphthylene	0.82	U J	10	0.82	ug/L		06/12/18 09:03	06/12/18 23:11	1
Acetophenone	0.79	U J	10	0.79	ug/L		06/12/18 09:03	06/12/18 23:11	1
Anthracene	0.63	U F1 J	10	0.63	ug/L		06/12/18 09:03	06/12/18 23:11	1
Atrazine	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzaldehyde	0.59	U J	10	0.59	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzo[a]anthracene	0.59	U J	1.0	0.59	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzo[a]pyrene	0.41	U J	1.0	0.41	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzo[b]fluoranthene	1.1	U J	2.0	1.1	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzo[g,h,i]perylene	1.4	U J	10	1.4	ug/L		06/12/18 09:03	06/12/18 23:11	1
Benzo[k]fluoranthene	0.67	U J	1.0	0.67	ug/L		06/12/18 09:03	06/12/18 23:11	1
Bis(2-chloroethoxy)methane	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/12/18 23:11	1
Bis(2-chloroethyl)ether	0.30	U J	1.0	0.30	ug/L		06/12/18 09:03	06/12/18 23:11	1
Bis(2-ethylhexyl) phthalate	1.7	U J	2.0	1.7	ug/L		06/12/18 09:03	06/12/18 23:11	1
Butyl benzyl phthalate	0.85	U J	10	0.85	ug/L		06/12/18 09:03	06/12/18 23:11	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/12/18 09:03	06/12/18 23:11	1
Carbazole	0.68	U J	10	0.68	ug/L		06/12/18 09:03	06/12/18 23:11	1
Chrysene	0.91	U J	2.0	0.91	ug/L		06/12/18 09:03	06/12/18 23:11	1
Dibenz(a,h)anthracene	0.72	U J	1.0	0.72	ug/L		06/12/18 09:03	06/12/18 23:11	1
Dibenzofuran	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/12/18 23:11	1
Diethyl phthalate	10 ~~0.9~~ J	U J	10	0.98	ug/L		06/12/18 09:03	06/12/18 23:11	1
Dimethyl phthalate	0.77	U J	10	0.77	ug/L		06/12/18 09:03	06/12/18 23:11	1
Di-n-butyl phthalate	10 ~~1.5~~ J	U J	10	0.84	ug/L		06/12/18 09:03	06/12/18 23:11	1
Di-n-octyl phthalate	4.8	U J	10	4.8	ug/L		06/12/18 09:03	06/12/18 23:11	1
Fluoranthene	0.84	U J	10	0.84	ug/L		06/12/18 09:03	06/12/18 23:11	1
Fluorene	0.91	U J	10	0.91	ug/L		06/12/18 09:03	06/12/18 23:11	1
Hexachlorobenzene	0.40	U J	1.0	0.40	ug/L		06/12/18 09:03	06/12/18 23:11	1
Hexachlorobutadiene	0.78	U J	1.0	0.78	ug/L		06/12/18 09:03	06/12/18 23:11	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/12/18 09:03	06/12/18 23:11	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/12/18 09:03	06/12/18 23:11	1
Indeno[1,2,3-cd]pyrene	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/12/18 23:11	1
Isophorone	0.80	U J	10	0.80	ug/L		06/12/18 09:03	06/12/18 23:11	1
Naphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/12/18 23:11	1
Nitrobenzene	0.57	U F2 F1 J	1.0	0.57	ug/L		06/12/18 09:03	06/12/18 23:11	1
N-Nitrosodi-n-propylamine	0.43	U J	1.0	0.43	ug/L		06/12/18 09:03	06/12/18 23:11	1
N-Nitrosodiphenylamine	0.89	U J	10	0.89	ug/L		06/12/18 09:03	06/12/18 23:11	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 09:03	06/12/18 23:11	1
Phenanthrene	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/12/18 23:11	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 09:03	06/12/18 23:11	1
Pyrene	1.6	U J	10	1.6	ug/L		06/12/18 09:03	06/12/18 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*26 - 139*	*06/12/18 09:03*	*06/12/18 23:11*	*1*
2-Fluorobiphenyl	*89*		*45 - 107*	*06/12/18 09:03*	*06/12/18 23:11*	*1*
2-Fluorophenol (Surr)	*43*		*25 - 58*	*06/12/18 09:03*	*06/12/18 23:11*	*1*
Nitrobenzene-d5 (Surr)	*104*		*51 - 108*	*06/12/18 09:03*	*06/12/18 23:11*	*1*
Phenol-d5 (Surr)	*29*		*14 - 39*	*06/12/18 09:03*	*06/12/18 23:11*	*1*
Terphenyl-d14 (Surr)	*93*		*40 - 148*	*06/12/18 09:03*	*06/12/18 23:11*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 01:47	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 01:47	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 01:47	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 01:47	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 01:47	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 01:47	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 01:47	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 01:47	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 01:47	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 01:47	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 01:47	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 01:47	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 01:47	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 01:47	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*		*10 - 150*	*06/13/18 07:48*	*06/14/18 01:47*	*1*
DCB Decachlorobiphenyl	*50*		*10 - 150*	*06/13/18 07:48*	*06/14/18 01:47*	*1*
Tetrachloro-m-xylene	*82*		*12 - 136*	*06/13/18 07:48*	*06/14/18 01:47*	*1*
Tetrachloro-m-xylene	*80*		*12 - 136*	*06/13/18 07:48*	*06/14/18 01:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 22:38	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 22:38	1

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 22:38	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*10 - 150*	*06/13/18 08:05*	*06/13/18 22:38*	*1*
DCB Decachlorobiphenyl	*64*		*10 - 150*	*06/13/18 08:05*	*06/13/18 22:38*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.76	~~0.37 J~~ UJ	1.76	0.53	ng/L		06/14/18 12:00	06/20/18 07:46	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.76	~~0.66 J~~ UJ	1.76	0.53	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorobutanesulfonic acid (PFBS)		4.71 J+	1.76	0.77	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorobutanoic acid (PFBA)		32.3 ~~B~~	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorodecanesulfonic acid (PFDS)	0.39	U	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorodecanoic acid (PFDA)		0.49 J	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorododecanoic acid (PFDoA)	0.39	U	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.39	U	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluoroheptanoic acid (PFHpA)		2.86 ~~B~~	1.76	0.25	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorohexanesulfonic acid (PFHxS)		2.73 ~~B~~ UJ	1.76	0.25	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorohexanoic acid (PFHxA)		4.75 ~~B~~ J	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorononanoic acid (PFNA)	1.76	~~1.55 JB~~ UJ	1.76	0.23	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorooctane Sulfonamide (PFOSA)	1.76	~~0.61 JB~~ UJ	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorooctanesulfonic acid (PFOS)		3.71	1.76	0.26	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorooctanoic acid (PFOA)		11.2 ~~B~~	1.76	0.41	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluoropentanoic acid (PFPeA)		16.0 ~~B~~ J-	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorotetradecanoic acid (PFTeA)	0.39	UJ	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluorotridecanoic Acid (PFTriA)	0.39	U	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
Perfluoroundecanoic acid (PFUnA)	0.39	U	1.76	0.39	ng/L		06/14/18 12:00	06/20/18 07:46	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.53	U	1.76	0.53	ng/L		06/14/18 12:00	06/20/18 07:46	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.53	U	1.76	0.53	ng/L		06/14/18 12:00	06/20/18 07:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*132*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C2 PFDoA	*115*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C2 PFHxA	*42*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C2 PFUnA	*128*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C2-PFTeDA	*116*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C3-PFBS	*64*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C4 PFBA	*12*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C4 PFOA	*99*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C4 PFOS	*113*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*
13C4-PFHpA	*70*		*25 - 150*	*06/14/18 12:00*	*06/20/18 07:46*	*1*

Client Sample ID: MW-5
Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	126		25 - 150	06/14/18 12:00	06/20/18 07:46	1
13C5-PFPeA	22	*	25 - 150	06/14/18 12:00	06/20/18 07:46	1
13C8 FOSA	96		25 - 150	06/14/18 12:00	06/20/18 07:46	1
18O2 PFHxS	82		25 - 150	06/14/18 12:00	06/20/18 07:46	1
d3-NMeFOSAA	92		25 - 150	06/14/18 12:00	06/20/18 07:46	1
d5-NEtFOSAA	107		25 - 150	06/14/18 12:00	06/20/18 07:46	1
M2-6:2FTS	361	*	25 - 150	06/14/18 12:00	06/20/18 07:46	1
M2-8:2FTS	236	*	25 - 150	06/14/18 12:00	06/20/18 07:46	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.9	J	40.0	15.0	ug/L		06/12/18 08:15	06/12/18 15:56	2
Antimony	0.72	J	2.0	0.62	ug/L		06/12/18 08:15	06/12/18 15:56	2
Arsenic	7.2		2.0	0.77	ug/L		06/12/18 08:15	06/12/18 15:56	2
Barium	222		4.0	1.1	ug/L		06/12/18 08:15	06/12/18 15:56	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/12/18 08:15	06/12/18 15:56	2
Cadmium	0.61	J	2.0	0.61	ug/L		06/12/18 08:15	06/12/18 15:56	2
Calcium	207000		200	67.6	ug/L		06/12/18 08:15	06/12/18 15:56	2
Chromium	1.3	U	4.0	1.3	ug/L		06/12/18 08:15	06/12/18 15:56	2
Cobalt	4.9		4.0	1.3	ug/L		06/12/18 08:15	06/12/18 15:56	2
Copper	25.0		4.0	1.9	ug/L		06/12/18 08:15	06/12/18 15:56	2
Iron	4620		120	45.7	ug/L		06/12/18 08:15	06/12/18 15:56	2
Lead	4.5		1.2	0.37	ug/L		06/12/18 08:15	06/12/18 15:56	2
Magnesium	35200		200	65.7	ug/L		06/12/18 08:15	06/12/18 15:56	2
Manganese	826		8.0	2.7	ug/L		06/12/18 08:15	06/12/18 15:56	2
Nickel	10.3		4.0	1.3	ug/L		06/12/18 08:15	06/12/18 15:56	2
Potassium	49300		200	64.9	ug/L		06/12/18 08:15	06/12/18 15:56	2
Selenium	0.69	U	10.0	0.69	ug/L		06/12/18 08:15	06/12/18 15:56	2
Silver	1.4	U	2.0	1.4	ug/L		06/12/18 08:15	06/12/18 15:56	2
Sodium	72100		200	75.7	ug/L		06/12/18 08:15	06/12/18 15:56	2
Thallium	0.24	U	0.80	0.24	ug/L		06/12/18 08:15	06/12/18 15:56	2
Vanadium	1.7	J	4.0	1.2	ug/L		06/12/18 08:15	06/12/18 15:56	2
Zinc	230		16.0	5.4	ug/L		06/12/18 08:15	06/12/18 15:56	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		06/19/18 14:14	06/19/18 17:17	2
Aluminum	15.0	U	40.0	15.0	ug/L		06/19/18 14:14	06/19/18 17:17	2
Arsenic	1.1	J	2.0	0.77	ug/L		06/19/18 14:14	06/19/18 17:17	2
Barium	201		4.0	1.1	ug/L		06/19/18 14:14	06/19/18 17:17	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/19/18 14:14	06/19/18 17:17	2
Calcium	220000		200	67.6	ug/L		06/19/18 14:14	06/19/18 17:17	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/19/18 14:14	06/19/18 17:17	2
Cobalt	2.4	J	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:17	2
Chromium	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:17	2
Copper	16.1		4.0	1.9	ug/L		06/19/18 14:14	06/19/18 17:17	2
Iron	45.7	U	120	45.7	ug/L		06/19/18 14:14	06/19/18 17:17	2
Potassium	49600		200	64.9	ug/L		06/19/18 14:14	06/19/18 17:17	2
Magnesium	32000		200	65.7	ug/L		06/19/18 14:14	06/19/18 17:17	2
Manganese	707		8.0	2.7	ug/L		06/19/18 14:14	06/19/18 17:17	2

Client Sample ID: MW-5

Date Collected: 06/08/18 11:30
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-5
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	65200		200	75.7	ug/L		06/19/18 14:14	06/19/18 17:17	2
Nickel	8.5		4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:17	2
Lead	0.37	U	1.2	0.37	ug/L		06/19/18 14:14	06/19/18 17:17	2
Antimony	0.62	U	2.0	0.62	ug/L		06/19/18 14:14	06/19/18 17:17	2
Selenium	0.69	U	10.0	0.69	ug/L		06/19/18 14:14	06/19/18 17:17	2
Thallium	0.24	U	0.80	0.24	ug/L		06/19/18 14:14	06/19/18 17:17	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/19/18 14:14	06/19/18 17:17	2
Zinc	165		16.0	5.4	ug/L		06/19/18 14:14	06/19/18 17:17	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 15:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/14/18 12:16	06/14/18 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U F1 *	0.010	0.0020	mg/L		06/13/18 20:11	06/14/18 10:56	1

Client Sample ID: Dup-1

Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 13:58	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 13:58	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:58	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 13:58	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 13:58	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 13:58	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 13:58	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 13:58	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:58	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 13:58	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 13:58	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 13:58	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 13:58	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 13:58	1
Acetone	5.0	U	5.0	5.0	ug/L			06/13/18 13:58	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:58	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 13:58	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 13:58	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 13:58	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 13:58	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 13:58	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 13:58	1

Client Sample ID: Dup-1
Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 13:58	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 13:58	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 13:58	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 13:58	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 13:58	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 13:58	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 13:58	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 13:58	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 13:58	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 13:58	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 13:58	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 13:58	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 13:58	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 13:58	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 13:58	1
Methylene Chloride	0.32	U	1.0	0.32	ug/L			06/13/18 13:58	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 13:58	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 13:58	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 13:58	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 13:58	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 13:58	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 13:58	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 13:58	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 13:58	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 13:58	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 13:58	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 13:58	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 13:58	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 13:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1-Hexanol, 2-ethyl-	*5.5*	*J N*	*ug/L*		*11.99*	*104-76-7*		*06/13/18 13:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*06/13/18 13:58*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/13/18 13:58*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*06/13/18 13:58*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*06/13/18 13:58*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		06/12/18 14:56	06/13/18 15:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*22*		*10 - 150*	*06/12/18 14:56*	*06/13/18 15:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:42	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/12/18 13:43	06/13/18 02:42	1

Client Sample ID: Dup-1
Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4-Dinitrophenol	14	U	20	14	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/12/18 13:43	06/13/18 02:42	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Chlorophenol	0.38	U	10	0.38	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Methylphenol	0.26	U	10	0.26	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/12/18 13:43	06/13/18 02:42	1
2-Nitrophenol	0.75	U	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:42	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		06/12/18 13:43	06/13/18 02:42	1
3-Nitroaniline	0.96	U	10	0.96	ug/L		06/12/18 13:43	06/13/18 02:42	1
4,6-Dinitro-2-methylphenol	13	U	20	13	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Chloro-3-methylphenol	0.58	U	10	0.58	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Chloroaniline	1.9	U	10	1.9	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Methylphenol	0.24	U	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/12/18 13:43	06/13/18 02:42	1
4-Nitrophenol	0.69	U	20	0.69	ug/L		06/12/18 13:43	06/13/18 02:42	1
Acenaphthene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:42	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/12/18 13:43	06/13/18 02:42	1
Acetophenone	0.79	U	10	0.79	ug/L		06/12/18 13:43	06/13/18 02:42	1
Anthracene	0.63	U	10	0.63	ug/L		06/12/18 13:43	06/13/18 02:42	1
Atrazine	1.3	U	2.0	1.3	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzaldehyde	~~0.59~~	~~U~~ R	10	0.59	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/12/18 13:43	06/13/18 02:42	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/12/18 13:43	06/13/18 02:42	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/12/18 13:43	06/13/18 02:42	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/12/18 13:43	06/13/18 02:42	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		06/12/18 13:43	06/13/18 02:42	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/12/18 13:43	06/13/18 02:42	1
Caprolactam	0.68	U	10	0.68	ug/L		06/12/18 13:43	06/13/18 02:42	1
Carbazole	0.68	U	10	0.68	ug/L		06/12/18 13:43	06/13/18 02:42	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/12/18 13:43	06/13/18 02:42	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/12/18 13:43	06/13/18 02:42	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:42	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/12/18 13:43	06/13/18 02:42	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/12/18 13:43	06/13/18 02:42	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/12/18 13:43	06/13/18 02:42	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/12/18 13:43	06/13/18 02:42	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/12/18 13:43	06/13/18 02:42	1

Client Sample ID: Dup-1
Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.91	U	10	0.91	ug/L		06/12/18 13:43	06/13/18 02:42	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/12/18 13:43	06/13/18 02:42	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/12/18 13:43	06/13/18 02:42	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/12/18 13:43	06/13/18 02:42	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		06/12/18 13:43	06/13/18 02:42	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/12/18 13:43	06/13/18 02:42	1
Isophorone	0.80	U	10	0.80	ug/L		06/12/18 13:43	06/13/18 02:42	1
Naphthalene	1.1	U	10	1.1	ug/L		06/12/18 13:43	06/13/18 02:42	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/12/18 13:43	06/13/18 02:42	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/12/18 13:43	06/13/18 02:42	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/12/18 13:43	06/13/18 02:42	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 13:43	06/13/18 02:42	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/12/18 13:43	06/13/18 02:42	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 13:43	06/13/18 02:42	1
Pyrene	1.6	U	10	1.6	ug/L		06/12/18 13:43	06/13/18 02:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/12/18 13:43*	*06/13/18 02:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*26 - 139*	*06/12/18 13:43*	*06/13/18 02:42*	*1*
2-Fluorobiphenyl	*99*		*45 - 107*	*06/12/18 13:43*	*06/13/18 02:42*	*1*
2-Fluorophenol (Surr)	*41*		*25 - 58*	*06/12/18 13:43*	*06/13/18 02:42*	*1*
Nitrobenzene-d5 (Surr)	*99*		*51 - 108*	*06/12/18 13:43*	*06/13/18 02:42*	*1*
Phenol-d5 (Surr)	*21*		*14 - 39*	*06/12/18 13:43*	*06/13/18 02:42*	*1*
Terphenyl-d14 (Surr)	*98*		*40 - 148*	*06/12/18 13:43*	*06/13/18 02:42*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:13	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:13	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:13	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:13	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 02:13	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:13	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 02:13	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:13	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:13	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:13	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 02:13	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:13	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:13	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:13	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 02:13	1

Client Sample ID: Dup-1

Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		10 - 150	06/13/18 07:48	06/14/18 02:13	1
DCB Decachlorobiphenyl	62		10 - 150	06/13/18 07:48	06/14/18 02:13	1
Tetrachloro-m-xylene	91		12 - 136	06/13/18 07:48	06/14/18 02:13	1
Tetrachloro-m-xylene	92		12 - 136	06/13/18 07:48	06/14/18 02:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:10	1
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:10	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	73		10 - 150	06/13/18 08:05	06/13/18 23:10	1
DCB Decachlorobiphenyl	83		10 - 150	06/13/18 08:05	06/13/18 23:10	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.51	U	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 08:34	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.71 ~~0.70 J~~ U		1.71	0.51	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorobutanesulfonic acid (PFBS)	7.72 J		1.71	0.75	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorobutanoic acid (PFBA)	42.6 ~~B~~		1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorodecanesulfonic acid (PFDS)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorodecanoic acid (PFDA)	0.38	U J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorododecanoic acid (PFDoA)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.56	J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluoroheptanoic acid (PFHpA)	2.63 ~~B~~		1.71	0.25	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorohexanesulfonic acid (PFHxS)	2.50 ~~B~~ U J		1.71	0.24	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorohexanoic acid (PFHxA)	4.29 ~~B~~ J		1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorononanoic acid (PFNA)	1.71 ~~1.66 J B~~ U		1.71	0.22	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorooctane Sulfonamide (PFOSA)	1.71 ~~0.67 J B~~ U J		1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorooctanesulfonic acid (PFOS)	3.64		1.71	0.26	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorooctanoic acid (PFOA)	13.0 ~~B~~		1.71	0.40	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluoropentanoic acid (PFPeA)	7.55 ~~B~~ J		1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorotetradecanoic acid (PFTeA)	0.38	U J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluorotridecanoic Acid (PFTriA)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
Perfluoroundecanoic acid (PFUnA)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 08:34	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.71 ~~0.61 J B~~ U		1.71	0.51	ng/L		06/14/18 12:00	06/20/18 08:34	1

Client Sample ID: Dup-1
Date Collected: 06/08/18 11:50
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-6
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.51	U	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 08:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*133*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C2 PFDoA	*113*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C2 PFHxA	*37*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C2 PFUnA	*127*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C2-PFTeDA	*122*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C3-PFBS	*52*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C4 PFBA	*11*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C4 PFOA	*96*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C4 PFOS	*102*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C4-PFHpA	*68*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C5 PFNA	*119*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C5-PFPeA	*18*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
13C8 FOSA	*96*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
18O2 PFHxS	*76*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
d3-NMeFOSAA	*98*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
d5-NEtFOSAA	*119*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
M2-6:2FTS	*348*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*
M2-8:2FTS	*228*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:34*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	26.3	J	40.0	15.0	ug/L		06/10/18 18:50	06/11/18 19:27	2
Antimony	0.62	U	2.0	0.62	ug/L		06/10/18 18:50	06/11/18 19:27	2
Arsenic	5.8		2.0	0.77	ug/L		06/10/18 18:50	06/11/18 19:27	2
Barium	268		4.0	1.1	ug/L		06/10/18 18:50	06/11/18 19:27	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/10/18 18:50	06/11/18 19:27	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/10/18 18:50	06/11/18 19:27	2
Calcium	179000		200	67.6	ug/L		06/10/18 18:50	06/11/18 19:27	2
Chromium	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:27	2
Cobalt	4.5		4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:27	2
Copper	28.1		4.0	1.9	ug/L		06/10/18 18:50	06/11/18 19:27	2
Iron	5100		120	45.7	ug/L		06/10/18 18:50	06/11/18 19:27	2
Lead	4.9		1.2	0.37	ug/L		06/10/18 18:50	06/11/18 19:27	2
Magnesium	32500		200	65.7	ug/L		06/10/18 18:50	06/11/18 19:27	2
Manganese	838		8.0	2.7	ug/L		06/10/18 18:50	06/11/18 19:27	2
Nickel	9.7		4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:27	2
Potassium	45100		200	64.9	ug/L		06/10/18 18:50	06/11/18 19:27	2
Selenium	0.69	U	10.0	0.69	ug/L		06/10/18 18:50	06/11/18 19:27	2
Silver	1.4	U	2.0	1.4	ug/L		06/10/18 18:50	06/11/18 19:27	2
Sodium	71600		200	75.7	ug/L		06/10/18 18:50	06/11/18 19:27	2
Thallium	0.24	U	0.80	0.24	ug/L		06/10/18 18:50	06/11/18 19:27	2
Vanadium	1.6	J	4.0	1.2	ug/L		06/10/18 18:50	06/11/18 19:27	2
Zinc	200		16.0	5.4	ug/L		06/10/18 18:50	06/11/18 19:27	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0020	U *	0.010	0.0020	mg/L		06/13/18 20:11	06/14/18 11:03	1

Client Sample ID: MW-2

Lab Sample ID: 460-157993-7

Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 14:23	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 14:23	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 14:23	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 14:23	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 14:23	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 14:23	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 14:23	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 14:23	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 14:23	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 14:23	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 14:23	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 14:23	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 14:23	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 14:23	1
Acetone	15	U	5.0	5.0	ug/L			06/13/18 14:23	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 14:23	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 14:23	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 14:23	1
Carbon disulfide	0.25	J	1.0	0.16	ug/L			06/13/18 14:23	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 14:23	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 14:23	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 14:23	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 14:23	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 14:23	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 14:23	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 14:23	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 14:23	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 14:23	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 14:23	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 14:23	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 14:23	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 14:23	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 14:23	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 14:23	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 14:23	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 14:23	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 14:23	1
Methylene Chloride	0.64	U	1.0	0.32	ug/L			06/13/18 14:23	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 14:23	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 14:23	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 14:23	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 14:23	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 14:23	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 14:23	1

Client Sample ID: MW-2
Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 14:23	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 14:23	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 14:23	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 14:23	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 14:23	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 14:23	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 14:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 14:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*06/13/18 14:23*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*06/13/18 14:23*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*06/13/18 14:23*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*06/13/18 14:23*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		06/12/18 14:56	06/13/18 16:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*20*		*10 - 150*	*06/12/18 14:56*	*06/13/18 16:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:37	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,4-Dinitrotoluene	1.0	U	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 04:37	1
2,6-Dinitrotoluene	0.39	U	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Chloronaphthalene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Methylnaphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Nitroaniline	0.47	U	10	0.47	ug/L		06/13/18 16:32	06/14/18 04:37	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:37	1
3,3'-Dichlorobenzidine	1.4	U J	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:37	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/13/18 16:32	06/14/18 04:37	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Chlorophenyl phenyl ether	1.3	U	10	1.3	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:37	1

Client Sample ID: MW-2
Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	0.54	U	10	0.54	ug/L		06/13/18 16:32	06/14/18 04:37	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/13/18 16:32	06/14/18 04:37	1
Acenaphthene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:37	1
Acenaphthylene	0.82	U	10	0.82	ug/L		06/13/18 16:32	06/14/18 04:37	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 04:37	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:37	1
Atrazine	1.3	U J	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzaldehyde	~~0.59 U~~	R	10	0.59	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:37	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 04:37	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:37	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 04:37	1
Bis(2-ethylhexyl) phthalate	1.8	J	2.0	1.7	ug/L		06/13/18 16:32	06/14/18 04:37	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/13/18 16:32	06/14/18 04:37	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:37	1
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:37	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 04:37	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 04:37	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:37	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 04:37	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 04:37	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:37	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 04:37	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:37	1
Fluorene	0.91	U	10	0.91	ug/L		06/13/18 16:32	06/14/18 04:37	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 04:37	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 04:37	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/13/18 16:32	06/14/18 04:37	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 04:37	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:37	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 04:37	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:37	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 04:37	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 04:37	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 04:37	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/13/18 16:32	06/14/18 04:37	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:37	1
Phenol	0.29	U J	10	0.29	ug/L		06/13/18 16:32	06/14/18 04:37	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 04:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 04:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*26 - 139*	*06/13/18 16:32*	*06/14/18 04:37*	*1*
2-Fluorobiphenyl	*76*		*45 - 107*	*06/13/18 16:32*	*06/14/18 04:37*	*1*
2-Fluorophenol (Surr)	*38*		*25 - 58*	*06/13/18 16:32*	*06/14/18 04:37*	*1*

Client Sample ID: MW-2

Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*85*		*51 - 108*	*06/13/18 16:32*	*06/14/18 04:37*	*1*
Phenol-d5 (Surr)	*24*		*14 - 39*	*06/13/18 16:32*	*06/14/18 04:37*	*1*
Terphenyl-d14 (Surr)	*85*		*40 - 148*	*06/13/18 16:32*	*06/14/18 04:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:34	1
1,2,4,5-Tetrachlorobenzene	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,2'-oxybis[1-chloropropane]	0.63	U J	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,4-Dinitrotoluene	1.0	U J	2.0	1.0	ug/L		06/12/18 09:03	06/13/18 00:34	1
2,6-Dinitrotoluene	2.0 ~~0.87~~	J J	2.0	0.39	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Chloronaphthalene	1.2	U J	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Methylnaphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Nitroaniline	0.47	U J	10	0.47	ug/L		06/12/18 09:03	06/13/18 00:34	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:34	1
3,3'-Dichlorobenzidine	1.4	U J	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:34	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/12/18 09:03	06/13/18 00:34	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Bromophenyl phenyl ether	0.75	U J	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Chlorophenyl phenyl ether	1.3	U J	10	1.3	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Nitroaniline	0.54	U J	10	0.54	ug/L		06/12/18 09:03	06/13/18 00:34	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/12/18 09:03	06/13/18 00:34	1
Acenaphthene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:34	1
Acenaphthylene	0.82	U J	10	0.82	ug/L		06/12/18 09:03	06/13/18 00:34	1
Acetophenone	0.79	U J	10	0.79	ug/L		06/12/18 09:03	06/13/18 00:34	1
Anthracene	0.63	U J	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:34	1
Atrazine	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzaldehyde	0.59	U J	10	0.59	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzo[a]anthracene	0.59	U J	1.0	0.59	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzo[a]pyrene	0.41	U J	1.0	0.41	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzo[b]fluoranthene	1.1	U J	2.0	1.1	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzo[g,h,i]perylene	1.4	U J	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:34	1
Benzo[k]fluoranthene	0.67	U J	1.0	0.67	ug/L		06/12/18 09:03	06/13/18 00:34	1
Bis(2-chloroethoxy)methane	0.24	U J	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:34	1
Bis(2-chloroethyl)ether	0.30	U J	1.0	0.30	ug/L		06/12/18 09:03	06/13/18 00:34	1
Bis(2-ethylhexyl) phthalate	1.7	U J	2.0	1.7	ug/L		06/12/18 09:03	06/13/18 00:34	1
Butyl benzyl phthalate	0.85	U J	10	0.85	ug/L		06/12/18 09:03	06/13/18 00:34	1
Caprolactam	0.68	U J	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:34	1

Client Sample ID: MW-2
Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.68	U J	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:34	1
Chrysene	0.91	U J	2.0	0.91	ug/L		06/12/18 09:03	06/13/18 00:34	1
Dibenz(a,h)anthracene	0.72	U J	1.0	0.72	ug/L		06/12/18 09:03	06/13/18 00:34	1
Dibenzofuran	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:34	1
Diethyl phthalate	10 ~~8.0~~ J	UJ	10	0.98	ug/L		06/12/18 09:03	06/13/18 00:34	1
Dimethyl phthalate	0.77	U J	10	0.77	ug/L		06/12/18 09:03	06/13/18 00:34	1
Di-n-butyl phthalate	10 ~~2.0~~ J	UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:34	1
Di-n-octyl phthalate	4.8	U J	10	4.8	ug/L		06/12/18 09:03	06/13/18 00:34	1
Fluoranthene	0.84	U J	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:34	1
Fluorene	0.91	U J	10	0.91	ug/L		06/12/18 09:03	06/13/18 00:34	1
Hexachlorobenzene	0.40	U J	1.0	0.40	ug/L		06/12/18 09:03	06/13/18 00:34	1
Hexachlorobutadiene	0.78	U J	1.0	0.78	ug/L		06/12/18 09:03	06/13/18 00:34	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/12/18 09:03	06/13/18 00:34	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/12/18 09:03	06/13/18 00:34	1
Indeno[1,2,3-cd]pyrene	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:34	1
Isophorone	0.80	U J	10	0.80	ug/L		06/12/18 09:03	06/13/18 00:34	1
Naphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:34	1
Nitrobenzene	0.57	U J	1.0	0.57	ug/L		06/12/18 09:03	06/13/18 00:34	1
N-Nitrosodi-n-propylamine	0.43	U J	1.0	0.43	ug/L		06/12/18 09:03	06/13/18 00:34	1
N-Nitrosodiphenylamine	0.89	U J	10	0.89	ug/L		06/12/18 09:03	06/13/18 00:34	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 09:03	06/13/18 00:34	1
Phenanthrene	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:34	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 09:03	06/13/18 00:34	1
Pyrene	1.6	U J	10	1.6	ug/L		06/12/18 09:03	06/13/18 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*26 - 139*	*06/12/18 09:03*	*06/13/18 00:34*	*1*
2-Fluorobiphenyl	*90*		*45 - 107*	*06/12/18 09:03*	*06/13/18 00:34*	*1*
2-Fluorophenol (Surr)	*45*		*25 - 58*	*06/12/18 09:03*	*06/13/18 00:34*	*1*
Nitrobenzene-d5 (Surr)	*105*		*51 - 108*	*06/12/18 09:03*	*06/13/18 00:34*	*1*
Phenol-d5 (Surr)	*29*		*14 - 39*	*06/12/18 09:03*	*06/13/18 00:34*	*1*
Terphenyl-d14 (Surr)	*63*		*40 - 148*	*06/12/18 09:03*	*06/13/18 00:34*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:25	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:25	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:25	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:25	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 02:25	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:25	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 02:25	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:25	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:25	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:25	1

Client Sample ID: MW-2
Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 02:25	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:25	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:25	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:25	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*46*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:25*	*1*
DCB Decachlorobiphenyl	*45*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:25*	*1*
Tetrachloro-m-xylene	*82*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:25*	*1*
Tetrachloro-m-xylene	*80*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1221	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1232	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1242	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1248	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1254	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1260	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor-1262	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:26	1
Aroclor 1268	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:26	1
Polychlorinated biphenyls, Total	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:26*	*1*
DCB Decachlorobiphenyl	*59*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:26*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.52	U	1.73	0.52	ng/L		06/14/18 12:00	06/20/18 08:50	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.52	U	1.73	0.52	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorobutanesulfonic acid (PFBS)	6.94	J +	1.73	0.76	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorobutanoic acid (PFBA)	13.0 ~~B~~	J-	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorodecanesulfonic acid (PFDS)	0.38	U	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorodecanoic acid (PFDA)	0.62	J	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorododecanoic acid (PFDoA)	0.38	U	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.38	U	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluoroheptanoic acid (PFHpA)	1.83 ~~B~~		1.73	0.25	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorohexanesulfonic acid (PFHxS)	2.68 ~~B~~	UJ	1.73	0.24	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorohexanoic acid (PFHxA)	1.92 ~~B~~	UJ	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorononanoic acid (PFNA)	1.80 ~~B~~		1.73	0.22	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorooctane Sulfonamide (PFOSA)	1.73 ~~0.57~~ ~~J B~~	UJ	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorooctanesulfonic acid (PFOS)	5.76		1.73	0.26	ng/L		06/14/18 12:00	06/20/18 08:50	1

Client Sample ID: MW-2
Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	7.66	~~B~~	1.73	0.41	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluoropentanoic acid (PFPeA)	12.0	~~B~~ J	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorotetradecanoic acid (PFTeA)	0.38	U J	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluorotridecanoic Acid (PFTriA)	0.38	U	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
Perfluoroundecanoic acid (PFUnA)	0.38	U	1.73	0.38	ng/L		06/14/18 12:00	06/20/18 08:50	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.73	~~0.65 JB~~ U	1.73	0.52	ng/L		06/14/18 12:00	06/20/18 08:50	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.52	U	1.73	0.52	ng/L		06/14/18 12:00	06/20/18 08:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*136*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C2 PFDoA	*111*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C2 PFHxA	*33*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C2 PFUnA	*132*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C2-PFTeDA	*83*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C3-PFBS	*40*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C4 PFBA	*9*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C4 PFOA	*96*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C4 PFOS	*107*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C4-PFHpA	*57*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C5 PFNA	*127*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C5-PFPeA	*17*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
13C8 FOSA	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
18O2 PFHxS	*69*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
d3-NMeFOSAA	*101*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
d5-NEtFOSAA	*115*		*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
M2-6:2FTS	*365*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*
M2-8:2FTS	*311*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 08:50*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	36.0	J	40.0	15.0	ug/L		06/10/18 18:50	06/11/18 19:32	2
Antimony	2.8		2.0	0.62	ug/L		06/10/18 18:50	06/11/18 19:32	2
Arsenic	5.7		2.0	0.77	ug/L		06/10/18 18:50	06/11/18 19:32	2
Barium	854		4.0	1.1	ug/L		06/10/18 18:50	06/11/18 19:32	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/10/18 18:50	06/11/18 19:32	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/10/18 18:50	06/11/18 19:32	2
Calcium	181000		200	67.6	ug/L		06/10/18 18:50	06/11/18 19:32	2
Chromium	2.8	J	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:32	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:32	2
Copper	13.9		4.0	1.9	ug/L		06/10/18 18:50	06/11/18 19:32	2
Iron	31700		120	45.7	ug/L		06/10/18 18:50	06/11/18 19:32	2
Lead	24.4		1.2	0.37	ug/L		06/10/18 18:50	06/11/18 19:32	2
Magnesium	24900		200	65.7	ug/L		06/10/18 18:50	06/11/18 19:32	2
Manganese	484		8.0	2.7	ug/L		06/10/18 18:50	06/11/18 19:32	2
Nickel	27.3		4.0	1.3	ug/L		06/10/18 18:50	06/11/18 19:32	2
Potassium	124000		200	64.9	ug/L		06/10/18 18:50	06/11/18 19:32	2
Selenium	0.69	U	10.0	0.69	ug/L		06/10/18 18:50	06/11/18 19:32	2
Silver	1.4	U	2.0	1.4	ug/L		06/10/18 18:50	06/11/18 19:32	2
Sodium	32400		200	75.7	ug/L		06/10/18 18:50	06/11/18 19:32	2

Client Sample ID: MW-2

Date Collected: 06/08/18 12:48
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-7
Matrix: Water

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.24	U	0.80	0.24	ug/L		06/10/18 18:50	06/11/18 19:32	2
Vanadium	2.6	J	4.0	1.2	ug/L		06/10/18 18:50	06/11/18 19:32	2
Zinc	255		16.0	5.4	ug/L		06/10/18 18:50	06/11/18 19:32	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		06/19/18 14:14	06/19/18 17:39	2
Aluminum	15.0	U	40.0	15.0	ug/L		06/19/18 14:14	06/19/18 17:39	2
Arsenic	1.4	J	2.0	0.77	ug/L		06/19/18 14:14	06/19/18 17:39	2
Barium	653		4.0	1.1	ug/L		06/19/18 14:14	06/19/18 17:39	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/19/18 14:14	06/19/18 17:39	2
Calcium	200000		200	67.6	ug/L		06/19/18 14:14	06/19/18 17:39	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/19/18 14:14	06/19/18 17:39	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:39	2
Chromium	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:39	2
Copper	3.6	J	4.0	1.9	ug/L		06/19/18 14:14	06/19/18 17:39	2
Iron	72.4	J	120	45.7	ug/L		06/19/18 14:14	06/19/18 17:39	2
Potassium	130000		200	64.9	ug/L		06/19/18 14:14	06/19/18 17:39	2
Magnesium	23400		200	65.7	ug/L		06/19/18 14:14	06/19/18 17:39	2
Manganese	438		8.0	2.7	ug/L		06/19/18 14:14	06/19/18 17:39	2
Sodium	32000		200	75.7	ug/L		06/19/18 14:14	06/19/18 17:39	2
Nickel	18.9		4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:39	2
Lead	0.37	U	1.2	0.37	ug/L		06/19/18 14:14	06/19/18 17:39	2
Antimony	1.4	J	2.0	0.62	ug/L		06/19/18 14:14	06/19/18 17:39	2
Selenium	0.69	U	10.0	0.69	ug/L		06/19/18 14:14	06/19/18 17:39	2
Thallium	0.24	U	0.80	0.24	ug/L		06/19/18 14:14	06/19/18 17:39	2
Vanadium	1.2	U	4.0	1.2	ug/L		06/19/18 14:14	06/19/18 17:39	2
Zinc	72.1		16.0	5.4	ug/L		06/19/18 14:14	06/19/18 17:39	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 16:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/14/18 12:16	06/14/18 14:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0037	J +	0.010	0.0020	mg/L		06/15/18 09:39	06/15/18 11:55	1

Client Sample ID: MW-3

Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 14:48	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 14:48	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 14:48	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 14:48	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 14:48	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 14:48	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 14:48	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 14:48	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 14:48	1
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 14:48	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 14:48	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 14:48	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 14:48	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 14:48	1
Acetone	9.8		5.0	5.0	ug/L			06/13/18 14:48	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 14:48	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 14:48	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 14:48	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 14:48	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 14:48	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 14:48	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 14:48	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 14:48	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 14:48	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 14:48	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 14:48	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 14:48	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 14:48	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 14:48	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 14:48	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 14:48	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 14:48	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 14:48	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 14:48	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 14:48	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 14:48	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 14:48	1
Methylene Chloride	1.0		1.0	0.32	ug/L			06/13/18 14:48	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 14:48	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 14:48	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 14:48	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 14:48	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 14:48	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 14:48	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 14:48	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 14:48	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 14:48	1
Vinyl chloride	0.38	J	1.0	0.17	ug/L			06/13/18 14:48	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 14:48	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 14:48	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 14:48	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					06/13/18 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		06/13/18 14:48	1
4-Bromofluorobenzene	101		77 - 124		06/13/18 14:48	1
Dibromofluoromethane (Surr)	98		72 - 131		06/13/18 14:48	1
Toluene-d8 (Surr)	103		80 - 120		06/13/18 14:48	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		06/12/18 14:56	06/13/18 16:19	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	19		10 - 150	06/12/18 14:56	06/13/18 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	UJ	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:58	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,3,4,6-Tetrachlorophenol	0.75	UJ	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4,5-Trichlorophenol	0.28	UJ	10	0.28	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4,6-Trichlorophenol	0.30	UJ	10	0.30	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4-Dichlorophenol	0.42	UJ	10	0.42	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4-Dimethylphenol	0.24	UJ	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4-Dinitrophenol	14	UJ	20	14	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,4-Dinitrotoluene	1.0	UJ	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 04:58	1
2,6-Dinitrotoluene	0.39	UJ	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Chloronaphthalene	1.2	UJ	10	1.2	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Chlorophenol	0.38	UJ	10	0.38	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Methylnaphthalene	1.1	UJ	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Methylphenol	0.26	UJ	10	0.26	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Nitroaniline	0.47	UJ	10	0.47	ug/L		06/13/18 16:32	06/14/18 04:58	1
2-Nitrophenol	0.75	UJ	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:58	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:58	1
3-Nitroaniline	0.96	UJ	10	0.96	ug/L		06/13/18 16:32	06/14/18 04:58	1
4,6-Dinitro-2-methylphenol	13	UJ	20	13	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Chloro-3-methylphenol	0.58	UJ	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Chloroaniline	1.9	UJ	10	1.9	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Chlorophenyl phenyl ether	1.3	UJ	10	1.3	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Methylphenol	0.24	UJ	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Nitroaniline	0.54	UJ	10	0.54	ug/L		06/13/18 16:32	06/14/18 04:58	1
4-Nitrophenol	0.69	UJ	20	0.69	ug/L		06/13/18 16:32	06/14/18 04:58	1
Acenaphthene	1.1	UJ	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:58	1
Acenaphthylene	0.82	UJ	10	0.82	ug/L		06/13/18 16:32	06/14/18 04:58	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 04:58	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 04:58	1
Atrazine	1.3	UJ	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:58	1
Benzaldehyde	~~0.59 U~~	R	10	0.59	ug/L		06/13/18 16:32	06/14/18 04:58	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 04:58	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 04:58	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 04:58	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 04:58	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 04:58	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/13/18 16:32	06/14/18 04:58	1
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 04:58	1
Bis(2-ethylhexyl) phthalate	2.7		2.0	1.7	ug/L		06/13/18 16:32	06/14/18 04:58	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/13/18 16:32	06/14/18 04:58	1
Caprolactam	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:58	1
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 04:58	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 04:58	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 04:58	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:58	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 04:58	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 04:58	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:58	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 04:58	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 04:58	1
Fluorene	0.91	U	10	0.91	ug/L		06/13/18 16:32	06/14/18 04:58	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 04:58	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 04:58	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		06/13/18 16:32	06/14/18 04:58	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 04:58	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 04:58	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 04:58	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 04:58	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 04:58	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 04:58	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 04:58	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		06/13/18 16:32	06/14/18 04:58	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 04:58	1
Phenol	0.29	U	10	0.29	ug/L		06/13/18 16:32	06/14/18 04:58	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 04:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 04:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*26 - 139*	*06/13/18 16:32*	*06/14/18 04:58*	*1*
2-Fluorobiphenyl	*66*		*45 - 107*	*06/13/18 16:32*	*06/14/18 04:58*	*1*
2-Fluorophenol (Surr)	*35*		*25 - 58*	*06/13/18 16:32*	*06/14/18 04:58*	*1*
Nitrobenzene-d5 (Surr)	*73*		*51 - 108*	*06/13/18 16:32*	*06/14/18 04:58*	*1*
Phenol-d5 (Surr)	*23*		*14 - 39*	*06/13/18 16:32*	*06/14/18 04:58*	*1*
Terphenyl-d14 (Surr)	*81*		*40 - 148*	*06/13/18 16:32*	*06/14/18 04:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:55	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:55	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,4,6-Tetrachlorophenol	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4,5-Trichlorophenol	0.28	U UJ	10	0.28	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4,6-Trichlorophenol	0.30	U UJ	10	0.30	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4-Dichlorophenol	0.42	U UJ	10	0.42	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4-Dimethylphenol	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4-Dinitrophenol	14	U UJ	20	14	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,4-Dinitrotoluene	1.0	U UJ	2.0	1.0	ug/L		06/12/18 09:03	06/13/18 00:55	1
2,6-Dinitrotoluene	2.0 ~~7.4~~	UJ	2.0	0.39	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Chloronaphthalene	1.2	U UJ	10	1.2	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Chlorophenol	0.38	U UJ	10	0.38	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Methylnaphthalene	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Methylphenol	0.26	U UJ	10	0.26	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Nitroaniline	0.47	U UJ	10	0.47	ug/L		06/12/18 09:03	06/13/18 00:55	1
2-Nitrophenol	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:55	1
3,3'-Dichlorobenzidine	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:55	1
3-Nitroaniline	0.96	U UJ	10	0.96	ug/L		06/12/18 09:03	06/13/18 00:55	1
4,6-Dinitro-2-methylphenol	13	U UJ	20	13	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Bromophenyl phenyl ether	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Chloro-3-methylphenol	0.58	U UJ	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Chloroaniline	1.9	U UJ	10	1.9	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Chlorophenyl phenyl ether	1.3	U UJ	10	1.3	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Methylphenol	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Nitroaniline	0.54	U UJ	10	0.54	ug/L		06/12/18 09:03	06/13/18 00:55	1
4-Nitrophenol	0.69	U UJ	20	0.69	ug/L		06/12/18 09:03	06/13/18 00:55	1
Acenaphthene	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:55	1
Acenaphthylene	0.82	U UJ	10	0.82	ug/L		06/12/18 09:03	06/13/18 00:55	1
Acetophenone	0.79	U UJ	10	0.79	ug/L		06/12/18 09:03	06/13/18 00:55	1
Anthracene	0.63	U UJ	10	0.63	ug/L		06/12/18 09:03	06/13/18 00:55	1
Atrazine	1.3	U UJ	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzaldehyde	0.59	U UJ	10	0.59	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzo[a]anthracene	0.59	U UJ	1.0	0.59	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzo[a]pyrene	0.41	U UJ	1.0	0.41	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzo[b]fluoranthene	1.1	U UJ	2.0	1.1	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzo[g,h,i]perylene	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 00:55	1
Benzo[k]fluoranthene	0.67	U UJ	1.0	0.67	ug/L		06/12/18 09:03	06/13/18 00:55	1
Bis(2-chloroethoxy)methane	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 00:55	1
Bis(2-chloroethyl)ether	0.30	U UJ	1.0	0.30	ug/L		06/12/18 09:03	06/13/18 00:55	1
Bis(2-ethylhexyl) phthalate	3.8	J-	2.0	1.7	ug/L		06/12/18 09:03	06/13/18 00:55	1
Butyl benzyl phthalate	0.85	U UJ	10	0.85	ug/L		06/12/18 09:03	06/13/18 00:55	1
Caprolactam	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:55	1
Carbazole	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 00:55	1
Chrysene	0.91	U UJ	2.0	0.91	ug/L		06/12/18 09:03	06/13/18 00:55	1
Dibenz(a,h)anthracene	0.72	U UJ	1.0	0.72	ug/L		06/12/18 09:03	06/13/18 00:55	1
Dibenzofuran	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:55	1
Diethyl phthalate	10 ~~1.1~~	UJ	10	0.98	ug/L		06/12/18 09:03	06/13/18 00:55	1
Dimethyl phthalate	0.77	U UJ	10	0.77	ug/L		06/12/18 09:03	06/13/18 00:55	1
Di-n-butyl phthalate	0.84	U UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:55	1
Di-n-octyl phthalate	4.8	U UJ	10	4.8	ug/L		06/12/18 09:03	06/13/18 00:55	1
Fluoranthene	0.84	U UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 00:55	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.91	U J	10	0.91	ug/L		06/12/18 09:03	06/13/18 00:55	1
Hexachlorobenzene	0.40	U J	1.0	0.40	ug/L		06/12/18 09:03	06/13/18 00:55	1
Hexachlorobutadiene	0.78	U J	1.0	0.78	ug/L		06/12/18 09:03	06/13/18 00:55	1
Hexachlorocyclopentadiene	1.7	U J	10	1.7	ug/L		06/12/18 09:03	06/13/18 00:55	1
Hexachloroethane	1.2	U J	2.0	1.2	ug/L		06/12/18 09:03	06/13/18 00:55	1
Indeno[1,2,3-cd]pyrene	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 00:55	1
Isophorone	0.80	U J	10	0.80	ug/L		06/12/18 09:03	06/13/18 00:55	1
Naphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 00:55	1
Nitrobenzene	0.57	U J	1.0	0.57	ug/L		06/12/18 09:03	06/13/18 00:55	1
N-Nitrosodi-n-propylamine	0.43	U J	1.0	0.43	ug/L		06/12/18 09:03	06/13/18 00:55	1
N-Nitrosodiphenylamine	0.89	U J	10	0.89	ug/L		06/12/18 09:03	06/13/18 00:55	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 09:03	06/13/18 00:55	1
Phenanthrene	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/13/18 00:55	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 09:03	06/13/18 00:55	1
Pyrene	1.6	U J	10	1.6	ug/L		06/12/18 09:03	06/13/18 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*46*		*26 - 139*	*06/12/18 09:03*	*06/13/18 00:55*	*1*
2-Fluorobiphenyl	*51*		*45 - 107*	*06/12/18 09:03*	*06/13/18 00:55*	*1*
2-Fluorophenol (Surr)	*31*		*25 - 58*	*06/12/18 09:03*	*06/13/18 00:55*	*1*
Nitrobenzene-d5 (Surr)	*62*		*51 - 108*	*06/12/18 09:03*	*06/13/18 00:55*	*1*
Phenol-d5 (Surr)	*19*		*14 - 39*	*06/12/18 09:03*	*06/13/18 00:55*	*1*
Terphenyl-d14 (Surr)	*56*		*40 - 148*	*06/12/18 09:03*	*06/13/18 00:55*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U J	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:38	1
4,4'-DDE	0.0020	U J	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:38	1
4,4'-DDT	0.0040	U J	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:38	1
Aldrin	0.0030	U J	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:38	1
alpha-BHC	0.0070	U J	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 02:38	1
beta-BHC	0.018	J	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:38	1
Chlordane (technical)	0.055	U J	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 02:38	1
delta-BHC	0.0050	U J	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:38	1
Dieldrin	0.0030	U J	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endosulfan I	0.0020	U J	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endosulfan II	0.0040	U J	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endosulfan sulfate	0.0060	U J	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endrin	0.0040	U J	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endrin aldehyde	0.0080	U J	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:38	1
Endrin ketone	0.0080	U J	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:38	1
gamma-BHC (Lindane)	0.012	U J	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 02:38	1
Heptachlor	0.0030	U J	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:38	1
Heptachlor epoxide	0.0050	U J	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:38	1
Methoxychlor	0.0040	U J	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:38	1
Toxaphene	0.11	U J	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*18*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:38*	*1*
DCB Decachlorobiphenyl	*17*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:38*	*1*

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*36*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:38*	*1*
Tetrachloro-m-xylene	*38*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1221	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1232	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1242	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1248	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1254	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1260	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor-1262	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:42	1
Aroclor 1268	0.11	U J	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:42	1
Polychlorinated biphenyls, Total	0.12	U J	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*23*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:42*	*1*
DCB Decachlorobiphenyl	*24*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:42*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.71 ~~0.56 J~~	4	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 09:06	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.51	U	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorobutanesulfonic acid (PFBS)	7.74	J +	1.71	0.75	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorobutanoic acid (PFBA)	16.7	~~B~~	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorodecanesulfonic acid (PFDS)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorodecanoic acid (PFDA)	0.39	J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorododecanoic acid (PFDoA)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.50	J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluoroheptanoic acid (PFHpA)	3.75	~~B~~	1.71	0.25	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorohexanesulfonic acid (PFHxS)	1.71 ~~4.35 J B~~	UJ	1.71	0.24	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorohexanoic acid (PFHxA)	5.69	~~B~~ J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorononanoic acid (PFNA)	2.46	~~B~~	1.71	0.22	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorooctane Sulfonamide (PFOSA)	1.71 ~~0.59 J B~~	UJ	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorooctanesulfonic acid (PFOS)	6.03		1.71	0.26	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorooctanoic acid (PFOA)	8.73	~~B~~	1.71	0.40	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluoropentanoic acid (PFPeA)	2.40	~~B~~ UJ	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorotetradecanoic acid (PFTeA)	0.38	U J	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluorotridecanoic Acid (PFTriA)	0.38	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
Perfluoroundecanoic acid (PFUnA)	1.71 ~~0.39 J B~~	U	1.71	0.38	ng/L		06/14/18 12:00	06/20/18 09:06	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.71 ~~0.64 J B~~	U	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 09:06	1

Client Sample ID: MW-3
Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.51	U	1.71	0.51	ng/L		06/14/18 12:00	06/20/18 09:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*117*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C2 PFDoA	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C2 PFHxA	*41*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C2 PFUnA	*112*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C2-PFTeDA	*62*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C3-PFBS	*38*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C4 PFBA	*12*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C4 PFOA	*97*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C4 PFOS	*91*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C4-PFHpA	*68*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C5 PFNA	*115*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C5-PFPeA	*19*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
13C8 FOSA	*78*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
18O2 PFHxS	*67*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
d3-NMeFOSAA	*85*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
d5-NEtFOSAA	*98*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
M2-6:2FTS	*354*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*
M2-8:2FTS	*241*	*	*25 - 150*	*06/14/18 12:00*	*06/20/18 09:06*	*1*

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	146		40.0	15.0	ug/L		06/12/18 08:15	06/14/18 18:49	2
Antimony	1.7	J	2.0	0.62	ug/L		06/12/18 08:15	06/14/18 18:49	2
Arsenic	25.3		2.0	0.77	ug/L		06/12/18 08:15	06/14/18 18:49	2
Barium	256		4.0	1.1	ug/L		06/12/18 08:15	06/14/18 18:49	2
Beryllium	0.76	J	0.80	0.26	ug/L		06/12/18 08:15	06/16/18 16:15	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/12/18 08:15	06/14/18 18:49	2
Calcium	118000	J	200	67.6	ug/L		06/12/18 08:15	06/14/18 18:49	2
Chromium	2.4	J	4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:49	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:49	2
Copper	43.2		4.0	1.9	ug/L		06/12/18 08:15	06/14/18 18:49	2
Iron	15800		120	45.7	ug/L		06/12/18 08:15	06/14/18 18:49	2
Lead	34.5		1.2	0.37	ug/L		06/12/18 08:15	06/14/18 18:49	2
Magnesium	17200		200	65.7	ug/L		06/12/18 08:15	06/14/18 18:49	2
Manganese	180		8.0	2.7	ug/L		06/12/18 08:15	06/14/18 18:49	2
Nickel	9.6		4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:49	2
Potassium	85400	J	200	64.9	ug/L		06/12/18 08:15	06/14/18 18:49	2
Selenium	1.0	J	10.0	0.69	ug/L		06/12/18 08:15	06/14/18 18:49	2
Silver	1.4	U	2.0	1.4	ug/L		06/12/18 08:15	06/14/18 18:49	2
Sodium	18800		200	75.7	ug/L		06/12/18 08:15	06/14/18 18:49	2
Thallium	0.24	U	0.80	0.24	ug/L		06/12/18 08:15	06/14/18 18:49	2
Vanadium	8.5		4.0	1.2	ug/L		06/12/18 08:15	06/14/18 18:49	2
Zinc	143		16.0	5.4	ug/L		06/12/18 08:15	06/14/18 18:49	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		06/19/18 14:14	06/19/18 17:48	2

Client Sample ID: MW-3

Date Collected: 06/08/18 14:07
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-8
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	29.6	J	40.0	15.0	ug/L		06/19/18 14:14	06/19/18 17:48	2
Arsenic	4.8		2.0	0.77	ug/L		06/19/18 14:14	06/19/18 17:48	2
Barium	125		4.0	1.1	ug/L		06/19/18 14:14	06/19/18 17:48	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/19/18 14:14	06/19/18 17:48	2
Calcium	145000	J	200	67.6	ug/L		06/19/18 14:14	06/19/18 17:48	2
Cadmium	0.61	U	2.0	0.61	ug/L		06/19/18 14:14	06/19/18 17:48	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:48	2
Chromium	1.3	J	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:48	2
Copper	25.0		4.0	1.9	ug/L		06/19/18 14:14	06/19/18 17:48	2
Iron	1340		120	45.7	ug/L		06/19/18 14:14	06/19/18 17:48	2
Potassium	101000	J	200	64.9	ug/L		06/19/18 14:14	06/19/18 17:48	2
Magnesium	18700		200	65.7	ug/L		06/19/18 14:14	06/19/18 17:48	2
Manganese	178		8.0	2.7	ug/L		06/19/18 14:14	06/19/18 17:48	2
Sodium	20200		200	75.7	ug/L		06/19/18 14:14	06/19/18 17:48	2
Nickel	8.1		4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:48	2
Lead	1.5		1.2	0.37	ug/L		06/19/18 14:14	06/19/18 17:48	2
Antimony	1.2	J	2.0	0.62	ug/L		06/19/18 14:14	06/19/18 17:48	2
Selenium	0.69	J	10.0	0.69	ug/L		06/19/18 14:14	06/19/18 17:48	2
Thallium	0.24	U	0.80	0.24	ug/L		06/19/18 14:14	06/19/18 17:48	2
Vanadium	2.5	J	4.0	1.2	ug/L		06/19/18 14:14	06/19/18 17:48	2
Zinc	85.5		16.0	5.4	ug/L		06/19/18 14:14	06/19/18 17:48	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/13/18 14:20	06/13/18 16:05	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/14/18 12:16	06/14/18 14:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0036	J +	0.010	0.0020	mg/L		06/15/18 09:39	06/15/18 11:56	1

Client Sample ID: MW-4

Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			06/13/18 15:14	1
1,1,2,2-Tetrachloroethane	0.37	U	1.0	0.37	ug/L			06/13/18 15:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	U	1.0	0.31	ug/L			06/13/18 15:14	1
1,1,2-Trichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 15:14	1
1,1-Dichloroethane	0.26	U	1.0	0.26	ug/L			06/13/18 15:14	1
1,1-Dichloroethene	0.12	U	1.0	0.12	ug/L			06/13/18 15:14	1
1,2,3-Trichlorobenzene	0.36	U	1.0	0.36	ug/L			06/13/18 15:14	1
1,2,4-Trichlorobenzene	0.37	U	1.0	0.37	ug/L			06/13/18 15:14	1
1,2-Dichloropropane	0.35	U	1.0	0.35	ug/L			06/13/18 15:14	1
1,3-Dichlorobenzene	0.34	U	1.0	0.34	ug/L			06/13/18 15:14	1

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.76	U	1.0	0.76	ug/L			06/13/18 15:14	1
1,4-Dioxane	28	U	50	28	ug/L			06/13/18 15:14	1
2-Butanone (MEK)	1.9	U	5.0	1.9	ug/L			06/13/18 15:14	1
2-Hexanone	2.9	U	5.0	2.9	ug/L			06/13/18 15:14	1
4-Methyl-2-pentanone (MIBK)	2.7	U	5.0	2.7	ug/L			06/13/18 15:14	1
Acetone	27		5.0	5.0	ug/L			06/13/18 15:14	1
Benzene	0.43	U	1.0	0.43	ug/L			06/13/18 15:14	1
Bromoform	0.54	U	1.0	0.54	ug/L			06/13/18 15:14	1
Bromomethane	1.0	U J	1.0	1.0	ug/L			06/13/18 15:14	1
Carbon disulfide	0.16	U	1.0	0.16	ug/L			06/13/18 15:14	1
Carbon tetrachloride	0.21	U	1.0	0.21	ug/L			06/13/18 15:14	1
Chlorobenzene	0.38	U	1.0	0.38	ug/L			06/13/18 15:14	1
Chlorobromomethane	0.41	U	1.0	0.41	ug/L			06/13/18 15:14	1
Chlorodibromomethane	0.28	U	1.0	0.28	ug/L			06/13/18 15:14	1
Chloroethane	0.32	U	1.0	0.32	ug/L			06/13/18 15:14	1
Chloroform	0.33	U	1.0	0.33	ug/L			06/13/18 15:14	1
Chloromethane	0.14	U	1.0	0.14	ug/L			06/13/18 15:14	1
cis-1,2-Dichloroethene	0.22	U	1.0	0.22	ug/L			06/13/18 15:14	1
cis-1,3-Dichloropropene	0.46	U	1.0	0.46	ug/L			06/13/18 15:14	1
Cyclohexane	0.32	U	1.0	0.32	ug/L			06/13/18 15:14	1
Dichlorobromomethane	0.34	U	1.0	0.34	ug/L			06/13/18 15:14	1
Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L			06/13/18 15:14	1
Ethylbenzene	0.30	U	1.0	0.30	ug/L			06/13/18 15:14	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/13/18 15:14	1
Isopropylbenzene	0.34	U	1.0	0.34	ug/L			06/13/18 15:14	1
Methyl acetate	0.31	U	5.0	0.31	ug/L			06/13/18 15:14	1
Methyl tert-butyl ether	0.47	U	1.0	0.47	ug/L			06/13/18 15:14	1
Methylcyclohexane	0.26	U	1.0	0.26	ug/L			06/13/18 15:14	1
Methylene Chloride	0.78	J	1.0	0.32	ug/L			06/13/18 15:14	1
m-Xylene & p-Xylene	0.30	U	1.0	0.30	ug/L			06/13/18 15:14	1
o-Xylene	0.36	U	1.0	0.36	ug/L			06/13/18 15:14	1
Styrene	0.42	U	1.0	0.42	ug/L			06/13/18 15:14	1
Tetrachloroethene	0.25	U	1.0	0.25	ug/L			06/13/18 15:14	1
Toluene	0.38	U	1.0	0.38	ug/L			06/13/18 15:14	1
trans-1,2-Dichloroethene	0.24	U	1.0	0.24	ug/L			06/13/18 15:14	1
trans-1,3-Dichloropropene	0.49	U	1.0	0.49	ug/L			06/13/18 15:14	1
Trichloroethene	0.31	U	1.0	0.31	ug/L			06/13/18 15:14	1
Trichlorofluoromethane	0.14	U	1.0	0.14	ug/L			06/13/18 15:14	1
Vinyl chloride	0.17	U	1.0	0.17	ug/L			06/13/18 15:14	1
1,2-Dichloroethane	0.43	U	1.0	0.43	ug/L			06/13/18 15:14	1
1,2-Dichlorobenzene	0.43	U	1.0	0.43	ug/L			06/13/18 15:14	1
1,2-Dibromo-3-Chloropropane	0.38	U	1.0	0.38	ug/L			06/13/18 15:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*06/13/18 15:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*		*06/13/18 15:14*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*06/13/18 15:14*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*06/13/18 15:14*	*1*

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*80 - 120*		*06/13/18 15:14*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016	U	0.20	0.016	ug/L		06/12/18 14:56	06/13/18 16:37	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	*17*		*10 - 150*	*06/12/18 14:56*	*06/13/18 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U J	10	1.2	ug/L		06/13/18 16:32	06/14/18 05:19	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,3,4,6-Tetrachlorophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4,5-Trichlorophenol	0.28	U J	10	0.28	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4,6-Trichlorophenol	0.30	U J	10	0.30	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4-Dichlorophenol	0.42	U J	10	0.42	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4-Dimethylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4-Dinitrophenol	14	U J	20	14	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,4-Dinitrotoluene	1.0	U J	2.0	1.0	ug/L		06/13/18 16:32	06/14/18 05:19	1
2,6-Dinitrotoluene	0.39	U J	2.0	0.39	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Chloronaphthalene	1.2	U J	10	1.2	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Chlorophenol	0.38	U J	10	0.38	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Methylnaphthalene	1.1	U J	10	1.1	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Methylphenol	0.26	U J	10	0.26	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Nitroaniline	0.47	U J	10	0.47	ug/L		06/13/18 16:32	06/14/18 05:19	1
2-Nitrophenol	0.75	U J	10	0.75	ug/L		06/13/18 16:32	06/14/18 05:19	1
3,3'-Dichlorobenzidine	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 05:19	1
3-Nitroaniline	0.96	U J	10	0.96	ug/L		06/13/18 16:32	06/14/18 05:19	1
4,6-Dinitro-2-methylphenol	13	U J	20	13	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Bromophenyl phenyl ether	0.75	U	10	0.75	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Chloro-3-methylphenol	0.58	U J	10	0.58	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Chloroaniline	1.9	U J	10	1.9	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Chlorophenyl phenyl ether	1.3	U J	10	1.3	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Methylphenol	0.24	U J	10	0.24	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Nitroaniline	0.54	U J	10	0.54	ug/L		06/13/18 16:32	06/14/18 05:19	1
4-Nitrophenol	0.69	U J	20	0.69	ug/L		06/13/18 16:32	06/14/18 05:19	1
Acenaphthene	1.1	U J	10	1.1	ug/L		06/13/18 16:32	06/14/18 05:19	1
Acenaphthylene	0.82	U J	10	0.82	ug/L		06/13/18 16:32	06/14/18 05:19	1
Acetophenone	0.79	U	10	0.79	ug/L		06/13/18 16:32	06/14/18 05:19	1
Anthracene	0.63	U	10	0.63	ug/L		06/13/18 16:32	06/14/18 05:19	1
Atrazine	1.3	U J	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzaldehyde	~~0.59 U~~	R	10	0.59	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzo[a]anthracene	0.59	U	1.0	0.59	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzo[a]pyrene	0.41	U	1.0	0.41	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzo[b]fluoranthene	1.1	U	2.0	1.1	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzo[g,h,i]perylene	1.4	U	10	1.4	ug/L		06/13/18 16:32	06/14/18 05:19	1
Benzo[k]fluoranthene	0.67	U	1.0	0.67	ug/L		06/13/18 16:32	06/14/18 05:19	1
Bis(2-chloroethoxy)methane	0.24	U	10	0.24	ug/L		06/13/18 16:32	06/14/18 05:19	1

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.30	U	1.0	0.30	ug/L		06/13/18 16:32	06/14/18 05:19	1
Bis(2-ethylhexyl) phthalate	1.7	U	2.0	1.7	ug/L		06/13/18 16:32	06/14/18 05:19	1
Butyl benzyl phthalate	0.85	U	10	0.85	ug/L		06/13/18 16:32	06/14/18 05:19	1
Caprolactam	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 05:19	1
Carbazole	0.68	U	10	0.68	ug/L		06/13/18 16:32	06/14/18 05:19	1
Chrysene	0.91	U	2.0	0.91	ug/L		06/13/18 16:32	06/14/18 05:19	1
Dibenz(a,h)anthracene	0.72	U	1.0	0.72	ug/L		06/13/18 16:32	06/14/18 05:19	1
Dibenzofuran	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 05:19	1
Diethyl phthalate	0.98	U	10	0.98	ug/L		06/13/18 16:32	06/14/18 05:19	1
Dimethyl phthalate	0.77	U	10	0.77	ug/L		06/13/18 16:32	06/14/18 05:19	1
Di-n-butyl phthalate	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 05:19	1
Di-n-octyl phthalate	4.8	U	10	4.8	ug/L		06/13/18 16:32	06/14/18 05:19	1
Fluoranthene	0.84	U	10	0.84	ug/L		06/13/18 16:32	06/14/18 05:19	1
Fluorene	0.91	U	10	0.91	ug/L		06/13/18 16:32	06/14/18 05:19	1
Hexachlorobenzene	0.40	U	1.0	0.40	ug/L		06/13/18 16:32	06/14/18 05:19	1
Hexachlorobutadiene	0.78	U	1.0	0.78	ug/L		06/13/18 16:32	06/14/18 05:19	1
Hexachlorocyclopentadiene	1.7	U	10	1.7	ug/L		06/13/18 16:32	06/14/18 05:19	1
Hexachloroethane	1.2	U	2.0	1.2	ug/L		06/13/18 16:32	06/14/18 05:19	1
Indeno[1,2,3-cd]pyrene	1.3	U	2.0	1.3	ug/L		06/13/18 16:32	06/14/18 05:19	1
Isophorone	0.80	U	10	0.80	ug/L		06/13/18 16:32	06/14/18 05:19	1
Naphthalene	1.1	U	10	1.1	ug/L		06/13/18 16:32	06/14/18 05:19	1
Nitrobenzene	0.57	U	1.0	0.57	ug/L		06/13/18 16:32	06/14/18 05:19	1
N-Nitrosodi-n-propylamine	0.43	U	1.0	0.43	ug/L		06/13/18 16:32	06/14/18 05:19	1
N-Nitrosodiphenylamine	0.89	U	10	0.89	ug/L		06/13/18 16:32	06/14/18 05:19	1
Pentachlorophenol	1.4	U	20	1.4	ug/L		06/13/18 16:32	06/14/18 05:19	1
Phenanthrene	0.58	U	10	0.58	ug/L		06/13/18 16:32	06/14/18 05:19	1
Phenol	0.29	U	10	0.29	ug/L		06/13/18 16:32	06/14/18 05:19	1
Pyrene	1.6	U	10	1.6	ug/L		06/13/18 16:32	06/14/18 05:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*				*06/13/18 16:32*	*06/14/18 05:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*26 - 139*	*06/13/18 16:32*	*06/14/18 05:19*	*1*
2-Fluorobiphenyl	*68*		*45 - 107*	*06/13/18 16:32*	*06/14/18 05:19*	*1*
2-Fluorophenol (Surr)	*36*		*25 - 58*	*06/13/18 16:32*	*06/14/18 05:19*	*1*
Nitrobenzene-d5 (Surr)	*78*		*51 - 108*	*06/13/18 16:32*	*06/14/18 05:19*	*1*
Phenol-d5 (Surr)	*23*		*14 - 39*	*06/13/18 16:32*	*06/14/18 05:19*	*1*
Terphenyl-d14 (Surr)	*97*		*40 - 148*	*06/13/18 16:32*	*06/14/18 05:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U	10	1.2	ug/L		06/12/18 09:03	06/13/18 01:16	1
1,2,4,5-Tetrachlorobenzene	1.2	U	10	1.2	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,2'-oxybis[1-chloropropane]	0.63	U	10	0.63	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,3,4,6-Tetrachlorophenol	0.75	U	10	0.75	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,4,5-Trichlorophenol	0.28	U	10	0.28	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,4,6-Trichlorophenol	0.30	U	10	0.30	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,4-Dichlorophenol	0.42	U	10	0.42	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,4-Dimethylphenol	0.24	U	10	0.24	ug/L		06/12/18 09:03	06/13/18 01:16	1

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	14	U UJ	20	14	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,4-Dinitrotoluene	1.0	U UJ	2.0	1.0	ug/L		06/12/18 09:03	06/13/18 01:16	1
2,6-Dinitrotoluene	2.6 ~~22~~	UJ	2.0	0.39	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Chloronaphthalene	1.2	U UJ	10	1.2	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Chlorophenol	0.38	U UJ	10	0.38	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Methylnaphthalene	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Methylphenol	0.26	U UJ	10	0.26	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Nitroaniline	0.47	U UJ	10	0.47	ug/L		06/12/18 09:03	06/13/18 01:16	1
2-Nitrophenol	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 01:16	1
3,3'-Dichlorobenzidine	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 01:16	1
3-Nitroaniline	0.96	U UJ	10	0.96	ug/L		06/12/18 09:03	06/13/18 01:16	1
4,6-Dinitro-2-methylphenol	13	U UJ	20	13	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Bromophenyl phenyl ether	0.75	U UJ	10	0.75	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Chloro-3-methylphenol	0.58	U UJ	10	0.58	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Chloroaniline	1.9	U UJ	10	1.9	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Chlorophenyl phenyl ether	1.3	U UJ	10	1.3	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Methylphenol	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Nitroaniline	0.54	U UJ	10	0.54	ug/L		06/12/18 09:03	06/13/18 01:16	1
4-Nitrophenol	0.69	U UJ	20	0.69	ug/L		06/12/18 09:03	06/13/18 01:16	1
Acenaphthene	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 01:16	1
Acenaphthylene	0.82	U UJ	10	0.82	ug/L		06/12/18 09:03	06/13/18 01:16	1
Acetophenone	0.79	U UJ	10	0.79	ug/L		06/12/18 09:03	06/13/18 01:16	1
Anthracene	0.63	U UJ	10	0.63	ug/L		06/12/18 09:03	06/13/18 01:16	1
Atrazine	1.3	U UJ	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzaldehyde	0.59	U UJ	10	0.59	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzo[a]anthracene	0.59	U UJ	1.0	0.59	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzo[a]pyrene	0.41	U UJ	1.0	0.41	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzo[b]fluoranthene	1.1	U UJ	2.0	1.1	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzo[g,h,i]perylene	1.4	U UJ	10	1.4	ug/L		06/12/18 09:03	06/13/18 01:16	1
Benzo[k]fluoranthene	0.67	U UJ	1.0	0.67	ug/L		06/12/18 09:03	06/13/18 01:16	1
Bis(2-chloroethoxy)methane	0.24	U UJ	10	0.24	ug/L		06/12/18 09:03	06/13/18 01:16	1
Bis(2-chloroethyl)ether	0.30	U UJ	1.0	0.30	ug/L		06/12/18 09:03	06/13/18 01:16	1
Bis(2-ethylhexyl) phthalate	2.4	J	2.0	1.7	ug/L		06/12/18 09:03	06/13/18 01:16	1
Butyl benzyl phthalate	0.85	U UJ	10	0.85	ug/L		06/12/18 09:03	06/13/18 01:16	1
Caprolactam	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 01:16	1
Carbazole	0.68	U UJ	10	0.68	ug/L		06/12/18 09:03	06/13/18 01:16	1
Chrysene	0.91	U UJ	2.0	0.91	ug/L		06/12/18 09:03	06/13/18 01:16	1
Dibenz(a,h)anthracene	0.72	U UJ	1.0	0.72	ug/L		06/12/18 09:03	06/13/18 01:16	1
Dibenzofuran	1.1	U UJ	10	1.1	ug/L		06/12/18 09:03	06/13/18 01:16	1
Diethyl phthalate	10 ~~5.6~~	UJ	10	0.98	ug/L		06/12/18 09:03	06/13/18 01:16	1
Dimethyl phthalate	0.77	U UJ	10	0.77	ug/L		06/12/18 09:03	06/13/18 01:16	1
Di-n-butyl phthalate	10 ~~3.4~~	UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 01:16	1
Di-n-octyl phthalate	4.8	U UJ	10	4.8	ug/L		06/12/18 09:03	06/13/18 01:16	1
Fluoranthene	0.84	U UJ	10	0.84	ug/L		06/12/18 09:03	06/13/18 01:16	1
Fluorene	0.91	U UJ	10	0.91	ug/L		06/12/18 09:03	06/13/18 01:16	1
Hexachlorobenzene	0.40	U UJ	1.0	0.40	ug/L		06/12/18 09:03	06/13/18 01:16	1
Hexachlorobutadiene	0.78	U UJ	1.0	0.78	ug/L		06/12/18 09:03	06/13/18 01:16	1
Hexachlorocyclopentadiene	1.7	U UJ	10	1.7	ug/L		06/12/18 09:03	06/13/18 01:16	1
Hexachloroethane	1.2	U UJ	2.0	1.2	ug/L		06/12/18 09:03	06/13/18 01:16	1

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Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	1.3	U J	2.0	1.3	ug/L		06/12/18 09:03	06/13/18 01:16	1
Isophorone	0.80	U J	10	0.80	ug/L		06/12/18 09:03	06/13/18 01:16	1
Naphthalene	1.1	U J	10	1.1	ug/L		06/12/18 09:03	06/13/18 01:16	1
Nitrobenzene	0.57	U J	1.0	0.57	ug/L		06/12/18 09:03	06/13/18 01:16	1
N-Nitrosodi-n-propylamine	0.43	U J	1.0	0.43	ug/L		06/12/18 09:03	06/13/18 01:16	1
N-Nitrosodiphenylamine	0.89	U J	10	0.89	ug/L		06/12/18 09:03	06/13/18 01:16	1
Pentachlorophenol	1.4	U J	20	1.4	ug/L		06/12/18 09:03	06/13/18 01:16	1
Phenanthrene	0.58	U J	10	0.58	ug/L		06/12/18 09:03	06/13/18 01:16	1
Phenol	0.29	U J	10	0.29	ug/L		06/12/18 09:03	06/13/18 01:16	1
Pyrene	1.6	U J	10	1.6	ug/L		06/12/18 09:03	06/13/18 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*26 - 139*	*06/12/18 09:03*	*06/13/18 01:16*	*1*
2-Fluorobiphenyl	*84*		*45 - 107*	*06/12/18 09:03*	*06/13/18 01:16*	*1*
2-Fluorophenol (Surr)	*40*		*25 - 58*	*06/12/18 09:03*	*06/13/18 01:16*	*1*
Nitrobenzene-d5 (Surr)	*102*		*51 - 108*	*06/12/18 09:03*	*06/13/18 01:16*	*1*
Phenol-d5 (Surr)	*26*		*14 - 39*	*06/12/18 09:03*	*06/13/18 01:16*	*1*
Terphenyl-d14 (Surr)	*99*		*40 - 148*	*06/12/18 09:03*	*06/13/18 01:16*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:51	1
4,4'-DDE	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:51	1
4,4'-DDT	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:51	1
Aldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:51	1
alpha-BHC	0.0070	U	0.020	0.0070	ug/L		06/13/18 07:48	06/14/18 02:51	1
beta-BHC	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:51	1
Chlordane (technical)	0.055	U	0.50	0.055	ug/L		06/13/18 07:48	06/14/18 02:51	1
delta-BHC	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:51	1
Dieldrin	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endosulfan I	0.0020	U	0.020	0.0020	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endosulfan II	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endosulfan sulfate	0.0060	U	0.020	0.0060	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endrin	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endrin aldehyde	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:51	1
Endrin ketone	0.0080	U	0.020	0.0080	ug/L		06/13/18 07:48	06/14/18 02:51	1
gamma-BHC (Lindane)	0.012	U	0.020	0.012	ug/L		06/13/18 07:48	06/14/18 02:51	1
Heptachlor	0.0030	U	0.020	0.0030	ug/L		06/13/18 07:48	06/14/18 02:51	1
Heptachlor epoxide	0.0050	U	0.020	0.0050	ug/L		06/13/18 07:48	06/14/18 02:51	1
Methoxychlor	0.0040	U	0.020	0.0040	ug/L		06/13/18 07:48	06/14/18 02:51	1
Toxaphene	0.11	U	0.50	0.11	ug/L		06/13/18 07:48	06/14/18 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*76*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:51*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 150*	*06/13/18 07:48*	*06/14/18 02:51*	*1*
Tetrachloro-m-xylene	*81*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:51*	*1*
Tetrachloro-m-xylene	*83*		*12 - 136*	*06/13/18 07:48*	*06/14/18 02:51*	*1*

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
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Lab Sample ID: 460-157993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1221	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1232	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1242	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1248	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1254	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1260	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor-1262	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:58	1
Aroclor 1268	0.11	U	0.40	0.11	ug/L		06/13/18 08:05	06/13/18 23:58	1
Polychlorinated biphenyls, Total	0.12	U	0.40	0.12	ug/L		06/13/18 08:05	06/13/18 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:58*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 150*	*06/13/18 08:05*	*06/13/18 23:58*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.67	~~0.61 J~~ UJ	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 09:22	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.67	~~0.62 J~~ UJ	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorobutanesulfonic acid (PFBS)	6.39	J+	1.67	0.73	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorobutanoic acid (PFBA)	26.4	~~B~~	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorodecanesulfonic acid (PFDS)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorodecanoic acid (PFDA)	0.89	J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorododecanoic acid (PFDoA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.61	J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluoroheptanoic acid (PFHpA)	4.39	~~B~~	1.67	0.24	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorohexanesulfonic acid (PFHxS)	2.55	~~B~~ UJ	1.67	0.23	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorohexanoic acid (PFHxA)	4.79	~~B~~ J	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorononanoic acid (PFNA)	2.51	~~B~~	1.67	0.22	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorooctane Sulfonamide (PFOSA)	1.67	~~0.53 J B~~ UJ	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorooctanesulfonic acid (PFOS)	37.0		1.67	0.25	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorooctanoic acid (PFOA)	12.0	~~B~~	1.67	0.39	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluoropentanoic acid (PFPeA)	3.24	~~3.24 B~~ UJ	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorotetradecanoic acid (PFTeA)	0.37	UJ	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluorotridecanoic Acid (PFTriA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
Perfluoroundecanoic acid (PFUnA)	0.37	U	1.67	0.37	ng/L		06/14/18 12:00	06/20/18 09:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.67	~~0.73 J B~~ UJ	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 09:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.50	UJ	1.67	0.50	ng/L		06/14/18 12:00	06/20/18 09:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFDA	*133*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:22*	*1*
13C2 PFDoA	*123*		*25 - 150*	*06/14/18 12:00*	*06/20/18 09:22*	*1*

Client Sample ID: MW-4

Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	47		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C2 PFUnA	134		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C2-PFTeDA	70		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C3-PFBS	42		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C4 PFBA	15	*	25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C4 PFOA	102		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C4 PFOS	102		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C4-PFHpA	77		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C5 PFNA	124		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C5-PFPeA	25		25 - 150	06/14/18 12:00	06/20/18 09:22	1
13C8 FOSA	93		25 - 150	06/14/18 12:00	06/20/18 09:22	1
18O2 PFHxS	77		25 - 150	06/14/18 12:00	06/20/18 09:22	1
d3-NMeFOSAA	110		25 - 150	06/14/18 12:00	06/20/18 09:22	1
d5-NEtFOSAA	133		25 - 150	06/14/18 12:00	06/20/18 09:22	1
M2-6:2FTS	379	*	25 - 150	06/14/18 12:00	06/20/18 09:22	1
M2-8:2FTS	314	*	25 - 150	06/14/18 12:00	06/20/18 09:22	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	285		40.0	15.0	ug/L		06/12/18 08:15	06/14/18 18:53	2
Antimony	6.2		2.0	0.62	ug/L		06/12/18 08:15	06/14/18 18:53	2
Arsenic	6.0		2.0	0.77	ug/L		06/12/18 08:15	06/14/18 18:53	2
Barium	249		4.0	1.1	ug/L		06/12/18 08:15	06/14/18 18:53	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/12/18 08:15	06/16/18 16:17	2
Cadmium	0.63	J	2.0	0.61	ug/L		06/12/18 08:15	06/14/18 18:53	2
Calcium	123000		200	67.6	ug/L		06/12/18 08:15	06/14/18 18:53	2
Chromium	3.3	J	4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:53	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:53	2
Copper	255		4.0	1.9	ug/L		06/12/18 08:15	06/14/18 18:53	2
Iron	3690		120	45.7	ug/L		06/12/18 08:15	06/14/18 18:53	2
Lead	89.0		1.2	0.37	ug/L		06/12/18 08:15	06/14/18 18:53	2
Magnesium	17200		200	65.7	ug/L		06/12/18 08:15	06/14/18 18:53	2
Manganese	96.8		8.0	2.7	ug/L		06/12/18 08:15	06/14/18 18:53	2
Nickel	25.7		4.0	1.3	ug/L		06/12/18 08:15	06/14/18 18:53	2
Potassium	49000		200	64.9	ug/L		06/12/18 08:15	06/14/18 18:53	2
Selenium	0.81	J	10.0	0.69	ug/L		06/12/18 08:15	06/14/18 18:53	2
Silver	1.4	U	2.0	1.4	ug/L		06/12/18 08:15	06/14/18 18:53	2
Sodium	24200		200	75.7	ug/L		06/12/18 08:15	06/14/18 18:53	2
Thallium	0.24	U	0.80	0.24	ug/L		06/12/18 08:15	06/14/18 18:53	2
Vanadium	3.6	J	4.0	1.2	ug/L		06/12/18 08:15	06/14/18 18:53	2
Zinc	295		16.0	5.4	ug/L		06/12/18 08:15	06/14/18 18:53	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.4	U	2.0	1.4	ug/L		06/19/18 14:14	06/19/18 17:59	2
Aluminum	34.3	J	40.0	15.0	ug/L		06/19/18 14:14	06/19/18 17:59	2
Arsenic	3.2		2.0	0.77	ug/L		06/19/18 14:14	06/19/18 17:59	2
Barium	218		4.0	1.1	ug/L		06/19/18 14:14	06/19/18 17:59	2
Beryllium	0.26	U	0.80	0.26	ug/L		06/19/18 14:14	06/19/18 17:59	2
Calcium	135000		200	67.6	ug/L		06/19/18 14:14	06/19/18 17:59	2

Client Sample ID: MW-4
Date Collected: 06/08/18 15:45
Date Received: 06/08/18 20:30

Lab Sample ID: 460-157993-9
Matrix: Water

Method: 6020A - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.61	U	2.0	0.61	ug/L		06/19/18 14:14	06/19/18 17:59	2
Cobalt	1.3	U	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:59	2
Chromium	1.5	J	4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:59	2
Copper	102		4.0	1.9	ug/L		06/19/18 14:14	06/19/18 17:59	2
Iron	367		120	45.7	ug/L		06/19/18 14:14	06/19/18 17:59	2
Potassium	51200		200	64.9	ug/L		06/19/18 14:14	06/19/18 17:59	2
Magnesium	16700		200	65.7	ug/L		06/19/18 14:14	06/19/18 17:59	2
Manganese	58.7		8.0	2.7	ug/L		06/19/18 14:14	06/19/18 17:59	2
Sodium	15200		200	75.7	ug/L		06/19/18 14:14	06/19/18 17:59	2
Nickel	18.8		4.0	1.3	ug/L		06/19/18 14:14	06/19/18 17:59	2
Lead	5.4		1.2	0.37	ug/L		06/19/18 14:14	06/19/18 17:59	2
Antimony	5.0		2.0	0.62	ug/L		06/19/18 14:14	06/19/18 17:59	2
Selenium	0.69	U	10.0	0.69	ug/L		06/19/18 14:14	06/19/18 17:59	2
Thallium	0.24	U	0.80	0.24	ug/L		06/19/18 14:14	06/19/18 17:59	2
Vanadium	1.7	J	4.0	1.2	ug/L		06/19/18 14:14	06/19/18 17:59	2
Zinc	197		16.0	5.4	ug/L		06/19/18 14:14	06/19/18 17:59	2

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.20	0.12	ug/L		06/13/18 14:20	06/13/18 16:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.20	0.12	ug/L		06/14/18 12:16	06/14/18 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0032	J +	0.010	0.0020	mg/L		06/15/18 09:39	06/15/18 11:56	1

JU Rossi 7/17/18

EPA Qualifier Definitions

U	**The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.**
J	**The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.**
J+	**The result is an estimated quantity, but the result may be biased high.**
J-	**The result is an estimated quantity, but the result may be biased low.**
NJ	**The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.**
UJ	**The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.**
R	**The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.**

ATTACHMENT B

CHAIN OF CUSTODY RECORD
Laboratory Job No. J157933

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

06/22/2018

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) James Vander Vliet	Samplers Name (Printed) Valerie Gorman & Art Intramo	Site/Project Identification 2015.191 New Rochelle
Company JMSorge Inc.	P. O. # 2015.191	State (Location of site): NJ: ☐ NY: ☒ Other:
Address 57 Fourth Street	Analysis Turnaround Time: Standard ☒ JMS 5 Day TAT	Regulatory Program: DKQP: ☐
City Somerville State NJ	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone 9082800066 Fax 9082189185		Job No: 157993

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of Cont.	PFAS	1,4 Dioxane	TCL BNs + 20	TCL Pests	PCBs	TAL Metals w/ Hg (6020/7470A)	TCL VOCs + 10 TICs	Cyanide	Dissolved SVOCs Lab Filtered	Dissolved TAL Metals + Hg Lab Filtered		Sample Numbers
FB-P	6/8/18	0915	Water	15	X	X	X	X	X	X	X	X				1
FB-B		0930	Water	15	X	X	X	X	X	X	X	X				2
TB		0945	Water	3							X					3
MW-1		1110	GW	18	X	X	X	X	X	X	X	X	X	X		4
MW-5		1130	GW	18	X	X	X	X	X	X	X	X	X	X		5
Dup-1		1150	GW	15	X	X	X	X	X	X	X	X				6
MS/MSD		1245	GW	15	X	X	X	X	X	X	X	X				
MW-2		1248	GW	18	X	X	X	X	X	X	X	X	X	X		7
MW-3		1407	GW	18	X	X	X	X	X	X	X	X	X	X		8
MW-4		1545	GW	18	X	X	X	X	X	X	X	X	X	X		9
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH				Soil:												
6 = Other _____, 7 = Other _____				Water:	1	1	1	1	1	1,4	1,2	1,5	1	1		

Special Instructions X = run

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Valerie Gorman	JMSorge Inc.	6/8/18 20:30	1) [redacted]	TA 601
2)			2)	
3)			3)	
4)			4)	

460-157993 Chain of Custody

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

R#11 0.2, 3.3, 1.6, 0.2°C

ATTACHMENT C

SELECTED PAGES FROM DATA PACKAGE -
QC EXCEEDANCES AND VALIDATION ISSUES
Laboratory Job No. J157933

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PF061918A81.d

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
13C2 PFDA	86.6	116	121.3	140	25-150	
13C2 PFDoA	86.6	101	108.7	126	25-150	
13C2 PFHxA	86.6	36.6	36.48	42	25-150	
13C2 PFUnA	86.6	112	105.3	122	25-150	
13C2-PFTeDA	86.6	102	114.5	132	25-150	
13C3-PFBS	80.6	52.6	43.79	54	25-150	
13C4 PFBA	86.6	10.3	9.927	11	25-150	*
13C4 PFOA	86.6	86.7	90.38	104	25-150	
13C4 PFOS	82.8	94.6	93.92	113	25-150	
13C4-PFHpA	86.6	61.9	57.97	67	25-150	
13C5 PFNA	86.6	110	111.0	128	25-150	
13C5-PFPeA	86.6	19.0	18.18	21	25-150	*
13C8 FOSA	86.6	84.4	89.40	103	25-150	
18O2 PFHxS	81.9	68.1	68.12	83	25-150	
d3-NMeFOSAA	86.6	80.5	92.65	107	25-150	
d5-NEtFOSAA	86.6	93.9	96.86	112	25-150	
M2-6:2FTS	82.3	301	310.9	378	25-150	*
M2-8:2FTS	83.0	199	209.5	252	25-150	*
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	34.7	0.57 J	33.30	94	40-160	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	34.7	0.66 J	31.25	88	40-160	
Perfluorobutanesulfonic acid (PFBS)	30.6	4.71	47.04	138	40-160	
Perfluorobutanoic acid (PFBA)	34.7	32.3	75.88	126	40-160	
Perfluorodecanesulfonic acid (PFDS)	33.4	0.39 U	32.97	99	40-160	
Perfluorodecanoic acid (PFDA)	34.7	0.49 J	34.01	97	40-160	
Perfluorododecanoic acid (PFDoA)	34.7	0.39 U	35.84	103	40-160	
Perfluoroheptanesulfonic Acid (PFHpS)	33.0	0.39 U	34.13	103	40-160	
Perfluoroheptanoic acid (PFHpA)	34.7	2.86	40.07	107	40-160	
Perfluorohexanesulfonic acid (PFHxS)	31.5	2.73	39.09	115	40-160	
Perfluorohexanoic acid (PFHxA)	34.7	4.75	38.62	98	40-160	
Perfluorononanoic acid (PFNA)	34.7	1.55 J	38.58	107	40-160	
Perfluorooctane Sulfonamide (PFOSA)	34.7	0.61 J	34.83	99	40-160	
Perfluorooctanesulfonic acid (PFOS)	32.2	3.71	38.82	109	40-160	
Perfluorooctanoic acid (PFOA)	34.7	11.2	44.71	97	40-160	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PF061918A81.d

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluoropentanoic acid (PFPeA)	34.7	16.0	37.95	63	40-160	
Perfluorotetradecanoic acid (PFTeA)	34.7	0.39 U	35.34	102	40-160	
Perfluorotridecanoic Acid (PFTriA)	34.7	0.39 U	32.87	95	40-160	
Perfluoroundecanoic acid (PFUnA)	34.7	0.39 U	45.38	131	40-160	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	33.2	0.53 U	45.58	137	40-160	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	32.8	0.53 U	38.39	117	40-160	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
FB-P	460-157993-1	64	97	99	109	97	88	137	94
FB-B	460-157993-2	89	119	97	127	109	88	146	102
MW-1	460-157993-4	12 *	23 *	59	42	69	87	423 *	97
MW-5	460-157993-5	12 *	22 *	64	42	70	82	361 *	99
Dup-1	460-157993-6	11 *	18 *	52	37	68	76	348 *	96
MW-2	460-157993-7	9 *	17 *	40	33	57	69	365 *	96
MW-3	460-157993-8	12 *	19 *	38	41	68	67	354 *	97
MW-4	460-157993-9	15 *	25	42	47	77	77	379 *	102
	MB 200-130634/1-A	100	120	98	119	106	88	149	106
	LCS 200-130634/2-A	98	123	103	118	100	91	150	103
MW-5 MS	460-157993-5 MS	11 *	21 *	54	42	67	83	378 *	104
MW-5 MSD	460-157993-5 MSD	13 *	20 *	57	38	66	81	380 *	98

	QC LIMITS
PFBA = 13C4 PFBA	25-150
PFPeA = 13C5-PFPeA	25-150
PFBS = 13C3-PFBS	25-150
PFHxA = 13C2 PFHxA	25-150
PFHpA = 13C4-PFHpA	25-150
PFHxS = 18O2 PFHxS	25-150
M262FTS = M2-6:2FTS	25-150
PFOA = 13C4 PFOA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFNA #	PFOS #	M282FTS #	PFDA #	d3NMFOS #	d5NEFOS #	PFUnA #	PFOSA #
FB-P	460-157993-1	94	81	93	93	56	68	93	48
FB-B	460-157993-2	103	89	96	106	69	77	95	46
MW-1	460-157993-4	127	112	302 *	139	110	129	134	91
MW-5	460-157993-5	126	113	236 *	132	92	107	128	96
Dup-1	460-157993-6	119	102	228 *	133	98	119	127	96
MW-2	460-157993-7	127	107	311 *	136	101	115	132	97
MW-3	460-157993-8	115	91	241 *	117	85	98	112	78
MW-4	460-157993-9	124	102	314 *	133	110	133	134	93
	MB 200-130634/1-A	99	87	124	93	75	79	96	56
	LCS 200-130634/2-A	105	89	130	84	81	79	94	53
MW-5 MS	460-157993-5 MS	128	113	252 *	140	107	112	122	103
MW-5 MSD	460-157993-5 MSD	121	106	251 *	140	94	111	126	101

	QC LIMITS
PFNA = 13C5 PFNA	25-150
PFOS = 13C4 PFOS	25-150
M282FTS = M2-8:2FTS	25-150
PFDA = 13C2 PFDA	25-150
d3NMFOS = d3-NMeFOSAA	25-150
d5NEFOS = d5-NEtFOSAA	25-150
PFUnA = 13C2 PFUnA	25-150
PFOSA = 13C8 FOSA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFDoA #	PFTDA #
FB-P	460-157993-1	77	62
FB-B	460-157993-2	85	69
MW-1	460-157993-4	131	124
MW-5	460-157993-5	115	116
Dup-1	460-157993-6	113	122
MW-2	460-157993-7	111	83
MW-3	460-157993-8	97	62
MW-4	460-157993-9	123	70
	MB 200-130634/1-A	87	63
	LCS 200-130634/2-A	80	62
MW-5 MS	460-157993-5 MS	126	132
MW-5 MSD	460-157993-5 MSD	123	128

	QC LIMITS
PFDoA = 13C2 PFDoA	25-150
PFTDA = 13C2-PFTeDA	25-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 460-157993-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 200-130634/1-A

Matrix: Water | Lab File ID: PF061918A75.d

Analysis Method: 537 (modified) | Date Collected:

Extraction Method: 3535 | Date Extracted: 06/14/2018 12:00

Sample wt/vol: 250(mL) | Date Analyzed: 06/20/2018 06:25

Con. Extract Vol.: 0.5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: C-18 ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 130831 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	0.60	U	2.00	0.60
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	0.60	U	2.00	0.60
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.88	U	2.00	0.88
375-22-4	Perfluorobutanoic acid (PFBA)	1.476	J	2.00	0.44
335-77-3	Perfluorodecanesulfonic acid (PFDS)	0.44	U	2.00	0.44
335-76-2	Perfluorodecanoic acid (PFDA)	0.44	U	2.00	0.44
307-55-1	Perfluorododecanoic acid (PFDoA)	0.44	U	2.00	0.44
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.44	U	2.00	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.351	J	2.00	0.29
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.146	J	2.00	0.28
307-24-4	Perfluorohexanoic acid (PFHxA)	0.811	J	2.00	0.44
375-95-1	Perfluorononanoic acid (PFNA)	0.374	J	2.00	0.26
754-91-6	Perfluorooctane Sulfonamide (PFOSA)	0.686	J	2.00	0.44
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.30	U	2.00	0.30
335-67-1	Perfluorooctanoic acid (PFOA)	0.659	J	2.00	0.47
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.893	J	2.00	0.44
376-06-7	Perfluorotetradecanoic acid (PFTeA)	0.44	U	2.00	0.44
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	0.44	U	2.00	0.44
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.465	J	2.00	0.44
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	0.856	J	2.00	0.60
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	0.60	U	2.00	0.60

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVL 200-130831/7 Calibration Date: 06/19/2018 12:08

Instrument ID: LC410 Calib Start Date: 06/06/2018 18:01

GC Column: C-18 ID: 4.60(mm) Calib End Date: 06/06/2018 19:22

Lab File ID: PF061918A07.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	L1ID		0.8505		1271	1000	27.1	50.0
Perfluoropentanoic acid (PFPeA)	L1ID		1.024		1003	1000	0.3	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	0.8425	0.8770		920	884	4.1	50.0
Perfluorohexanoic acid (PFHxA)	L1ID		1.191		1381	1000	38.1	50.0
Perfluoroheptanoic acid (PFHpA)	L2ID		1.110		1175	1000	17.5	50.0
Perfluorohexanesulfonic acid (PFHxS)	L1ID		1.061		1358	910	49.2	50.0
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	L1ID		1.097		823	948	-13.2	50.0
Perfluorooctanoic acid (PFOA)	L1ID		1.180		1194	1000	19.4	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	L1ID		0.8845		1064	952	11.8	50.0
Perfluorononanoic acid (PFNA)	L2ID		0.9407		1130	1000	13.0	50.0
Perfluorooctanesulfonic acid (PFOS)	L2ID		1.089		960	928	3.5	50.0
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	L1ID		0.6012		1005	958	4.9	50.0
Perfluorodecanoic acid (PFDA)	L2ID		1.104		1229	1000	22.9	50.0
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	L1ID		1.081		1202	1000	20.2	50.0
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	L2ID		0.7630		973	1000	-2.7	50.0
Perfluorodecanesulfonic acid (PFDS)	L2ID		0.9473		918	964	-4.7	50.0
Perfluoroundecanoic acid (PFUnA)	L2ID		1.177		1115	1000	11.5	50.0
Perfluorooctane Sulfonamide (PFOSA)	L1ID		0.9690		1247	1000	24.7	50.0
Perfluorododecanoic acid (PFDoA)	L2ID		0.9678		1082	1000	8.2	50.0
Perfluorotridecanoic Acid (PFTriA)	L2ID		1.081		1113	1000	11.3	50.0
Perfluorotetradecanoic acid (PFTeA)	L2ID		0.7441		652	1000	-34.8	50.0
13C4 PFBA	Ave	0.6319	0.6342		50180	50000	0.4	50.0
13C5-PFPeA	Ave	0.9274	1.106		59640	50000	19.3	50.0
13C3-PFBS	Ave	0.6135	0.6712		50870	46500	9.4	50.0
13C2 PFHxA	Ave	1.084	1.312		60550	50000	21.1	50.0
13C4-PFHpA	Ave	1.244	1.421		57120	50000	14.2	50.0
18O2 PFHxS	Ave	0.5867	0.5778		46590	47300	-1.5	50.0
M2-6:2FTS	Ave	0.1646	0.2393		69040	47500	45.4	50.0
13C4 PFOA	Ave	0.9520	1.037		54490	50000	9.0	50.0
13C5 PFNA	Ave	1.253	1.557		62110	50000	24.2	50.0
13C4 PFOS	Ave	0.6352	0.6640		49970	47800	4.5	50.0

FORM VII 537 (modified)

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVL 200-130831/7 Calibration Date: 06/19/2018 12:08

Instrument ID: LC410 Calib Start Date: 06/06/2018 18:01

GC Column: C-18 ID: 4.60(mm) Calib End Date: 06/06/2018 19:22

Lab File ID: PF061918A07.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
M2-8:2FTS	Ave	0.3407	0.3357		47200	47900	-1.5	50.0
13C2 PFDA	Ave	1.826	1.780		48740	50000	-2.5	50.0
d3-NMeFOSAA	Ave	0.3847	0.3517		45710	50000	-8.6	50.0
d5-NEtFOSAA	Ave	0.3292	0.3136		47640	50000	-4.7	50.0
13C2 PFUnA	Ave	1.670	1.524		45650	50000	-8.7	50.0
13C8 FOSA	Ave	1.403	1.380		49150	50000	-1.7	50.0
13C2 PFDoA	Ave	2.016	1.991		49380	50000	-1.2	50.0
13C2-PFTeDA	Ave	2.046	1.935		47300	50000	-5.4	50.0

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 527806	Date: 06/14/2018 10:42		Prep Batch: 527576			Date: 06/13/2018 20:11					
						LCS Source: WTcnCmplex-IM_00110					
9012B	LCS 460-527576/2-A	Cyanide, Total	0.142		mg/L	0.120	118	85-115			*
Batch ID: 528177	Date: 06/15/2018 11:25		Prep Batch: 528125			Date: 06/15/2018 09:39					
						LCS Source: WTcnCmplex-IM_00112					
9012B	LCS 460-528125/2-A	Cyanide, Total	0.102		mg/L	0.100	102	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	DCBP1 #	DCBP2 #
FB-P	460-157993-1	90	91
FB-B	460-157993-2	75	70
MW-1	460-157993-4	87	91
MW-5	460-157993-5	64	60
Dup-1	460-157993-6	83	73
MW-2	460-157993-7	59	57
MW-3	460-157993-8	24	23
MW-4	460-157993-9	84	86
	MB 460-527379/1-A	83	82
	LCS 460-527379/2-A	84	87
MW-5 MS	460-157993-5 MS	67	61
MW-5 MSD	460-157993-5 MSD	76	75

	QC LIMITS
DCBP = DCB Decachlorobiphenyl	10-150

Column to be used to flag recovery values

FORM II 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Client Sample ID: MW-3 Lab Sample ID: 460-157993-8

Instrument ID (1): CPESTGC5 Instrument ID (2): CPESTGC5

Date Analyzed (1): 06/14/2018 02:38 Date Analyzed (2): 06/14/2018 02:38

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
beta-BHC	1		2.51	2.49	2.51	0.014		27.7
	2		2.52	2.50	2.52	0.018		

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCBP1 #	DCBP2 #
FB-P	460-157993-1	96	98	81	80
FB-B	460-157993-2	96	98	60	64
MW-1	460-157993-4	91	92	81	87
MW-5	460-157993-5	80	82	50	52
Dup-1	460-157993-6	92	91	62	64
MW-2	460-157993-7	80	82	45	46
MW-3	460-157993-8	38	36	17	18
MW-4	460-157993-9	83	81	73	76
	MB 460-527374/1-A	74	73	72	75
	LCS 460-527374/2-A	70	74	68	72
MW-5 MS	460-157993-5 MS	76	75	62	67
MW-5 MSD	460-157993-5 MSD	86	83	65	68

	QC LIMITS
TCX = Tetrachloro-m-xylene	12-136
DCBP = DCB Decachlorobiphenyl	10-150

Column to be used to flag recovery values

FORM II 8081B

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02694.D

Lab ID: LCS 460-527511/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Atrazine	160	163	102	38-146	
Benzaldehyde	160	142	89	46-111	
Caprolactam	160	45.1	28	10-43	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02629.D

Lab ID: LCS 460-527177/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Atrazine	160	155	97	38-146	
Benzaldehyde	160	142	89	46-111	
Caprolactam	160	32.3	20	10-43	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P03013.D

Lab ID: LCS 460-527098/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Atrazine	160	172	107	38-146	
Benzaldehyde	160	172	108	46-111	
Caprolactam	160	36.7	23	10-43	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02696.D

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	80.0	1.2 U	75.5	94	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	1.2 U	72.4	90	46-105	
2,2'-oxybis[1-chloropropane]	80.0	0.63 U	79.5	99	50-108	
2,3,4,6-Tetrachlorophenol	80.0	0.75 U	81.2	101	57-122	
2,4,5-Trichlorophenol	80.0	0.28 U	73.8	92	59-117	
2,4,6-Trichlorophenol	80.0	0.30 U	76.1	95	62-120	
2,4-Dichlorophenol	80.0	0.42 U	76.3	95	62-102	
2,4-Dimethylphenol	80.0	0.24 U	72.4	91	61-95	
2,4-Dinitrophenol	160	14 U	134	84	45-125	
2,4-Dinitrotoluene	80.0	1.0 U	90.1	113	70-123	
2,6-Dinitrotoluene	80.0	0.39 U	92.6	116	68-121	
2-Chloronaphthalene	80.0	1.2 U	74.4	93	54-105	
2-Chlorophenol	80.0	0.38 U	68.6	86	54-92	
2-Methylnaphthalene	80.0	1.1 U	79.6	99	47-104	
2-Methylphenol	80.0	0.26 U	57.7	72	43-80	
2-Nitroaniline	80.0	0.47 U	61.0	76	46-124	
2-Nitrophenol	80.0	0.75 U	82.9	104	58-109	
3,3'-Dichlorobenzidine	80.0	1.4 U	26.6	33	68-123	F1
3-Nitroaniline	80.0	0.96 U	54.0	68	60-117	
4,6-Dinitro-2-methylphenol	160	13 U	164	102	59-132	
4-Bromophenyl phenyl ether	80.0	0.75 U	80.1	100	57-126	
4-Chloro-3-methylphenol	80.0	0.58 U	74.8	94	58-98	
4-Chloroaniline	80.0	1.9 U	49.7	62	51-108	
4-Chlorophenyl phenyl ether	80.0	1.3 U	83.8	105	60-114	
4-Methylphenol	80.0	0.24 U	51.9	65	34-78	
4-Nitroaniline	80.0	0.54 U	61.6	77	48-135	
4-Nitrophenol	160	0.69 U	60.7	38	11-47	
Acenaphthene	80.0	1.1 U	80.3	100	58-107	
Acenaphthylene	80.0	0.82 U	77.2	96	61-106	
Acetophenone	80.0	0.79 U	84.7	106	54-115	
Anthracene	80.0	0.63 U	82.7	103	70-118	
Atrazine	160	1.3 U	21.3	13	38-146	F1
Benzaldehyde	160	0.59 U	0.59 U	0	46-111	F1
Benzo[a]anthracene	80.0	0.59 U	86.7	108	73-119	
Benzo[a]pyrene	80.0	0.41 U	94.8	119	76-125	
Benzo[b]fluoranthene	80.0	1.1 U	91.7	115	78-123	
Benzo[g,h,i]perylene	80.0	1.4 U	77.5	97	63-133	
Benzo[k]fluoranthene	80.0	0.67 U	89.7	112	71-126	
Bis(2-chloroethoxy)methane	80.0	0.24 U	84.0	105	67-104	F1
Bis(2-chloroethyl)ether	80.0	0.30 U	75.6	95	63-106	
Bis(2-ethylhexyl) phthalate	80.0	2.0	97.6	119	63-135	
Butyl benzyl phthalate	80.0	0.85 U	114	142	66-129	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02696.D

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Caprolactam	160	0.68 U	34.5	22	10-43	
Carbazole	80.0	0.68 U	83.0	104	68-121	
Chrysene	80.0	0.91 U	84.8	106	73-121	
Dibenz(a,h)anthracene	80.0	0.72 U	81.6	102	59-136	
Dibenzofuran	80.0	1.1 U	78.2	98	67-108	
Diethyl phthalate	80.0	0.98 U	86.9	109	61-129	
Dimethyl phthalate	80.0	0.77 U	79.8	100	65-121	
Di-n-butyl phthalate	80.0	0.84 U	97.3	122	64-130	
Di-n-octyl phthalate	80.0	4.8 U	103	129	64-131	
Fluoranthene	80.0	0.84 U	87.9	110	66-123	
Fluorene	80.0	0.91 U	84.4	106	67-112	
Hexachlorobenzene	80.0	0.40 U	78.2	98	63-125	
Hexachlorobutadiene	80.0	0.78 U	61.0	76	34-99	
Hexachlorocyclopentadiene	80.0	1.7 U	50.2	63	18-99	
Hexachloroethane	80.0	1.2 U	59.6	75	39-92	
Indeno[1,2,3-cd]pyrene	80.0	1.3 U	75.2	94	57-142	
Isophorone	80.0	0.80 U	78.8	99	55-105	
Naphthalene	80.0	1.1 U	73.6	92	51-98	
Nitrobenzene	80.0	0.57 U	92.5	116	56-106	F1
N-Nitrosodi-n-propylamine	80.0	0.43 U	89.9	112	48-118	
N-Nitrosodiphenylamine	80.0	0.89 U	77.7	97	69-118	
Pentachlorophenol	160	1.4 U	148	92	54-120	
Phenanthrene	80.0	0.58 U	82.1	103	70-117	
Phenol	80.0	0.29 U	29.3	37	16-43	
Pyrene	80.0	1.6 U	97.1	121	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: P03015.D

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	80.0	1.2 U	77.4	97	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	1.2 U	76.9	96	46-105	
2,2'-oxybis[1-chloropropane]	80.0	0.63 U	89.1	111	50-108	F1
2,3,4,6-Tetrachlorophenol	80.0	0.75 U	78.1	98	57-122	
2,4,5-Trichlorophenol	80.0	0.28 U	77.0	96	59-117	
2,4,6-Trichlorophenol	80.0	0.30 U	78.3	98	62-120	
2,4-Dichlorophenol	80.0	0.42 U	74.2	93	62-102	
2,4-Dimethylphenol	80.0	0.24 U	73.2	92	61-95	
2,4-Dinitrophenol	160	14 U	147	92	45-125	
2,4-Dinitrotoluene	80.0	1.0 U	91.8	115	70-123	
2,6-Dinitrotoluene	80.0	90	182	115	68-121	
2-Chloronaphthalene	80.0	1.2 U	77.3	97	54-105	
2-Chlorophenol	80.0	0.38 U	62.6	78	54-92	
2-Methylnaphthalene	80.0	1.1 U	72.2	90	47-104	
2-Methylphenol	80.0	0.26 U	54.4	68	43-80	
2-Nitroaniline	80.0	0.47 U	87.1	109	46-124	
2-Nitrophenol	80.0	0.75 U	78.9	99	58-109	
3,3'-Dichlorobenzidine	80.0	1.4 U	53.7	67	68-123	F1
3-Nitroaniline	80.0	0.96 U	69.1	86	60-117	
4,6-Dinitro-2-methylphenol	160	13 U	153	95	59-132	
4-Bromophenyl phenyl ether	80.0	0.75 U	75.7	95	57-126	
4-Chloro-3-methylphenol	80.0	0.58 U	73.4	92	58-98	
4-Chloroaniline	80.0	1.9 U	62.1	78	51-108	
4-Chlorophenyl phenyl ether	80.0	1.3 U	85.2	106	60-114	
4-Methylphenol	80.0	0.24 U	44.5	56	34-78	
4-Nitroaniline	80.0	0.54 U	77.6	97	48-135	
4-Nitrophenol	160	0.69 U	56.1	35	11-47	
Acenaphthene	80.0	1.1 U	79.0	99	58-107	
Acenaphthylene	80.0	0.82 U	78.2	98	61-106	
Acetophenone	80.0	0.79 U	83.5	104	54-115	
Anthracene	80.0	0.63 U	81.5	102	70-118	
Atrazine	160	1.3 U	171	107	38-146	
Benzaldehyde	160	0.59 U	174	109	46-111	
Benzo[a]anthracene	80.0	0.59 U	83.9	105	73-119	
Benzo[a]pyrene	80.0	0.41 U	91.4	114	76-125	
Benzo[b]fluoranthene	80.0	1.1 U	95.0	119	78-123	
Benzo[g,h,i]perylene	80.0	1.4 U	92.4	115	63-133	
Benzo[k]fluoranthene	80.0	0.67 U	89.0	111	71-126	
Bis(2-chloroethoxy)methane	80.0	0.24 U	82.0	102	67-104	
Bis(2-chloroethyl)ether	80.0	0.30 U	81.5	102	63-106	
Bis(2-ethylhexyl) phthalate	80.0	1.7 U	85.4	107	63-135	
Butyl benzyl phthalate	80.0	0.85 U	86.2	108	66-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: P03015.D

Lab ID: 460-157993-5 MS Client ID: MW-5 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Caprolactam	160	0.68 U	45.2	28	10-43	
Carbazole	80.0	0.68 U	86.9	109	68-121	
Chrysene	80.0	0.91 U	84.5	106	73-121	
Dibenz(a,h)anthracene	80.0	0.72 U	93.8	117	59-136	
Dibenzofuran	80.0	1.1 U	79.4	99	67-108	
Diethyl phthalate	80.0	6.9 J	91.7	106	61-129	
Dimethyl phthalate	80.0	0.77 U	80.7	101	65-121	
Di-n-butyl phthalate	80.0	1.5 J	104	129	64-130	
Di-n-octyl phthalate	80.0	4.8 U	93.3	117	64-131	
Fluoranthene	80.0	0.84 U	85.6	107	66-123	
Fluorene	80.0	0.91 U	85.3	107	67-112	
Hexachlorobenzene	80.0	0.40 U	76.8	96	63-125	
Hexachlorobutadiene	80.0	0.78 U	64.6	81	34-99	
Hexachlorocyclopentadiene	80.0	1.7 U	51.7	65	18-99	
Hexachloroethane	80.0	1.2 U	62.5	78	39-92	
Indeno[1,2,3-cd]pyrene	80.0	1.3 U	91.6	114	57-142	
Isophorone	80.0	0.80 U	79.0	99	55-105	
Naphthalene	80.0	1.1 U	74.7	93	51-98	
Nitrobenzene	80.0	0.57 U	93.4	117	56-106	F1
N-Nitrosodi-n-propylamine	80.0	0.43 U	82.5	103	48-118	
N-Nitrosodiphenylamine	80.0	0.89 U	77.6	97	69-118	
Pentachlorophenol	160	1.4 U	158	99	54-120	
Phenanthrene	80.0	0.58 U	82.2	103	70-117	
Phenol	80.0	0.29 U	29.6	37	16-43	
Pyrene	80.0	1.6 U	91.1	114	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02697.D

Lab ID: 460-157993-5 MSD Client ID: MW-5 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	80.0	69.8	87	8	30	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	67.0	84	8	30	46-105	
2,2'-oxybis[1-chloropropane]	80.0	72.3	90	9	30	50-108	
2,3,4,6-Tetrachlorophenol	80.0	78.3	98	4	30	57-122	
2,4,5-Trichlorophenol	80.0	71.4	89	3	30	59-117	
2,4,6-Trichlorophenol	80.0	71.7	90	6	30	62-120	
2,4-Dichlorophenol	80.0	71.3	89	7	30	62-102	
2,4-Dimethylphenol	80.0	67.2	84	7	30	61-95	
2,4-Dinitrophenol	160	133	83	1	30	45-125	
2,4-Dinitrotoluene	80.0	85.9	107	5	30	70-123	
2,6-Dinitrotoluene	80.0	85.7	107	8	30	68-121	
2-Chloronaphthalene	80.0	69.1	86	7	30	54-105	
2-Chlorophenol	80.0	62.9	79	9	30	54-92	
2-Methylnaphthalene	80.0	73.3	92	8	30	47-104	
2-Methylphenol	80.0	53.0	66	9	30	43-80	
2-Nitroaniline	80.0	65.0	81	6	30	46-124	
2-Nitrophenol	80.0	77.1	96	7	30	58-109	
3,3'-Dichlorobenzidine	80.0	47.1	59	56	30	68-123	F1 F2
3-Nitroaniline	80.0	56.7	71	5	30	60-117	
4,6-Dinitro-2-methylphenol	160	161	100	2	30	59-132	
4-Bromophenyl phenyl ether	80.0	74.2	93	8	30	57-126	
4-Chloro-3-methylphenol	80.0	69.5	87	7	30	58-98	
4-Chloroaniline	80.0	53.1	66	7	30	51-108	
4-Chlorophenyl phenyl ether	80.0	78.4	98	7	30	60-114	
4-Methylphenol	80.0	48.1	60	8	30	34-78	
4-Nitroaniline	80.0	70.3	88	13	30	48-135	
4-Nitrophenol	160	57.8	36	5	30	11-47	
Acenaphthene	80.0	75.3	94	7	30	58-107	
Acenaphthylene	80.0	71.7	90	7	30	61-106	
Acetophenone	80.0	76.8	96	10	30	54-115	
Anthracene	80.0	78.4	98	5	30	70-118	
Atrazine	160	20.6	13	3	30	38-146	F1
Benzaldehyde	160	0.59 U	0	NC	30	46-111	F1
Benzo[a]anthracene	80.0	83.1	104	4	30	73-119	
Benzo[a]pyrene	80.0	91.2	114	4	30	76-125	
Benzo[b]fluoranthene	80.0	86.8	108	6	30	78-123	
Benzo[g,h,i]perylene	80.0	74.6	93	4	30	63-133	
Benzo[k]fluoranthene	80.0	92.6	116	3	30	71-126	
Bis(2-chloroethoxy)methane	80.0	77.9	97	8	30	67-104	
Bis(2-chloroethyl)ether	80.0	69.0	86	9	30	63-106	
Bis(2-ethylhexyl) phthalate	80.0	94.9	116	3	30	63-135	
Butyl benzyl phthalate	80.0	109	137	4	30	66-129	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02697.D

Lab ID: 460-157993-5 MSD Client ID: MW-5 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Caprolactam	160	35.9	22	4	30	10-43	
Carbazole	80.0	79.7	100	4	30	68-121	
Chrysene	80.0	82.3	103	3	30	73-121	
Dibenz(a,h)anthracene	80.0	81.5	102	0	30	59-136	
Dibenzofuran	80.0	72.9	91	7	30	67-108	
Diethyl phthalate	80.0	82.7	103	5	30	61-129	
Dimethyl phthalate	80.0	74.6	93	7	30	65-121	
Di-n-butyl phthalate	80.0	93.0	116	5	30	64-130	
Di-n-octyl phthalate	80.0	100	125	3	30	64-131	
Fluoranthene	80.0	84.8	106	4	30	66-123	
Fluorene	80.0	78.7	98	7	30	67-112	
Hexachlorobenzene	80.0	72.7	91	7	30	63-125	
Hexachlorobutadiene	80.0	58.4	73	4	30	34-99	
Hexachlorocyclopentadiene	80.0	48.0	60	4	30	18-99	
Hexachloroethane	80.0	57.0	71	5	30	39-92	
Indeno[1,2,3-cd]pyrene	80.0	74.0	93	2	30	57-142	
Isophorone	80.0	73.3	92	7	30	55-105	
Naphthalene	80.0	67.8	85	8	30	51-98	
Nitrobenzene	80.0	82.9	104	11	30	56-106	
N-Nitrosodi-n-propylamine	80.0	82.4	103	9	30	48-118	
N-Nitrosodiphenylamine	80.0	73.4	92	6	30	69-118	
Pentachlorophenol	160	144	90	3	30	54-120	
Phenanthrene	80.0	75.9	95	8	30	70-117	
Phenol	80.0	26.8	34	9	30	16-43	
Pyrene	80.0	92.0	115	5	30	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: P03016.D

Lab ID: 460-157993-5 MSD Client ID: MW-5 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	80.0	72.9	91	6	30	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	69.9	87	10	30	46-105	
2,2'-oxybis[1-chloropropane]	80.0	91.9	115	3	30	50-108	F1
2,3,4,6-Tetrachlorophenol	80.0	77.5	97	1	30	57-122	
2,4,5-Trichlorophenol	80.0	71.8	90	7	30	59-117	
2,4,6-Trichlorophenol	80.0	71.4	89	9	30	62-120	
2,4-Dichlorophenol	80.0	69.7	87	6	30	62-102	
2,4-Dimethylphenol	80.0	65.5	82	11	30	61-95	
2,4-Dinitrophenol	160	143	89	3	30	45-125	
2,4-Dinitrotoluene	80.0	92.5	116	1	30	70-123	
2,6-Dinitrotoluene	80.0	180	113	1	30	68-121	
2-Chloronaphthalene	80.0	73.3	92	5	30	54-105	
2-Chlorophenol	80.0	53.8	67	15	30	54-92	
2-Methylnaphthalene	80.0	67.5	84	7	30	47-104	
2-Methylphenol	80.0	51.9	65	5	30	43-80	
2-Nitroaniline	80.0	78.0	97	11	30	46-124	
2-Nitrophenol	80.0	71.2	89	10	30	58-109	
3,3'-Dichlorobenzidine	80.0	52.6	66	2	30	68-123	F1
3-Nitroaniline	80.0	63.6	80	8	30	60-117	
4,6-Dinitro-2-methylphenol	160	135	84	12	30	59-132	
4-Bromophenyl phenyl ether	80.0	88.3	110	15	30	57-126	
4-Chloro-3-methylphenol	80.0	68.3	85	7	30	58-98	
4-Chloroaniline	80.0	57.0	71	8	30	51-108	
4-Chlorophenyl phenyl ether	80.0	79.9	100	6	30	60-114	
4-Methylphenol	80.0	40.4	50	10	30	34-78	
4-Nitroaniline	80.0	73.3	92	6	30	48-135	
4-Nitrophenol	160	48.2	30	15	30	11-47	
Acenaphthene	80.0	75.5	94	5	30	58-107	
Acenaphthylene	80.0	73.6	92	6	30	61-106	
Acetophenone	80.0	69.7	87	18	30	54-115	
Anthracene	80.0	95.5	119	16	30	70-118	F1
Atrazine	160	173	108	1	30	38-146	
Benzaldehyde	160	153	95	13	30	46-111	
Benzo[a]anthracene	80.0	81.2	102	3	30	73-119	
Benzo[a]pyrene	80.0	88.0	110	4	30	76-125	
Benzo[b]fluoranthene	80.0	82.5	103	14	30	78-123	
Benzo[g,h,i]perylene	80.0	97.9	122	6	30	63-133	
Benzo[k]fluoranthene	80.0	84.5	106	5	30	71-126	
Bis(2-chloroethoxy)methane	80.0	77.4	97	6	30	67-104	
Bis(2-chloroethyl)ether	80.0	68.6	86	17	30	63-106	
Bis(2-ethylhexyl) phthalate	80.0	86.8	109	2	30	63-135	
Butyl benzyl phthalate	80.0	87.5	109	1	30	66-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water (Dissolved Level: Low Lab File ID: P03016.D

Lab ID: 460-157993-5 MSD Client ID: MW-5 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Caprolactam	160	41.0	26	10	30	10-43	
Carbazole	80.0	83.4	104	4	30	68-121	
Chrysene	80.0	85.0	106	1	30	73-121	
Dibenz(a,h)anthracene	80.0	97.9	122	4	30	59-136	
Dibenzofuran	80.0	77.1	96	3	30	67-108	
Diethyl phthalate	80.0	89.9	104	2	30	61-129	
Dimethyl phthalate	80.0	78.8	99	2	30	65-121	
Di-n-butyl phthalate	80.0	80.2	98	26	30	64-130	
Di-n-octyl phthalate	80.0	87.8	110	6	30	64-131	
Fluoranthene	80.0	83.7	105	2	30	66-123	
Fluorene	80.0	78.7	98	8	30	67-112	
Hexachlorobenzene	80.0	80.7	101	5	30	63-125	
Hexachlorobutadiene	80.0	58.1	73	11	30	34-99	
Hexachlorocyclopentadiene	80.0	45.9	57	12	30	18-99	
Hexachloroethane	80.0	59.8	75	4	30	39-92	
Indeno[1,2,3-cd]pyrene	80.0	94.2	118	3	30	57-142	
Isophorone	80.0	74.3	93	6	30	55-105	
Naphthalene	80.0	70.3	88	6	30	51-98	
Nitrobenzene	80.0	65.1	81	36	30	56-106	F2
N-Nitrosodi-n-propylamine	80.0	70.8	88	15	30	48-118	
N-Nitrosodiphenylamine	80.0	66.3	83	16	30	69-118	
Pentachlorophenol	160	154	96	3	30	54-120	
Phenanthrene	80.0	78.9	99	4	30	70-117	
Phenol	80.0	23.2	29	24	30	16-43	
Pyrene	80.0	91.5	114	0	30	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02630.D

Lab ID: LCSD 460-527177/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Atrazine	160	155	97	0	30	38-146	
Benzaldehyde	160	144	90	1	30	46-111	
Caprolactam	160	29.7	19	8	30	10-43	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02628.D

Lab ID: LCSD 460-527177/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	80.0	72.5	91	11	30	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	70.4	88	11	30	46-105	
2,2'-oxybis[1-chloropropane]	80.0	69.2	87	12	30	50-108	
2,3,4,6-Tetrachlorophenol	80.0	73.7	92	9	30	57-122	
2,4,5-Trichlorophenol	80.0	70.0	88	10	30	59-117	
2,4,6-Trichlorophenol	80.0	70.7	88	9	30	62-120	
2,4-Dichlorophenol	80.0	69.5	87	10	30	62-102	
2,4-Dimethylphenol	80.0	64.7	81	12	30	61-95	
2,4-Dinitrophenol	160	122	76	0	30	45-125	
2,4-Dinitrotoluene	80.0	82.7	103	10	30	70-123	
2,6-Dinitrotoluene	80.0	83.0	104	9	30	68-121	
2-Chloronaphthalene	80.0	72.0	90	11	30	54-105	
2-Chlorophenol	80.0	59.9	75	12	30	54-92	
2-Methylnaphthalene	80.0	72.3	90	8	30	47-104	
2-Methylphenol	80.0	49.4	62	10	30	43-80	
2-Nitroaniline	80.0	78.4	98	9	30	46-124	
2-Nitrophenol	80.0	74.4	93	9	30	58-109	
3,3'-Dichlorobenzidine	80.0	69.4	87	19	30	68-123	
3-Nitroaniline	80.0	64.3	80	12	30	60-117	
4,6-Dinitro-2-methylphenol	160	153	96	5	30	59-132	
4-Bromophenyl phenyl ether	80.0	76.0	95	7	30	57-126	
4-Chloro-3-methylphenol	80.0	64.9	81	9	30	58-98	
4-Chloroaniline	80.0	58.0	73	13	30	51-108	
4-Chlorophenyl phenyl ether	80.0	77.9	97	9	30	60-114	
4-Methylphenol	80.0	43.3	54	9	30	34-78	
4-Nitroaniline	80.0	72.0	90	15	30	48-135	
4-Nitrophenol	160	49.2	31	17	30	11-47	
Acenaphthene	80.0	76.5	96	10	30	58-107	
Acenaphthylene	80.0	72.9	91	11	30	61-106	
Acetophenone	80.0	72.5	91	11	30	54-115	
Anthracene	80.0	81.2	101	8	30	70-118	
Benzo[a]anthracene	80.0	84.8	106	9	30	73-119	
Benzo[a]pyrene	80.0	92.6	116	8	30	76-125	
Benzo[b]fluoranthene	80.0	86.5	108	6	30	78-123	
Benzo[g,h,i]perylene	80.0	71.8	90	14	30	63-133	
Benzo[k]fluoranthene	80.0	91.3	114	6	30	71-126	
Bis(2-chloroethoxy)methane	80.0	75.4	94	10	30	67-104	
Bis(2-chloroethyl)ether	80.0	66.9	84	11	30	63-106	
Bis(2-ethylhexyl) phthalate	80.0	88.4	110	6	30	63-135	
Butyl benzyl phthalate	80.0	100	125	6	30	66-129	
Carbazole	80.0	79.7	100	14	30	68-121	
Chrysene	80.0	84.5	106	9	30	73-121	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02628.D

Lab ID: LCSD 460-527177/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dibenz(a,h)anthracene	80.0	76.5	96	17	30	59-136	
Dibenzofuran	80.0	74.0	93	11	30	67-108	
Diethyl phthalate	80.0	78.5	98	8	30	61-129	
Dimethyl phthalate	80.0	74.4	93	10	30	65-121	
Di-n-butyl phthalate	80.0	87.6	109	10	30	64-130	
Di-n-octyl phthalate	80.0	89.0	111	3	30	64-131	
Fluoranthene	80.0	82.6	103	12	30	66-123	
Fluorene	80.0	79.7	100	9	30	67-112	
Hexachlorobenzene	80.0	74.0	92	8	30	63-125	
Hexachlorobutadiene	80.0	60.9	76	7	30	34-99	
Hexachlorocyclopentadiene	80.0	52.7	66	5	30	18-99	
Hexachloroethane	80.0	58.9	74	8	30	39-92	
Indeno[1,2,3-cd]pyrene	80.0	69.8	87	11	30	57-142	
Isophorone	80.0	71.5	89	9	30	55-105	
Naphthalene	80.0	69.0	86	10	30	51-98	
Nitrobenzene	80.0	75.8	95	10	30	56-106	
N-Nitrosodi-n-propylamine	80.0	74.6	93	9	30	48-118	
N-Nitrosodiphenylamine	80.0	77.2	96	9	30	69-118	
Pentachlorophenol	160	142	89	8	30	54-120	
Phenanthrene	80.0	79.2	99	9	30	70-117	
Phenol	80.0	24.6	31	16	30	16-43	
Pyrene	80.0	93.4	117	3	30	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02693a.D

Lab ID: LCS 460-527511/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	80.0	68.3	85	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	63.8	80	46-105	
2,2'-oxybis[1-chloropropane]	80.0	72.1	90	50-108	
2,3,4,6-Tetrachlorophenol	80.0	77.2	96	57-122	
2,4,5-Trichlorophenol	80.0	70.6	88	59-117	
2,4,6-Trichlorophenol	80.0	71.2	89	62-120	
2,4-Dichlorophenol	80.0	73.1	91	62-102	
2,4-Dimethylphenol	80.0	71.0	89	61-95	
2,4-Dinitrophenol	160	129	81	45-125	
2,4-Dinitrotoluene	80.0	88.0	110	70-123	
2,6-Dinitrotoluene	80.0	85.7	107	68-121	
2-Chloronaphthalene	80.0	67.7	85	54-105	
2-Chlorophenol	80.0	66.5	83	54-92	
2-Methylnaphthalene	80.0	71.1	89	47-104	
2-Methylphenol	80.0	59.5	74	43-80	
2-Nitroaniline	80.0	70.5	88	46-124	
2-Nitrophenol	80.0	78.1	98	58-109	
3,3'-Dichlorobenzidine	80.0	82.7	103	68-123	
3-Nitroaniline	80.0	74.8	94	60-117	
4,6-Dinitro-2-methylphenol	160	164	102	59-132	
4-Bromophenyl phenyl ether	80.0	75.7	95	57-126	
4-Chloro-3-methylphenol	80.0	71.9	90	58-98	
4-Chloroaniline	80.0	74.0	92	51-108	
4-Chlorophenyl phenyl ether	80.0	77.6	97	60-114	
4-Methylphenol	80.0	54.8	68	34-78	
4-Nitroaniline	80.0	83.5	104	48-135	
4-Nitrophenol	160	73.7	46	11-47	
Acenaphthene	80.0	74.4	93	58-107	
Acenaphthylene	80.0	70.5	88	61-106	
Acetophenone	80.0	78.2	98	54-115	
Anthracene	80.0	81.9	102	70-118	
Benzo[a]anthracene	80.0	87.1	109	73-119	
Benzo[a]pyrene	80.0	93.1	116	76-125	
Benzo[b]fluoranthene	80.0	88.6	111	78-123	
Benzo[g,h,i]perylene	80.0	78.2	98	63-133	
Benzo[k]fluoranthene	80.0	90.9	114	71-126	
Bis(2-chloroethoxy)methane	80.0	78.6	98	67-104	
Bis(2-chloroethyl)ether	80.0	71.5	89	63-106	
Bis(2-ethylhexyl) phthalate	80.0	96.9	121	63-135	
Butyl benzyl phthalate	80.0	112	140	66-129	*
Carbazole	80.0	84.8	106	68-121	
Chrysene	80.0	85.3	107	73-121	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02693a.D

Lab ID: LCS 460-527511/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibenz(a,h)anthracene	80.0	82.7	103	59-136	
Dibenzofuran	80.0	71.5	89	67-108	
Diethyl phthalate	80.0	83.8	105	61-129	
Dimethyl phthalate	80.0	75.3	94	65-121	
Di-n-butyl phthalate	80.0	96.8	121	64-130	
Di-n-octyl phthalate	80.0	100	125	64-131	
Fluoranthene	80.0	88.1	110	66-123	
Fluorene	80.0	77.8	97	67-112	
Hexachlorobenzene	80.0	74.7	93	63-125	
Hexachlorobutadiene	80.0	55.7	70	34-99	
Hexachlorocyclopentadiene	80.0	44.5	56	18-99	
Hexachloroethane	80.0	54.2	68	39-92	
Indeno[1,2,3-cd]pyrene	80.0	76.1	95	57-142	
Isophorone	80.0	74.6	93	55-105	
Naphthalene	80.0	66.1	83	51-98	
Nitrobenzene	80.0	81.3	102	56-106	
N-Nitrosodi-n-propylamine	80.0	83.2	104	48-118	
N-Nitrosodiphenylamine	80.0	76.9	96	69-118	
Pentachlorophenol	160	148	92	54-120	
Phenanthrene	80.0	80.1	100	70-117	
Phenol	80.0	35.9	45	16-43	*
Pyrene	80.0	96.5	121	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02627.D

Lab ID: LCS 460-527177/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	80.0	80.7	101	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	78.3	98	46-105	
2,2'-oxybis[1-chloropropane]	80.0	77.7	97	50-108	
2,3,4,6-Tetrachlorophenol	80.0	80.4	100	57-122	
2,4,5-Trichlorophenol	80.0	77.4	97	59-117	
2,4,6-Trichlorophenol	80.0	77.4	97	62-120	
2,4-Dichlorophenol	80.0	76.6	96	62-102	
2,4-Dimethylphenol	80.0	72.7	91	61-95	
2,4-Dinitrophenol	160	122	76	45-125	
2,4-Dinitrotoluene	80.0	91.5	114	70-123	
2,6-Dinitrotoluene	80.0	91.2	114	68-121	
2-Chloronaphthalene	80.0	80.5	101	54-105	
2-Chlorophenol	80.0	67.9	85	54-92	
2-Methylnaphthalene	80.0	78.1	98	47-104	
2-Methylphenol	80.0	54.6	68	43-80	
2-Nitroaniline	80.0	85.5	107	46-124	
2-Nitrophenol	80.0	81.7	102	58-109	
3,3'-Dichlorobenzidine	80.0	84.1	105	68-123	
3-Nitroaniline	80.0	72.2	90	60-117	
4,6-Dinitro-2-methylphenol	160	161	101	59-132	
4-Bromophenyl phenyl ether	80.0	81.1	101	57-126	
4-Chloro-3-methylphenol	80.0	70.8	89	58-98	
4-Chloroaniline	80.0	65.9	82	51-108	
4-Chlorophenyl phenyl ether	80.0	85.4	107	60-114	
4-Methylphenol	80.0	47.4	59	34-78	
4-Nitroaniline	80.0	83.4	104	48-135	
4-Nitrophenol	160	58.3	36	11-47	
Acenaphthene	80.0	84.1	105	58-107	
Acenaphthylene	80.0	81.2	102	61-106	
Acetophenone	80.0	81.1	101	54-115	
Anthracene	80.0	88.1	110	70-118	
Benzo[a]anthracene	80.0	92.6	116	73-119	
Benzo[a]pyrene	80.0	101	126	76-125	*
Benzo[b]fluoranthene	80.0	91.6	115	78-123	
Benzo[g,h,i]perylene	80.0	82.7	103	63-133	
Benzo[k]fluoranthene	80.0	96.6	121	71-126	
Bis(2-chloroethoxy)methane	80.0	83.7	105	67-104	*
Bis(2-chloroethyl)ether	80.0	74.7	93	63-106	
Bis(2-ethylhexyl) phthalate	80.0	93.5	117	63-135	
Butyl benzyl phthalate	80.0	106	133	66-129	*
Carbazole	80.0	91.6	115	68-121	
Chrysene	80.0	92.5	116	73-121	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: M02627.D

Lab ID: LCS 460-527177/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibenz(a,h)anthracene	80.0	90.3	113	59-136	
Dibenzofuran	80.0	82.6	103	67-108	
Diethyl phthalate	80.0	85.2	106	61-129	
Dimethyl phthalate	80.0	81.9	102	65-121	
Di-n-butyl phthalate	80.0	96.6	121	64-130	
Di-n-octyl phthalate	80.0	91.8	115	64-131	
Fluoranthene	80.0	93.0	116	66-123	
Fluorene	80.0	87.2	109	67-112	
Hexachlorobenzene	80.0	79.9	100	63-125	
Hexachlorobutadiene	80.0	65.5	82	34-99	
Hexachlorocyclopentadiene	80.0	55.5	69	18-99	
Hexachloroethane	80.0	64.0	80	39-92	
Indeno[1,2,3-cd]pyrene	80.0	77.8	97	57-142	
Isophorone	80.0	78.4	98	55-105	
Naphthalene	80.0	76.4	96	51-98	
Nitrobenzene	80.0	83.7	105	56-106	
N-Nitrosodi-n-propylamine	80.0	81.7	102	48-118	
N-Nitrosodiphenylamine	80.0	84.9	106	69-118	
Pentachlorophenol	160	154	96	54-120	
Phenanthrene	80.0	86.8	109	70-117	
Phenol	80.0	28.8	36	16-43	
Pyrene	80.0	96.0	120	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P03012.D

Lab ID: LCS 460-527098/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	80.0	86.2	108	54-108	
1,2,4,5-Tetrachlorobenzene	80.0	76.5	96	46-105	
2,2'-oxybis[1-chloropropane]	80.0	73.5	92	50-108	
2,3,4,6-Tetrachlorophenol	80.0	75.8	95	57-122	
2,4,5-Trichlorophenol	80.0	91.0	114	59-117	
2,4,6-Trichlorophenol	80.0	96.7	121	62-120	*
2,4-Dichlorophenol	80.0	74.4	93	62-102	
2,4-Dimethylphenol	80.0	68.6	86	61-95	
2,4-Dinitrophenol	160	142	89	45-125	
2,4-Dinitrotoluene	80.0	86.1	108	70-123	
2,6-Dinitrotoluene	80.0	85.4	107	68-121	
2-Chloronaphthalene	80.0	83.6	105	54-105	
2-Chlorophenol	80.0	59.0	74	54-92	
2-Methylnaphthalene	80.0	91.7	115	47-104	*
2-Methylphenol	80.0	46.7	58	43-80	
2-Nitroaniline	80.0	96.9	121	46-124	
2-Nitrophenol	80.0	75.4	94	58-109	
3,3'-Dichlorobenzidine	80.0	91.8	115	68-123	
3-Nitroaniline	80.0	76.8	96	60-117	
4,6-Dinitro-2-methylphenol	160	154	96	59-132	
4-Bromophenyl phenyl ether	80.0	74.4	93	57-126	
4-Chloro-3-methylphenol	80.0	83.9	105	58-98	*
4-Chloroaniline	80.0	73.7	92	51-108	
4-Chlorophenyl phenyl ether	80.0	73.9	92	60-114	
4-Methylphenol	80.0	41.5	52	34-78	
4-Nitroaniline	80.0	82.5	103	48-135	
4-Nitrophenol	160	57.1	36	11-47	
Acenaphthene	80.0	72.8	91	58-107	
Acenaphthylene	80.0	75.5	94	61-106	
Acetophenone	80.0	68.3	85	54-115	
Anthracene	80.0	79.0	99	70-118	
Benzo[a]anthracene	80.0	83.7	105	73-119	
Benzo[a]pyrene	80.0	87.5	109	76-125	
Benzo[b]fluoranthene	80.0	88.2	110	78-123	
Benzo[g,h,i]perylene	80.0	93.0	116	63-133	
Benzo[k]fluoranthene	80.0	82.8	103	71-126	
Bis(2-chloroethoxy)methane	80.0	79.1	99	67-104	
Bis(2-chloroethyl)ether	80.0	71.9	90	63-106	
Bis(2-ethylhexyl) phthalate	80.0	81.8	102	63-135	
Butyl benzyl phthalate	80.0	102	128	66-129	
Carbazole	80.0	85.2	106	68-121	
Chrysene	80.0	92.8	116	73-121	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P03012.D

Lab ID: LCS 460-527098/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibenz(a,h)anthracene	80.0	92.8	116	59-136	
Dibenzofuran	80.0	73.9	92	67-108	
Diethyl phthalate	80.0	77.7	97	61-129	
Dimethyl phthalate	80.0	82.7	103	65-121	
Di-n-butyl phthalate	80.0	82.8	104	64-130	
Di-n-octyl phthalate	80.0	85.0	106	64-131	
Fluoranthene	80.0	83.0	104	66-123	
Fluorene	80.0	74.2	93	67-112	
Hexachlorobenzene	80.0	75.3	94	63-125	
Hexachlorobutadiene	80.0	64.0	80	34-99	
Hexachlorocyclopentadiene	80.0	43.7	55	18-99	
Hexachloroethane	80.0	58.1	73	39-92	
Indeno[1,2,3-cd]pyrene	80.0	92.1	115	57-142	
Isophorone	80.0	74.8	93	55-105	
Naphthalene	80.0	73.6	92	51-98	
Nitrobenzene	80.0	61.0	76	56-106	
N-Nitrosodi-n-propylamine	80.0	75.0	94	48-118	
N-Nitrosodiphenylamine	80.0	77.7	97	69-118	
Pentachlorophenol	160	160	100	54-120	
Phenanthrene	80.0	78.0	97	70-117	
Phenol	80.0	25.0	31	16-43	
Pyrene	80.0	73.3	92	63-129	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
FB-P	460-157993-1	42	23	92	92	76	110
FB-B	460-157993-2	37	23	85	73	80	110
MW-1	460-157993-4	45	29	96	85	95	98
MW-5	460-157993-5	37	24	84	77	81	93
Dup-1	460-157993-6	41	21	99	99	78	98
MW-2	460-157993-7	38	24	85	76	87	85
MW-3	460-157993-8	35	23	73	66	69	81
MW-4	460-157993-9	36	23	78	68	77	97
	MB 460-527098/1-A	44	35	136 X	98	98	104
	MB 460-527177/1-A	45	24	102	94	80	119
	MB 460-527511/1-A	41	27	90	82	78	110
	LB 460-527258/1-B	46	31	96	83	89	117
	LCS 460-527098/2-A	42	27	106	111 X	95	86
	LCS 460-527098/3-A	49	39	109 X	98	90	95
	LCS 460-527177/2-A	46	30	103	101	97	110
	LCS 460-527177/4-A	38	21	92	87	73	103
	LCS 460-527511/2-A	48	37	91	83	95	113
	LCS 460-527511/3-A	48	33	98	85	87	117
	LCSD 460-527177/3-A	41	28	96	93	92	111
	LCSD 460-527177/5-A	41	21	100	96	80	112
MW-5 MS	460-157993-5 MS	43	30	96	91	98	93
MW-5 MSD	460-157993-5 MSD	40	28	90	85	95	91

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	25-58
PHL = Phenol-d5 (Surr)	14-39
NBZ = Nitrobenzene-d5 (Surr)	51-108
FBP = 2-Fluorobiphenyl	45-107
TBP = 2,4,6-Tribromophenol (Surr)	26-139
TPHL = Terphenyl-d14 (Surr)	40-148

Column to be used to flag recovery values

FORM II 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Matrix: Water (Dissolved) Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
MW-1	460-157993-4	52	30	119 X	92	98	105
MW-5	460-157993-5	43	29	104	89	95	93
MW-2	460-157993-7	45	29	105	90	88	63
MW-3	460-157993-8	31	19	62	51	46	56
MW-4	460-157993-9	40	26	102	84	91	99
MW-5 MS	460-157993-5 MS	45	34	151 X	102	108	98
MW-5 MSD	460-157993-5 MSD	42	25	112 X	91	105	97

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	25-58
PHL = Phenol-d5 (Surr)	14-39
NBZ = Nitrobenzene-d5 (Surr)	51-108
FBP = 2-Fluorobiphenyl	45-107
TBP = 2,4,6-Tribromophenol (Surr)	26-139
TPHL = Terphenyl-d14 (Surr)	40-148

Column to be used to flag recovery values

FORM II 8270D

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVIS 460-527252/2 Calibration Date: 06/12/2018 20:23

Instrument ID: CBNAMS18 Calib Start Date: 05/17/2018 15:44

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/17/2018 18:15

Lab File ID: P03007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5197	0.4777	0.0100	9190	10000	-8.1	20.0
N-Nitrosodimethylamine	Ave	0.8261	0.7220		8740	10000	-12.6	20.0
Pyridine	Ave	1.487	1.292		17400	20000	-13.1	20.0
Aniline	Ave	1.882	2.024		10800	10000	7.5	20.0
Phenol	Ave	1.488	1.696	0.8000	11400	10000	14.0	20.0
Bis(2-chloroethyl)ether	QuaF		1.141	0.7000	10100	10000	0.6	20.0
2-Chlorophenol	Ave	1.403	1.531	0.8000	10900	10000	9.1	20.0
n-Decane	Ave	1.106	1.187	0.0100	10700	10000	7.3	20.0
1,3-Dichlorobenzene	Ave	1.561	1.719		11000	10000	10.1	20.0
1,4-Dichlorobenzene	Ave	1.570	1.541		9820	10000	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.473	1.685		11400	10000	14.4	20.0
Benzyl alcohol	Ave	0.7109	0.7590	0.0100	10700	10000	6.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.284	1.695	0.0100	13200	10000	32.0*	20.0
2-Methylphenol	Ave	1.061	1.157	0.7000	10900	10000	9.0	20.0
N-Methylaniline	Lin2		1.871		10500	10000	4.6	20.0
Acetophenone	Ave	1.702	1.761	0.0100	10300	10000	3.5	20.0
N-Nitrosodi-n-propylamine	Ave	0.8052	0.9525	0.5000	11800	10000	18.3	20.0
3 & 4 Methylphenol	Ave	1.110	1.165		10500	10000	4.9	20.0
4-Methylphenol	Ave	1.101	1.125	0.6000	10200	10000	2.2	20.0
Hexachloroethane	Ave	0.5618	0.6022	0.3000	10700	10000	7.2	20.0
Nitrobenzene	Lin2		0.5894	0.2000	9920	10000	-0.8	20.0
n,n'-Dimethylaniline	Ave	1.851	1.834	0.0100	9910	10000	-0.9	20.0
Isophorone	Ave	0.5272	0.5614	0.4000	10600	10000	6.5	20.0
2-Nitrophenol	Ave	0.1774	0.1926	0.1000	10900	10000	8.6	20.0
2,4-Dimethylphenol	Ave	0.2809	0.2852	0.2000	10200	10000	1.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.3423	0.3533	0.3000	10300	10000	3.2	20.0
Benzoic acid	Qua		0.1746		10800	10000	8.3	20.0
2,4-Dichlorophenol	Ave	0.2735	0.2775	0.2000	10100	10000	1.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3383	0.3328		9840	10000	-1.6	20.0
Naphthalene	Ave	0.9791	1.000	0.7000	10200	10000	2.1	20.0
4-Chloroaniline	Ave	0.3652	0.3842	0.0100	10500	10000	5.2	20.0
Hexachlorobutadiene	Ave	0.1980	0.1936	0.0100	9780	10000	-2.2	20.0
4-Chloro-3-methylphenol	Ave	0.2311	0.2399		10400	10000	3.8	20.0
2-Methylnaphthalene	Ave	0.6630	0.6452	0.4000	9730	10000	-2.7	20.0
1-Methylnaphthalene	Ave	0.6124	0.6130	0.0100	10000	10000	0.1	20.0
Hexachlorocyclopentadiene	Ave	0.5389	0.3804	0.0500	7060	10000	-29.4*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7678	0.7614	0.0100	9920	10000	-0.8	20.0
2-tertbutyl-4-methylphenol	Ave	0.3906	0.3911	0.0100	10000	10000	0.1	20.0
2,4,6-Trichlorophenol	Ave	0.4505	0.4419	0.2000	9810	10000	-1.9	20.0
2,4,5-Trichlorophenol	Ave	0.4703	0.4671	0.2000	9930	10000	-0.7	20.0
1,1'-Biphenyl	Ave	1.788	1.804	0.0100	10100	10000	0.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVIS 460-527642/2 Calibration Date: 06/14/2018 00:51

Instrument ID: CBNAMS17 Calib Start Date: 05/08/2018 14:52

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/08/2018 17:17

Lab File ID: M02689.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4703	0.3923	0.0100	8340	10000	-16.6	20.0
N-Nitrosodimethylamine	Ave	0.7082	0.6057		8550	10000	-14.5	20.0
Pyridine	Ave	1.205	1.025		17000	20000	-15.0	20.0
Aniline	Ave	2.039	1.848		9060	10000	-9.4	20.0
Phenol	Ave	1.655	1.657	0.8000	10000	10000	0.2	20.0
Bis(2-chloroethyl)ether	Ave	1.290	1.198	0.7000	9290	10000	-7.1	20.0
2-Chlorophenol	Ave	1.380	1.360	0.8000	9850	10000	-1.5	20.0
n-Decane	Ave	1.084	1.011	0.0100	9320	10000	-6.8	20.0
1,3-Dichlorobenzene	Ave	1.508	1.462		9690	10000	-3.1	20.0
1,4-Dichlorobenzene	Ave	1.515	1.480		9770	10000	-2.3	20.0
Benzyl alcohol	Ave	0.8117	0.7920	0.0100	9760	10000	-2.4	20.0
1,2-Dichlorobenzene	Ave	1.432	1.413		9870	10000	-1.3	20.0
2-Methylphenol	Ave	1.174	1.135	0.7000	9670	10000	-3.3	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.438	1.383	0.0100	9620	10000	-3.8	20.0
N-Methylaniline	Lin2		1.867		10200	10000	1.5	20.0
Acetophenone	Ave	1.748	1.783	0.0100	10200	10000	2.0	20.0
N-Nitrosodi-n-propylamine	Ave	0.7620	0.8192	0.5000	10800	10000	7.5	20.0
3 & 4 Methylphenol	Ave	1.243	1.205		9690	10000	-3.1	20.0
4-Methylphenol	Ave	1.241	1.205	0.6000	9710	10000	-2.9	20.0
Hexachloroethane	Ave	0.5795	0.5987	0.3000	10300	10000	3.3	20.0
Nitrobenzene	Ave	0.6012	0.6482	0.2000	10800	10000	7.8	20.0
n,n'-Dimethylaniline	Ave	1.820	1.855	0.0100	10200	10000	1.9	20.0
Isophorone	Ave	0.5901	0.5998	0.4000	10200	10000	1.6	20.0
2-Nitrophenol	Ave	0.1768	0.1878	0.1000	10600	10000	6.2	20.0
2,4-Dimethylphenol	Ave	0.2946	0.2963	0.2000	10100	10000	0.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.3931	0.4096	0.3000	10400	10000	4.2	20.0
Benzoic acid	Qua		0.1684		9860	10000	-1.4	20.0
2,4-Dichlorophenol	Ave	0.2822	0.2883	0.2000	10200	10000	2.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3359	0.3313		9860	10000	-1.4	20.0
Naphthalene	Ave	1.001	1.020	0.7000	10200	10000	1.9	20.0
4-Chloroaniline	Ave	0.4234	0.4192	0.0100	9900	10000	-1.0	20.0
Hexachlorobutadiene	Ave	0.1843	0.1805	0.0100	9790	10000	-2.1	20.0
4-Chloro-3-methylphenol	Ave	0.2636	0.2790		10600	10000	5.8	20.0
2-Methylnaphthalene	Ave	0.6395	0.6704	0.4000	10500	10000	4.8	20.0
1-Methylnaphthalene	Ave	0.6017	0.6356	0.0100	10600	10000	5.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7096	0.6867	0.0100	9680	10000	-3.2	20.0
Hexachlorocyclopentadiene	Ave	0.4256	0.2698	0.0500	6340	10000	-36.6*	20.0
2-tertbutyl-4-methylphenol	Ave	0.3779	0.4274	0.0100	11300	10000	13.1	20.0
2,4,6-Trichlorophenol	Ave	0.4491	0.4427	0.2000	9860	10000	-1.4	20.0
2,4,5-Trichlorophenol	Ave	0.4789	0.4735	0.2000	9890	10000	-1.1	20.0
1,1'-Biphenyl	Ave	1.729	1.692	0.0100	9790	10000	-2.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVIS 460-527275/2 Calibration Date: 06/12/2018 22:36

Instrument ID: CBNAMS17 Calib Start Date: 05/08/2018 14:52

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/08/2018 17:17

Lab File ID: M02622.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4703	0.4265	0.0100	9070	10000	-9.3	20.0
N-Nitrosodimethylamine	Ave	0.7082	0.6056		8550	10000	-14.5	20.0
Pyridine	Ave	1.205	1.083		18000	20000	-10.1	20.0
Aniline	Ave	2.039	1.817		8910	10000	-10.9	20.0
Phenol	Ave	1.655	1.587	0.8000	9590	10000	-4.1	20.0
Bis(2-chloroethyl)ether	Ave	1.290	1.185	0.7000	9190	10000	-8.1	20.0
2-Chlorophenol	Ave	1.380	1.350	0.8000	9780	10000	-2.2	20.0
n-Decane	Ave	1.084	1.045	0.0100	9640	10000	-3.6	20.0
1,3-Dichlorobenzene	Ave	1.508	1.475		9780	10000	-2.2	20.0
1,4-Dichlorobenzene	Ave	1.515	1.486		9810	10000	-1.9	20.0
Benzyl alcohol	Ave	0.8117	0.6123	0.0100	7540	10000	-24.6*	20.0
1,2-Dichlorobenzene	Ave	1.432	1.403		9800	10000	-2.0	20.0
2-Methylphenol	Ave	1.174	1.085	0.7000	9240	10000	-7.6	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.438	1.346	0.0100	9360	10000	-6.4	20.0
N-Methylaniline	Lin2		1.806		9820	10000	-1.8	20.0
Acetophenone	Ave	1.748	1.681	0.0100	9620	10000	-3.8	20.0
N-Nitrosodi-n-propylamine	Ave	0.7620	0.7441	0.5000	9760	10000	-2.4	20.0
3 & 4 Methylphenol	Ave	1.243	1.212		9750	10000	-2.5	20.0
4-Methylphenol	Ave	1.241	1.140	0.6000	9190	10000	-8.1	20.0
Hexachloroethane	Ave	0.5795	0.5958	0.3000	10300	10000	2.8	20.0
Nitrobenzene	Ave	0.6012	0.6193	0.2000	10300	10000	3.0	20.0
n,n'-Dimethylaniline	Ave	1.820	1.776	0.0100	9760	10000	-2.4	20.0
Isophorone	Ave	0.5901	0.5772	0.4000	9780	10000	-2.2	20.0
2-Nitrophenol	Ave	0.1768	0.1848	0.1000	10400	10000	4.5	20.0
2,4-Dimethylphenol	Ave	0.2946	0.2936	0.2000	9960	10000	-0.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.3931	0.4011	0.3000	10200	10000	2.0	20.0
Benzoic acid	Qua		0.1586		9370	10000	-6.3	20.0
2,4-Dichlorophenol	Ave	0.2822	0.2831	0.2000	10000	10000	0.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3359	0.3335		9930	10000	-0.7	20.0
Naphthalene	Ave	1.001	1.022	0.7000	10200	10000	2.1	20.0
4-Chloroaniline	Ave	0.4234	0.4207	0.0100	9940	10000	-0.6	20.0
Hexachlorobutadiene	Ave	0.1843	0.1859	0.0100	10100	10000	0.9	20.0
4-Chloro-3-methylphenol	Ave	0.2636	0.2576		9770	10000	-2.3	20.0
2-Methylnaphthalene	Ave	0.6395	0.6528	0.4000	10200	10000	2.1	20.0
1-Methylnaphthalene	Ave	0.6017	0.6245	0.0100	10400	10000	3.8	20.0
Hexachlorocyclopentadiene	Ave	0.4256	0.2612	0.0500	6140	10000	-38.6*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7096	0.7105	0.0100	10000	10000	0.1	20.0
2-tertbutyl-4-methylphenol	Ave	0.3779	0.3929	0.0100	10400	10000	4.0	20.0
2,4,6-Trichlorophenol	Ave	0.4491	0.4246	0.2000	9450	10000	-5.5	20.0
2,4,5-Trichlorophenol	Ave	0.4789	0.4601	0.2000	9610	10000	-3.9	20.0
1,1'-Biphenyl	Ave	1.729	1.742	0.0100	10100	10000	0.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVIS 460-527275/2 Calibration Date: 06/12/2018 22:36

Instrument ID: CBNAMS17 Calib Start Date: 05/08/2018 14:52

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/08/2018 17:17

Lab File ID: M02622.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloronaphthalene	Ave	1.356	1.354	0.8000	9980	10000	-0.2	20.0
Phenyl ether	Ave	0.8841	0.9112	0.0100	10300	10000	3.1	20.0
2-Nitroaniline	Ave	0.4077	0.4229	0.0100	10400	10000	3.7	20.0
1,3-Dimethylnaphthalene	Ave	1.067	1.111	0.0100	10400	10000	4.2	20.0
Dimethyl phthalate	Ave	1.459	1.408	0.0100	9650	10000	-3.5	20.0
Coumarin	Ave	0.2101	0.2214	0.0100	10500	10000	5.4	20.0
2,6-Dinitrotoluene	Ave	0.2979	0.3204	0.2000	10800	10000	7.5	20.0
Acenaphthylene	Ave	1.954	1.947	0.9000	9970	10000	-0.3	20.0
3-Nitroaniline	Ave	0.3650	0.3649	0.0100	10000	10000	-0.0	20.0
Acenaphthene	Ave	1.193	1.213	0.9000	10200	10000	1.7	20.0
3,5-di-tert-butyl-4-hydroxytol	Ave	1.022	1.004	0.0100	9830	10000	-1.7	20.0
2,4-Dinitrophenol	Lin2		0.1631	0.0100	15600	20000	-21.9*	20.0
4-Nitrophenol	Ave	0.2404	0.2283	0.0100	19000	20000	-5.1	20.0
2,4-Dinitrotoluene	Ave	0.3887	0.4118	0.2000	10600	10000	5.9	20.0
Dibenzofuran	Ave	1.886	1.853	0.8000	9830	10000	-1.7	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3762	0.3576	0.0100	9510	10000	-4.9	20.0
Diethyl phthalate	Ave	1.439	1.428	0.0100	9930	10000	-0.7	20.0
Fluorene	Ave	1.397	1.453	0.9000	10400	10000	4.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.6824	0.7019	0.4000	10300	10000	2.9	20.0
4-Nitroaniline	Ave	0.3523	0.3688	0.0100	10500	10000	4.7	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1112	0.1082	0.0100	19500	20000	-2.7	20.0
N-Nitrosodiphenylamine	Ave	0.5617	0.5675	0.0100	10100	10000	1.0	20.0
1,2-Diphenylhydrazine	Ave	0.7181	0.7634	0.0100	10600	10000	6.3	20.0
4-Bromophenyl phenyl ether	Ave	0.2259	0.2216	0.1000	9810	10000	-1.9	20.0
Hexachlorobenzene	Ave	0.2594	0.2432	0.1000	9370	10000	-6.3	20.0
Pentachlorophenol	Ave	0.1466	0.1328	0.0500	18100	20000	-9.4	20.0
Pentachloronitrobenzene	Ave	0.0996	0.0957	0.0100	9600	10000	-4.0	20.0
n-Octadecane	Ave	0.3596	0.4248	0.0100	11800	10000	18.1	20.0
Phenanthrene	Ave	1.080	1.097	0.7000	10200	10000	1.6	20.0
Anthracene	Ave	1.096	1.113	0.7000	10200	10000	1.5	20.0
Carbazole	Ave	0.999	1.037	0.0100	10400	10000	3.8	20.0
Di-n-butyl phthalate	Ave	1.080	1.177	0.0100	10900	10000	9.0	20.0
Fluoranthene	Ave	1.107	1.177	0.6000	10600	10000	6.3	20.0
Benzidine	Qua		0.4560		9250	10000	-7.5	20.0
Pyrene	Ave	1.300	1.431	0.6000	11000	10000	10.1	20.0
Bisphenol-A	Qua		0.2101		5050	10000	-49.5*	20.0
Butyl benzyl phthalate	Ave	0.4741	0.5802	0.0100	12200	10000	22.4*	20.0
2,3,7,8-TCDD	Ave	0.1324	0.1683	0.0100	127	100	27.1*	20.0
Carbamazepine	Qua		0.5094	0.0100	11600	10000	15.9	20.0
3,3'-Dichlorobenzidine	QuaF		0.4755	0.0100	11100	10000	10.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157993-1

SDG No.:

Lab Sample ID: CCVIS 460-527356/2 Calibration Date: 06/13/2018 07:54

Instrument ID: CVOAMS15 Calib Start Date: 06/12/2018 06:20

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/12/2018 12:30

Lab File ID: T08356.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Ave	0.1198	0.1121		18.7	20.0	-6.4	20.0
Dichlorodifluoromethane	Ave	0.3791	0.3263	0.1000	17.2	20.0	-13.9	20.0
Chloromethane	Ave	0.2881	0.2768	0.1000	19.2	20.0	-3.9	20.0
Vinyl chloride	Ave	0.2753	0.2774	0.1000	20.2	20.0	0.8	20.0
Butadiene	Lin2		0.2557		20.4	20.0	2.1	20.0
Bromomethane	QuaF		0.2907	0.1000	15.7	20.0	-21.5	50.0
Chloroethane	Lin		0.8303	0.1000	24.3	20.0	21.4	50.0
Dichlorofluoromethane	Ave	0.3872	0.3992		20.6	20.0	3.1	20.0
Trichlorofluoromethane	Ave	0.4599	0.4178	0.1000	18.2	20.0	-9.2	20.0
Pentane	Ave	0.0529	0.0548		41.5	40.0	3.7	20.0
Ethanol	QuaF		0.4167		853	800	6.6	50.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2363	0.2389		20.2	20.0	1.1	20.0
Ethyl ether	Ave	0.2230	0.2393		21.5	20.0	7.3	20.0
2-Methyl-1,3-butadiene	Ave	0.2459	0.2512		20.4	20.0	2.2	20.0
Acrolein	Ave	8.870	10.71		48.3	40.0	20.7	50.0
1,1-Dichloroethene	Ave	0.2599	0.2624	0.1000	20.2	20.0	0.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2623	0.2626	0.1000	20.0	20.0	0.1	20.0
Acetone	QuaF		0.6409	0.0500	105	100	4.8	50.0
Iodomethane	QuaF		0.1224		8.51	20.0	-57.5*	20.0
Carbon disulfide	Ave	0.7317	0.7718	0.1000	21.1	20.0	5.5	50.0
Isopropyl alcohol	Ave	4.160	4.475		215	200	7.6	50.0
Acetonitrile	Ave	0.1917	0.1981		207	200	3.3	20.0
Allyl chloride	Ave	0.2010	0.2123		21.1	20.0	5.6	20.0
Methyl acetate	Ave	0.2206	0.2230	0.1000	40.4	40.0	1.1	20.0
Cyclopentene	Ave	0.6510	0.7006		21.5	20.0	7.6	20.0
Methylene Chloride	Ave	0.3074	0.2986	0.1000	19.4	20.0	-2.8	20.0
2-Methyl-2-propanol	Ave	6.601	6.919		210	200	4.8	50.0
Acrylonitrile	QuaF		0.1147		190	200	-5.0	20.0
trans-1,2-Dichloroethene	Ave	0.2889	0.2976	0.1000	20.6	20.0	3.0	20.0
Methyl tert-butyl ether	Ave	0.7955	0.8302	0.1000	20.9	20.0	4.4	20.0
Hexane	Ave	0.3962	0.4128		20.8	20.0	4.2	20.0
1,1-Dichloroethane	Ave	0.5287	0.5343	0.2000	20.2	20.0	1.1	20.0
Vinyl acetate	Ave	0.4968	0.4638		37.3	40.0	-6.6	20.0
Isopropyl ether	Ave	0.9682	1.002		20.7	20.0	3.5	20.0
2-Chloro-1,3-butadiene	Ave	0.2776	0.2884		20.8	20.0	3.9	20.0
Tert-butyl ethyl ether	Ave	0.8747	0.8994		20.6	20.0	2.8	20.0
2,2-Dichloropropane	Ave	0.1088	0.1080		19.8	20.0	-0.8	20.0
cis-1,2-Dichloroethene	Ave	0.3334	0.3379	0.1000	20.3	20.0	1.3	20.0
2-Butanone (MEK)	Ave	1.009	1.018	0.0500	101	100	0.9	50.0
Propionitrile	Ave	9.324	9.787		210	200	5.0	20.0

June 25, 2018

Mr. James Vander Vliet
J.M. Sorge, Inc.
57 Fourth Street
Somerville, NJ 08876

Re: Data Package Review Report –Test America – Edison – Soil Samples

Dear Mr. Vander Vliet:

The evaluation of analytical data for organic and inorganic analysis parameters, by Test America – Edison, for six soil samples from the GIS New Rochelle Site, which were reported in a single data package under Job No. 460-149327-1, has been completed. The data package was received by ddms, inc. (ddms) for review, and the following samples were reported:

SB-101A	SB-102A	SB-103A
SB-101B	SB-102B	SB-104A

Analyses were performed in accordance with USEPA Methods 8260C (Volatile Organic Compounds), 8270D (Semivolatile Organic Compounds), 8081B (Organochlorine Pesticides), 8082A (Polychlorinated Biphenyls [PCBs]), 6010C (metals), 7471B (Mercury), and 9012B (total cyanide). ddms' review was performed, to the extent possible, in accordance with the analytical methods and "DER-10/Technical Guidance for Site Investigation and Remediation". Professional judgment was applied as necessary and appropriate. Qualifiers consistent with those defined by EPA Region 2 were applied as necessary and appropriate. Below is the Data Usability Summary Report (DUSR) associated with these samples.

	Data Usability Summary Report	
1.	Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?	No – See Documentation Section
2.	Have all holding times been met?	Yes
3.	Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?	No – See Documentation Section
4.	Have all of the data been generated using established and agreed upon analytical protocols?	See Documentation Section
5.	Does an evaluation of the raw data confirm the results provided in the data summary sheet and the quality control verification forms?	Where raw data were provided
6.	Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?	Yes

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheet from the data package been attached to the DUSR?	Yes

Based on the data review effort, results were qualified as follows:

- Results for SVOC target compounds, 2-chloroisopropyl ether, hexachlorocyclopentadiene, pentachlorophenol, di-n-octyl phthalate, and benzo(b)fluoranthene, were qualified as estimated (J, UJ) in all six site samples, based on high %Ds between the CC and the IC.

- Results for all SVOC target analytes in SB-101B, SB-102A, SB-103A, and SB-104A were qualified as estimated (J-, UJ) based on low recoveries for all six surrogates added during the analytical process.

- Results for all acid-extractable SVOC target compounds and base/neutral compounds: n-nitroso-di-n-propylamine, bis(2-chloroethyl)ether, 2,2'-oxybis(1-chloropropane), acetophenone, isophorone, hexachloroethane, nitrobenzene, n-nitroso-diphenylamine, bis(2-chloroethoxy)methane, naphthalene, caprolactam, and 4-chloroaniline, in SB-101A and SB-102B were qualified as estimated (J-, UJ) based on low recoveries for the associated surrogate compounds.

- Results for SVOC target analytes, 2,4-dinitrophenol, 3,3'-dichlorobenzidine, 3-nitroaniline, and 4-chloroaniline in all samples were qualified as estimated (J-, UJ) based on low recoveries in the associated LCS.

- Results for SVOC target analytes, bis-2-chloroisopropyl ether, 2,4-dinitrophenol, 3,3'-dichlorobenzidine, 3-nitroaniline, 4,6-dinitro-2-methylphenol, 4-chloroaniline, hexachlorocyclopentadiene, and pentachlorophenol, in all samples were qualified as estimated (J-, UJ) based on low recoveries observed in the MS/MSD and the validator's professional judgement.

- Results for alpha-chlordane in SB-101A and SB-103A, and for alpha- and gamma-chlordane, and 4,4'-DDE in SB-102B, were qualified as tentatively identified (N) and estimated (J) based on high RPDs between the two analytical column measurements.

- Results for Aroclors 1254 and 1260 in SB-102A and SB-102B were qualified as estimated (J+) based on high surrogate recoveries, resulting in the potential for high bias.

- Results for antimony in all samples estimated (J-, UJ), based on low recovery in the LCS, with potential for low bias.

- Results for Mg and Mn in all of the site samples were qualified as estimated (J-, UJ) based on low recoveries in the MS.

- Results for beryllium in all of the site samples were qualified as estimated (J,UJ), based on the high RPD between the duplicate pair.

- The result for sodium in SB-101A was qualified as estimated (UJ) at the reporting limit, because this element was not detected in the sample but was reported at a concentration below the RL in the duplicate.

- Results for cyanide in all site samples were qualified as estimated (J, UJ) based on low recovery in the LCS, high recovery in the MS/MSD pair, and the validator's professional judgment.

All qualifiers are reflected on the laboratory Form Is included as Attachment A to this report. Only the pages documenting qualification of data have been included in this report. Region II qualifier definitions are also provided in this attachment. A copy of the chain of custody record is provided in Attachment B. Pages from the data package illustrating the exceedances and issues described in this validation report are included as Attachment C.

Review of TICs (tentatively identified compounds) was not performed as part of the Level 2B validation. These compounds are understood to be tentatively identified and associated concentrations are estimated, calculated using an assumed response factor of one. No reference standards were analyzed by the laboratory for the TICs associated with the site samples.

Documentation: A completeness review of the data package was performed, and the data package was determined to be a complete CLP-like data package for organics analyses. The data provided for inorganics were complete for a reduced data deliverables package only (see Documentation Section). Issues observed during the review are detailed below:

- The chain of custody (COC) form provide does not specify reference methods, therefore, the validator assumed that the methods run by the laboratory were the requested methods.
- Initial calibration verification standards were included in the runlogs provided with the data package, however, no summary forms or raw data were provided for these ICVs. No assessment of the IC standards could be made against a second source.
- No raw data were included in the data package for metals and cyanide analyses.

Holding Times, Preservation, Sample Integrity: A copy of the applicable chain of custody (COC) record was included in the data package, documenting a collection date of January 29, 2018. The samples were received by the laboratory on January 30, 2018. All analytical method required holding times were met.

Specific details regarding the review and evaluation of these data are discussed in the parameter-specific sections below:

A. 8260C (Volatile Organic Compounds),
B. 8270D (Semivolatile Organic Compounds),
C. 8081B (Organochlorine Pesticides),
D. 8082A (Polychlorinated Biphenyls [PCBs]),
E. 6010C (Metals), and 7471B (Mercury), and
F. 9012B (Total Cyanide).

A. Volatile Organic Compounds

1. Calibration:

Initial and continuing calibrations were acceptable. All analyses were performed on a single instrument. According to the run log an initial calibration verification standard was analyzed, however, no data or summary forms were provided, therefore, the accuracy of the IC assessed against a second source could not be evaluated.

2. Blanks:

One MB was prepared and analyzed with the site samples. No target analytes were detected in the MB.

3. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

Results for one LCS/LCSD pair, associated with the sample analyses were reported in the data package. Percent recoveries (70-130%R) and RPDs (30% max) were acceptable.

4. Matrix Spike (MS)/MS Duplicate (MSD):

No MS/MSD was prepared and analyzed with the field samples in this data set.

5. Laboratory Duplicate:

No unspiked duplicate pair was prepared and analyzed with the field samples in this data set.

6. Compound Identification:

Methylene chloride was detected in all six samples at concentrations between 4.8 to 41 mg/kg. These represent on-column concentrations of 4 to 9 µL/mL. The data user is cautioned that the concentrations of methylene chloride in the site soil samples may be attributable to contamination and may not be authentic sample components.

7. Compound Quantitation:

No calculations were performed as a part of the Level 2B validation effort, therefore, accurate quantitation was not verified.

8. Overall Assessment:

Results for VOCs in all of the site samples were determined to be valid as reported. No qualifiers were applied by the validator. The data user is cautioned that results for methylene chloride in all six samples may represent artifacts and may not be genuine sample components.

B. Semivolatile Organic Compounds

1. Calibration:

Summaries and data for two initial calibrations were provided, one for instrument CBNAMS12 (MS12) and one for CBNAMS5 (MS5). Each calibration was performed with two sets of standards. The first set included all but three of the target analytes. Benzaldehyde, caprolactam, and atrazine were calibrated with a second set of standards on each instrument. All compounds met acceptance criteria, however, calibration equations for a number of compounds on both instruments were established using quadratic or linear equations, indicating that the

calculated response factors were not consistent across the entire calibration range. Examination of the response factors (RFs) shows that the low standard in the curve for the affected compounds were disproportionately low (one-third to one-half) compared to the rest of the calibration range. This indicates that sensitivity at RL may be compromised.

No site samples were calculated against the calibration performed on MS12; only the LCS was analyzed in association with it. Quadratic equations were established for benzoic acid, hexachlorocyclopentadiene, 2,4-dinitrophenol, and pentachlorophenol, and linear equations were used for 4,6-dinitro-2-methylphenol, 3,3'-dichlorobenzidine, and benzidine. It should be noted also that a linear calibration was established for the surrogate compound 2-fluorophenol.

Quadratic equations were used to establish calibration for 2,4-dinitrophenol, 4,6-dinitrro-2-methylphenol, benzidine, 3,3'-dichlorobenzidine, and indeno(1,2,3-cd)pyrene on the instrument used to analyze the site samples.

An ICV pair on each of the instruments were listed on the respective run logs, however, no summary forms or data were provided for these ICVs in the data package. Without these calibration verification standards data, the accuracy of the IC standards against a second standard source cannot be assessed.

One continuing calibration standard set was analyzed on each instrument. Only the LCS was analyzed on MS12; all of the project samples, as well as the method blank, were analyzed on MS5. All compounds met the acceptance criteria on MS12. The following compounds exceeded the calibration criteria in the MS5 CC analyzed with the project samples:

Compound	%D	Qualifier Applied
2-Chloroisopropyl ether	46.8 Low	J, UJ
Hexachlorocyclopentadiene	43.9 Low	J, UJ
Pentachlorophenol	45.4 Low	J, UJ
Di-n-octyl phthalate	35.0 High	J, UJ
Benzo(b)fluoranthene	22.3 High	J, UJ

Results for these compounds were qualified as estimated in all six site samples based on high %Ds between the CC and the IC. Additionally, although they were <20 %D, benzo(a)pyrene (19.7%) and indeno(1,2,3-cd)pyrene (19.1%) were high compared to the IC. No results were qualified for these two compounds, but the data user is cautioned that variability in results for these two compounds are also likely to be higher than expected.

2. Surrogates:

Six surrogates (fluorophenol-d_5 [2FP], phenol-d_5 [PHL], nitrobenzene-d_5 [NBZ], 2-fluorobiphenyl [FBP], 2,4,6-tribromophenol [TBP], terphenyl-d_{14} [TPHL]) were used. Recoveries were assessed against validation criteria of 70130%. Exceedances are detailed below:

Sample	Surrogate	Qualifier Applied
SB-101A	2FP, PHL, TBP, NBZ all <70%	All acid extractable compounds and base/neutral List 1* qualified as estimated (J-,UJ)
SB-101B	All surrogates <70%	All target compounds qualified estimated (J-,UJ)
SB-102A	All surrogates <70%	All target compounds qualified estimated (J-,UJ)
SB-102B	2FP, PHL, TBP, NBZ <70%	All acid extractable compounds and base/neutral List 1* qualified as estimated (J-,UJ)
SB-103A	All surrogates <70%	All target compounds qualified estimated (J-,UJ)
SB-104A	2FP, PHL, TBP, NBZ, FBP <70%	All target compounds qualified as estimated (J-,UJ)

*List 1: n-nitroso-di-n-propylamine, bis(2-chloroethyl)ether, 2,2'-oxybis(1-chlloropropane), acetophenone, isophorone, hexachloroethane, nitrobenzene, n-nitroso-diphenylamine, bis(2-chloroethoxy)methane, naphthalene, caprolactam, and 4-chloroaniline

3. Blanks:

One MB was extracted and analyzed with the site samples. No target analytes were detected above the MDL in the MB.

4. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

Results for one LCS associated with the sample analyses were reported in the data package. Percent recoveries were acceptable (70-130%R) with the exceptions below:

Compound	%D	Qualifier Applied
2,4-Dinitrophenol	55	J-, UJ
3,3'-Dichlorobenzidine	46	J-, UJ
3-Nitroaniline	63	J-, UJ
4-Chloroaniline	40	J-, UJ

It is important to note that the LCS was analyzed on a different instrument than all of the field samples and the MB. This means that on the instrument used to analyze the samples, there is no LCS to support the accurate recovery of known concentrations of the SVOC target compounds for this sample set. An MS/MSD pair was analyzed on MS5, with the site samples, however, this spiked pair was prepared from a non-project sample.

5. Matrix Spike/Matrix Spike Duplicate:

Compound	MS %R	MSD %R
bis-2-chloroisopropylether	**39**	**38**
2,3,4,6-tetrachlorophenol	65	a
2,4-dichlorophenol	69	a
2,4-dimethylphenol	67	69
2,4-dinitrophenol	***22***	***26***
2-methylphenol	63	64
2-nitroaniline	58	62
3,3'-dichlorobenzidine	***42***	***49***
3-nitroaniline	***49***	***57***
4,6-dinitro-2-methylphenol	***37***	***41***
4-chloroaniline	***23***	***28***
4-methylphenol	67	68
4-nitrophenol	65	68
Acenaphthene	68	a
acetophenone	61	62
Benzaldehyde	50	51
bis(2-chloroethoxy)methane	64	64
bis(2-chloroethyl)ether	67	a
hexachlorobenzene	65	a
hexachlorobutadiene	68	67
hexachlorocyclopentadiene	***41***	***40***
Hexachloroethane	68	66
Isophorone	62	64
Naphthalene	a	68
Nitrobenzene	69	69
n-nitroso-di-n-propylamine	60	61
pentachlorophenol	***32***	***35***
Phenol	64	65

a = acceptable

Although the parent sample for the MS/MSD pair was not a project sample, it represents the only data available for recoveries of known concentrations of target analytes performed on the same instrument and analytical sequence as the site samples. Based on professional judgement, results for compounds with recoveries below 50% (in bold type in the table above) in this non-project MS/MSD pair were qualified in the site samples as estimated (J-,UJ) with the potential for low bias.

6. Laboratory Duplicate:

No lab duplicate was prepared and analyzed with this data set.

7. Compound Identification:

The target compounds, where reported, were accurately identified based on retention times (RTs). Comparison of sample spectra to reference spectra is not included in a Level 2B validation effort.

8. Compound Quantitation:

Verification of calculations is not performed for Level 2B validation.

9. Overall Assessment:

Results were qualified as estimated (J-, UJ) based on low surrogate recoveries, low recoveries observed in the LCS and MS/MSD, and (J, UJ) based on high %Ds and indications of elevated variability, and (J-,UJ) based on decreasing sensitivity at low concentrations, observed in the calibration standards.

C. Chlorinated Pesticides

1. Calibration:

Initial and continuing calibrations were acceptable for all target analytes. Performance evaluation mixture analyses preceded each calibration and showed acceptable resolution and breakdown.

2. ***Surrogates:***

All surrogate recoveries were acceptable.

3. ***Blanks:***

One MB was prepared and analyzed with the site samples. No target analytes were detected in the MB.

4. ***Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):***

Results for one LCS associated with the sample analyses were reported in the data package. Percent recoveries were acceptable (70-130%R).

5. ***Matrix Spike/Matrix Spike Duplicate:***

MS/MSD analyses were performed with a non-project sample.

6. Laboratory Duplicate:

No laboratory duplicate was prepared and analyzed with the site samples**.**

7. Compound Identification:

The following results exceeded the validation criteria for dual-column agreement (25%RPD):

Sample	Compound	RPD
SB-101A	alpha-chlordane	69.7
SB-102B	gamma-chlordane	28.6
	alpha-chlordane	46.8
	4,4'-DDE	31.4
SB-103A	alpha-chlordane	67.6

Results as detailed in the table above were qualified as tentatively identified (N) and estimated (J) based on high RPD between the two analytical column measurements.

8. Compound Quantitation:

Compounds were correctly identified based on comparison of peak RTs with the reference standards.

9. Overall Assessment

Results for alpha-chlordane in SB-101A and SB-103A, and for alpha- and gamma-chlordane, and 4,4'-DDE in SB-102B, were qualified as tentatively identified (N) and estimated (J) based on high RPDs between the two analytical column measurements.

D. Polychlorinated Biphenyls (PCBs) as Aroclors

1. Calibration:

All PCB analyses for this data set were performed on GC7. IC and CCs were acceptable for all Aroclors, with the exception of peak 5 (21%D; limit 20%) for Aroclor 1254 on the CLP-1 column in the CC; the response was acceptable on the CLP-2 column. The laboratory used eight peaks to identify and quantitate Aroclor 1254 and the remaining seven peaks were acceptable on both columns, therefore, no action was warranted.

2. Surrogates:

Surrogate recoveries were acceptable (70-130%) with the following exceptions:

Sample	TCX1	TCX2	DCBP1	DCBP2
SB-101A	a	138	133	136
SB-101B	133	138	142	140
SB-102A	a	a	a	131
SB-102B	a	a	a	136
SB-104A	a	130	a	134

a = acceptable

Results for Aroclors 1254 and 1260 in SB-102A and SB-102B were qualified as estimated (J+) and may be biased high. No PCBs were detected in SB-101A, SB101B and SB-104A and the potential high bias has no adverse effect on the ND results. Surrogate recoveries in SB-103A were acceptable.

3. Blanks:

One MB was prepared and analyzed with the site samples. No target Aroclors were detected in the MB.

4. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

Results for one LCS associated with the sample analyses were reported in the data package. Percent recoveries for spiked Aroclors, 1016 and 1260, were acceptable (70-130%R).

5. Matrix Spike/Matrix Spike Duplicate

One Matrix Spike/Matrix Spike Duplicate pair was prepared and analyzed using a non-project sample; recoveries and RPDs are acceptable.

6. Laboratory Duplicate:

No laboratory duplicate was prepared and analyzed with the site samples.

***7.* Compound Identification**

PCBs were accurately identified based on RTs and pattern matching compared with the reference standards.

8. Compound Quantitation

Stage 2B validation does not include calculation checks to determine if the results were accurately quantified against the calibration.

9. Overall Assessment

Results for Aroclors 1254 and 1260 in SB-102A and SB-102B were qualified as estimated (J+) based on high surrogate recoveries, resulting in the potential for high bias.

E. Metals

1. Calibration:

Initial, continuing, and low-level continuing calibrations were performed as appropriate. Recoveries were acceptable for all analytes in all of the associated calibration standards. Linear ranges established on 4/6/2017, were included in the data package for all metals, except mercury.

2. Blanks:

No target elements were reported in any of the method or calibration blanks associated with the site samples.

3. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

Results for one LCS ("LCSSRM") associated with the sample analyses were reported in the data package. With one exception, recoveries for all metals were acceptable. Antimony recovered at 65.5%. Results for antimony in all samples estimated (J-) with potential for low bias.

4. Matrix Spike/Matrix Spike Duplicate:

Project sample 101A was used to prepare a MS/MSD pair. Recoveries and RPDs were acceptable for all metals with the following exceptions. Concentrations of aluminum, calcium, and iron were all four times the concentration of the same metal in the native sample. Accurate recoveries are not expected in this situation, and no results were qualified. Recoveries for Mg (35) and Mn (63) were low. Results for Mg and Mn in all of the site samples were qualified as estimated (J-) based on low recoveries in the MS.

A post-digestion spike (PDS) was also performed using 101A. Recoveries for all metals were acceptable.

5. Laboratory Duplicate:

A laboratory duplicate pair was prepared with sample SB-101A. The RPD for beryllium between the sample and duplicate was 23 RPD. Sodium was detected in the duplicate at an estimated concentration of 185.8 J, but was not detected in the paired sample. The result for beryllium in SB-101A was qualified as estimated, based on the high RPD between the duplicate pair.

The result for sodium was qualified as estimated (UJ) because this element was not detected in the sample but was reported at a concentration below the RL in the duplicate.

6. Serial Dilution

Serial dilution was performed using sample SB-101A. Only aluminum and iron were present in the sample at concentrations-50 times the detection limits. Results for both elements (5.0 and 1.4 %D, respectively) were acceptable.

7. Analyte Identification

No raw data were provided for the metals analyses, therefore, accurate identification of the analytes could not be assessed.

8. Compound Quantitation

No raw data provided, therefore, no assessment of the accuracy of the calculated results could be made

9. Overall Assessment

Results were qualified as detailed below:

- Results for antimony in all samples estimated (J-, UJ), based on low recovery in the LCS, with potential for low bias.
- Results for Mg and Mn in all of the site samples were qualified as estimated (J-, UJ) based on low recoveries in the MS.
- Results for beryllium in all of the project samples were qualified as estimated (J, UJ), based on the high RPD between the duplicate pair.
- The result for sodium in SB-101A was qualified as estimated (UJ) at the reporting limit, because this element was not detected in the sample but was reported at a concentration below the RL in the duplicate.

F. Cyanide

1. Calibration:

IC and CC standards were analyzed at appropriate frequencies. Recoveries for cyanide in all of the calibration standards were acceptable.

2. Blanks:

A method blank was prepared and analyzed with the field samples. Cyanide was not detected in the MB (ND at 0.063 U [RL 0.24 mg/kg]).

3. Laboratory Control Sample (LCS)/LCS Duplicate (LCSD):

One LCS, “LCSSRM”, was analyzed in association with the field samples LCSSRM is labeled by the laboratory as LCS-certified reference material. This was assumed to mean that this LCS is prepared using a SRM (standard reference material) such as those obtained from the National Institute of Standards and Testing (NIST). Although within the laboratory’s limits (23.5-110.2%R) recovery for this SRM (34.9% R) was low. The low recovery indicates the potential for low bias in sample results, therefore, results for cyanide in all of the site samples were qualified as estimated (J-).

4. Matrix Spike/Matrix Spike Duplicate

One MS/MSD pair was prepared and analyzed using a non-project sample used; recovery in MS 122 is good, recovery in MSD is high 128 (limits 75-125).

5. Laboratory Duplicate:

No unspiked laboratory duplicate pair was prepared and analyzed with the site samples.

6. Analyte Identification

No raw data were provided, therefore, no assessment of accurate identification of the analyte could be made.

7. Compound Quantitation

A Stage 2B validation does not include calculation checks for the accuracy of the results.

8. Overall Assessment

Results for cyanide in all site samples were qualified as estimated (J-) based on low recovery in the LCS, high recovery in the MS/MSD pair, and the validator's professional judgment.

Please feel free to contact me at (302) 233-5274 or dshepperd@ddmsinc.com if you have any questions regarding this data package review report or need further information.

Sincerely,

de maximis Data Management Solutions, Inc.

Denise "Dee" Shepperd
Sr. Environmental Chemist

DAS/hrs
2074-0002\JMSorge
Enclosures

ATTACHMENT A

ANNOTATED FORM 1s
Laboratory Job No. J149327

Client Sample ID: SB-101A
Date Collected: 01/29/18 09:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-1
Matrix: Solid
Percent Solids: 40.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0012	U	0.0050	0.0012	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,1,2,2-Tetrachloroethane	0.0011	U	0.0050	0.0011	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0015	U	0.0050	0.0015	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,1,2-Trichloroethane	0.00090	U	0.0050	0.00090	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,1-Dichloroethane	0.0010	U	0.0050	0.0010	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,1-Dichloroethene	0.0011	U	0.0050	0.0011	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2,3-Trichlorobenzene	0.00091	U	0.0050	0.00091	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2,4-Trichlorobenzene	0.00046	U	0.0050	0.00046	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2-Dibromo-3-Chloropropane	0.0023	U	0.0050	0.0023	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2-Dichlorobenzene	0.00072	U	0.0050	0.00072	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2-Dichloroethane	0.0015	U	0.0050	0.0015	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,2-Dichloropropane	0.0021	U	0.0050	0.0021	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,3-Dichlorobenzene	0.00080	U	0.0050	0.00080	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,4-Dichlorobenzene	0.00050	U	0.0050	0.00050	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
1,4-Dioxane	0.046	U	0.10	0.046	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
2-Butanone (MEK)	0.0056	U	0.025	0.0056	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
2-Hexanone	0.0039	U	0.025	0.0039	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
4-Methyl-2-pentanone (MIBK)	0.0033	U	0.025	0.0033	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Acetone	0.019	U	0.025	0.019	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Benzene	0.0013	U	0.0050	0.0013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Bromoform	0.0021	U	0.0050	0.0021	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Bromomethane	0.0024	U	0.0050	0.0024	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Carbon disulfide	0.0013	U	0.0050	0.0013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Carbon tetrachloride	0.00091	U	0.0050	0.00091	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chlorobenzene	0.00089	U	0.0050	0.00089	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chlorobromomethane	0.0014	U	0.0050	0.0014	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chlorodibromomethane	0.00098	U	0.0050	0.00098	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chloroethane	0.0026	U	0.0050	0.0026	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chloroform	0.0016	U	0.0050	0.0016	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Chloromethane	0.0022	U	0.0050	0.0022	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
cis-1,2-Dichloroethene	0.00076	U	0.0050	0.00076	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
cis-1,3-Dichloropropene	0.0014	U	0.0050	0.0014	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Cyclohexane	0.0011	U	0.0050	0.0011	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Dichlorobromomethane	0.0013	U	0.0050	0.0013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Dichlorodifluoromethane	0.0017	U	0.0050	0.0017	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Ethylbenzene	0.0010	U	0.0050	0.0010	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Ethylene Dibromide	0.00091	U	0.0050	0.00091	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Isopropylbenzene	0.00063	U	0.0050	0.00063	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Methyl acetate	0.022	U	0.025	0.022	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Methyl tert-butyl ether	0.00063	U	0.0050	0.00063	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Methylcyclohexane	0.00080	U	0.0050	0.00080	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Methylene Chloride	**0.041**		0.0050	0.00082	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
m-Xylene & p-Xylene	0.00088	U	0.0050	0.00088	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
o-Xylene	0.00048	U	0.0050	0.00048	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Styrene	0.00062	U	0.0050	0.00062	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Tetrachloroethene	0.00072	U	0.0050	0.00072	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Toluene	0.0031	U	0.0050	0.0031	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
trans-1,2-Dichloroethene	0.0012	U	0.0050	0.0012	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
trans-1,3-Dichloropropene	0.0013	U	0.0050	0.0013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1

Client Sample Results

Client: J.M. Sorge, Inc.
Project/Site: GSI New Rochelle

TestAmerica Job ID: 460-149327-1

Client Sample ID: SB-101A
Date Collected: 01/29/18 09:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-1
Matrix: Solid
Percent Solids: 40.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.00072	U	0.0050	0.00072	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Trichlorofluoromethane	0.0020	U	0.0050	0.0020	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1
Vinyl chloride	0.0027	U	0.0050	0.0027	mg/Kg	☼	01/30/18 20:41	01/31/18 17:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
.alpha.-Pinene	*0.037*	*J N*	*mg/Kg*	☼	*9.98*	*80-56-8*	*01/30/18 20:41*	*01/31/18 17:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*	*01/30/18 20:41*	*01/31/18 17:18*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*	*01/30/18 20:41*	*01/31/18 17:18*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*01/30/18 20:41*	*01/31/18 17:18*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*01/30/18 20:41*	*01/31/18 17:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.017	U	0.82	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
1,2,4,5-Tetrachlorobenzene	0.036	U	0.82	0.036	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,2'-oxybis[1-chloropropane]	0.017	U UJ	0.82	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,3,4,6-Tetrachlorophenol	0.033	U UJ	0.82	0.033	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4,5-Trichlorophenol	0.032	U	0.82	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4,6-Trichlorophenol	0.033	U	0.33	0.033	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4-Dichlorophenol	0.026	U	0.33	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4-Dimethylphenol	0.032	U	0.82	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4-Dinitrophenol	0.089	U UJ	0.66	0.089	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,4-Dinitrotoluene	0.032	U	0.17	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2,6-Dinitrotoluene	0.034	U	0.17	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Chloronaphthalene	0.030	U	0.82	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Chlorophenol	0.034	U UJ	0.82	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Methylnaphthalene	0.020	U	0.82	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Methylphenol	0.042	U UJ	0.82	0.042	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Nitroaniline	0.019	U	0.82	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
2-Nitrophenol	0.048	U UJ	0.82	0.048	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
3,3'-Dichlorobenzidine	0.018	U * UJ	0.33	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
3-Nitroaniline	0.022	U UJ	0.82	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4,6-Dinitro-2-methylphenol	0.053	U UJ	0.66	0.053	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Bromophenyl phenyl ether	0.026	U	0.82	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Chloro-3-methylphenol	0.030	U UJ	0.82	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Chloroaniline	0.058	U UJ	0.82	0.058	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Chlorophenyl phenyl ether	0.023	U	0.82	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Methylphenol	0.024	U UJ	0.82	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Nitroaniline	0.12	U	0.82	0.12	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
4-Nitrophenol	0.065	U UJ	1.7	0.065	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Acenaphthene	0.031	U	0.82	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Acenaphthylene	**0.036**	J	0.82	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Acetophenone	0.049	U UJ	0.82	0.049	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Anthracene	**0.046**	J	0.82	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Atrazine	0.042	U	0.33	0.042	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Benzaldehyde	**0.13**	J	0.82	0.090	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Benzo[a]anthracene	**0.28**		0.082	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Benzo[a]pyrene	**0.33**		0.082	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1

D Sheppard 6/21/18

Client Sample ID: SB-101A
Date Collected: 01/29/18 09:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-1
Matrix: Solid
Percent Solids: 40.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**0.49**	J	0.082	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Benzo[g,h,i]perylene	**0.23**	J	0.82	0.054	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Benzo[k]fluoranthene	**0.17**		0.082	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Bis(2-chloroethoxy)methane	0.047	UJ	0.82	0.047	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Bis(2-chloroethyl)ether	0.032	UJ	0.082	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Bis(2-ethylhexyl) phthalate	**0.066**	J	0.82	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Butyl benzyl phthalate	0.027	U	0.82	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Caprolactam	0.032	UJ	0.82	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Carbazole	0.020	U	0.82	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Chrysene	**0.33**	J	0.82	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Dibenz(a,h)anthracene	**0.098**		0.082	0.061	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Dibenzofuran	0.025	U	0.82	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Diethyl phthalate	0.027	U	0.82	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Dimethyl phthalate	0.026	U	0.82	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Di-n-butyl phthalate	**0.025**	J	0.82	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Di-n-octyl phthalate	0.023	UJ	0.82	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Fluoranthene	**0.47**	J	0.82	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Fluorene	0.020	U	0.82	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Hexachlorobenzene	0.038	U	0.082	0.038	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Hexachlorobutadiene	0.021	U	0.17	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Hexachlorocyclopentadiene	0.026	UJ	0.82	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Hexachloroethane	0.028	UJ	0.082	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Indeno[1,2,3-cd]pyrene	**0.29**		0.082	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Isophorone	0.026	UJ	0.33	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Naphthalene	0.020	UJ	0.82	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Nitrobenzene	0.019	UJ	0.082	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
N-Nitrosodi-n-propylamine	0.035	UJ	0.082	0.035	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
N-Nitrosodiphenylamine	0.026	UJ	0.82	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Pentachlorophenol	0.21	UJ	0.66	0.21	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Phenanthrene	**0.13**	J	0.82	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Phenol	0.028	UJ	0.82	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1
Pyrene	**0.44**	J	0.82	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 04:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.76*	*J*	*mg/Kg*	☼	*4.23*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Vanillin	*1.7*	*J N*	*mg/Kg*	☼	*6.84*	*121-33-5*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
Phenol, 4-(3-hydroxy-1-propenyl)-	*0.86*	*J N*	*mg/Kg*	☼	*8.00*	*3690-05-9*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
4-((1E)-3-Hydroxy-1-propenyl) -2-methoxyphenol	*5.6*	*J N*	*mg/Kg*	☼	*8.51*	*1000297-95-5*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*1.1*	*J*	*mg/Kg*	☼	*8.88*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*1.1*	*J*	*mg/Kg*	☼	*9.56*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*1.4*	*J*	*mg/Kg*	☼	*10.90*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Tetradecanal	*0.81*	*J N*	*mg/Kg*	☼	*11.19*	*124-25-4*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*1.1*	*J*	*mg/Kg*	☼	*14.29*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
.beta.-Sitosterol	*3.3*	*J N*	*mg/Kg*	☼	*15.76*	*83-46-5*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*1.4*	*J*	*mg/Kg*	☼	*16.11*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Lup-20(29)-en-3-one	*1.1*	*J N*	*mg/Kg*	☼	*16.23*	*1617-70-5*	*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*0.71*	*J*	*mg/Kg*	☼	*16.42*		*02/01/18 12:51*	*02/02/18 04:15*	*1*
Unknown	*2.8*	*J*	*mg/Kg*	☼	*16.72*		*02/01/18 12:51*	*02/02/18 04:15*	*1*

D Shepard 6/21/18

Client Sample Results

Client: J.M. Sorge, Inc.
Project/Site: GSI New Rochelle

TestAmerica Job ID: 460-149327-1

Client Sample ID: SB-101A

Lab Sample ID: 460-149327-1

Date Collected: 01/29/18 09:20
Date Received: 01/30/18 15:20

Matrix: Solid
Percent Solids: 40.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	61		30 - 130	02/01/18 12:51	02/02/18 04:15	1
2-Fluorobiphenyl	72		30 - 130	02/01/18 12:51	02/02/18 04:15	1
2-Fluorophenol (Surr)	66		30 - 130	02/01/18 12:51	02/02/18 04:15	1
Nitrobenzene-d5 (Surr)	63		30 - 130	02/01/18 12:51	02/02/18 04:15	1
Phenol-d5 (Surr)	61		30 - 130	02/01/18 12:51	02/02/18 04:15	1
Terphenyl-d14 (Surr)	74		30 - 130	02/01/18 12:51	02/02/18 04:15	1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0028	U	0.017	0.0028	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
4,4'-DDE	0.0020	U	0.017	0.0020	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
4,4'-DDT	0.0030	U	0.017	0.0030	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Aldrin	0.0025	U	0.017	0.0025	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
alpha-BHC	0.0017	U	0.0049	0.0017	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
alpha-Chlordane	14	~~J p~~ N J	17	2.6	ug/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
beta-BHC	0.0019	U	0.0049	0.0019	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
delta-BHC	0.0010	U	0.0049	0.0010	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Dieldrin	0.0022	U	0.0049	0.0022	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endosulfan I	0.0025	U	0.017	0.0025	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endosulfan II	0.0043	U	0.017	0.0043	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endosulfan sulfate	0.0021	U	0.017	0.0021	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endrin	0.0024	U	0.017	0.0024	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endrin aldehyde	0.0039	U	0.017	0.0039	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Endrin ketone	0.0032	U	0.017	0.0032	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
gamma-BHC (Lindane)	0.0015	U	0.0049	0.0015	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
gamma-Chlordane	13	J	17	2.9	ug/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Heptachlor	0.0020	U	0.017	0.0020	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Heptachlor epoxide	0.0025	U	0.017	0.0025	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Methoxychlor	0.0038	U	0.017	0.0038	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1
Toxaphene	0.060	U	0.17	0.060	mg/Kg	☼	02/02/18 00:38	02/04/18 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	121		30 - 150	02/02/18 00:38	02/04/18 13:32	1
DCB Decachlorobiphenyl	126		30 - 150	02/02/18 00:38	02/04/18 13:32	1
Tetrachloro-m-xylene	120		30 - 150	02/02/18 00:38	02/04/18 13:32	1
Tetrachloro-m-xylene	116		30 - 150	02/02/18 00:38	02/04/18 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.022	U	0.17	0.022	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1221	0.022	U	0.17	0.022	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1232	0.022	U	0.17	0.022	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1242	0.022	U	0.17	0.022	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1248	0.022	U	0.17	0.022	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1254	0.023	U	0.17	0.023	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1260	0.023	U	0.17	0.023	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor 1268	0.023	U	0.17	0.023	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Aroclor-1262	0.023	U	0.17	0.023	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1
Polychlorinated biphenyls, Total	0.023	U	0.17	0.023	mg/Kg	☼	02/02/18 01:00	02/04/18 12:32	1

D Shepard 4/2/18

Client Sample Results

Client: J.M. Sorge, Inc.
Project/Site: GSI New Rochelle

TestAmerica Job ID: 460-149327-1

Client Sample ID: SB-101A

Lab Sample ID: 460-149327-1

Date Collected: 01/29/18 09:20
Date Received: 01/30/18 15:20

Matrix: Solid
Percent Solids: 40.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	132		30 - 150	02/02/18 01:00	02/04/18 12:32	1
Tetrachloro-m-xylene	128		30 - 150	02/02/18 01:00	02/04/18 12:32	1
DCB Decachlorobiphenyl	136		30 - 150	02/02/18 01:00	02/04/18 12:32	1
DCB Decachlorobiphenyl	133		30 - 150	02/02/18 01:00	02/04/18 12:32	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6160		97.0	19.9	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Silver	0.74	U	4.8	0.74	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Antimony	1.2	~~U~~ UJ	9.7	1.2	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Arsenic	2.7	J	7.3	1.8	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Barium	141		97.0	7.9	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Beryllium	0.37	~~J~~ J	0.97	0.11	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Cadmium	0.60	J	1.9	0.29	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Calcium	39700		2420	247	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Chromium	17.0		4.8	1.3	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Cobalt	5.1	J	24.2	2.8	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Copper	38.9		12.1	2.7	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Iron	11300		72.7	13.1	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Lead	78.2		4.8	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Magnesium	10400	~~F1~~ J-	2420	187	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Manganese	345	~~F1~~ J-	7.3	0.75	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Nickel	15.4	J	19.4	1.8	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Potassium	1370	J	2420	129	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Selenium	2.9	U	9.7	2.9	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Sodium	187	~~U~~ UJ	2420	187	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Thallium	2.9	U	9.7	2.9	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Vanadium	26.4		24.2	2.9	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4
Zinc	161		14.5	1.3	mg/Kg	☼	02/01/18 03:44	02/05/18 12:58	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.076		0.041	0.027	mg/Kg	☼	02/01/18 04:34	02/01/18 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.77	J	0.57	0.15	mg/Kg	☼	02/05/18 12:24	02/05/18 13:33	1

Client Sample ID: SB-101B

Lab Sample ID: 460-149327-2

Date Collected: 01/29/18 09:30
Date Received: 01/30/18 15:20

Matrix: Solid
Percent Solids: 76.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00024	U	0.0010	0.00024	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,1,2,2-Tetrachloroethane	0.00022	U	0.0010	0.00022	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00031	U	0.0010	0.00031	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,1,2-Trichloroethane	0.00019	U	0.0010	0.00019	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,1-Dichloroethane	0.00022	U	0.0010	0.00022	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,1-Dichloroethene	0.00023	U	0.0010	0.00023	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,2,3-Trichlorobenzene	0.00019	U	0.0010	0.00019	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1

D. Sheppard 6/21/18

Client Sample ID: SB-101B

Date Collected: 01/29/18 09:30
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-2

Matrix: Solid
Percent Solids: 76.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.000096	U	0.0010	0.000096	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,2-Dibromo-3-Chloropropane	0.00048	U	0.0010	0.00048	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,2-Dichlorobenzene	0.00015	U	0.0010	0.00015	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,2-Dichloroethane	0.00031	U	0.0010	0.00031	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,2-Dichloropropane	0.00044	U	0.0010	0.00044	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,3-Dichlorobenzene	0.00017	U	0.0010	0.00017	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,4-Dichlorobenzene	0.00010	U	0.0010	0.00010	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
1,4-Dioxane	0.0096	U	0.021	0.0096	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
2-Butanone (MEK)	**0.019**		0.0052	0.0012	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
2-Hexanone	0.00081	U	0.0052	0.00081	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
4-Methyl-2-pentanone (MIBK)	0.00069	U	0.0052	0.00069	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Acetone	**0.068**		0.0052	0.0040	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Benzene	0.00027	U	0.0010	0.00027	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Bromoform	0.00044	U	0.0010	0.00044	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Bromomethane	0.00050	U	0.0010	0.00050	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Carbon disulfide	**0.00072**	**J**	0.0010	0.00028	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Carbon tetrachloride	0.00019	U	0.0010	0.00019	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chlorobenzene	0.00018	U	0.0010	0.00018	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chlorobromomethane	0.00029	U	0.0010	0.00029	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chlorodibromomethane	0.00020	U	0.0010	0.00020	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chloroethane	0.00055	U	0.0010	0.00055	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chloroform	0.00033	U	0.0010	0.00033	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Chloromethane	0.00045	U	0.0010	0.00045	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
cis-1,2-Dichloroethene	0.00016	U	0.0010	0.00016	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
cis-1,3-Dichloropropene	0.00029	U	0.0010	0.00029	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Cyclohexane	0.00023	U	0.0010	0.00023	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Dichlorobromomethane	0.00027	U	0.0010	0.00027	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Dichlorodifluoromethane	0.00035	U	0.0010	0.00035	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Ethylbenzene	0.00021	U	0.0010	0.00021	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Ethylene Dibromide	0.00019	U	0.0010	0.00019	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Isopropylbenzene	0.00013	U	0.0010	0.00013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Methyl acetate	0.0045	U	0.0052	0.0045	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Methyl tert-butyl ether	0.00013	U	0.0010	0.00013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Methylcyclohexane	0.00017	U	0.0010	0.00017	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Methylene Chloride	**0.0067**		0.0010	0.00017	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
m-Xylene & p-Xylene	**0.00035**	**J**	0.0010	0.00018	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
o-Xylene	**0.00015**	**J**	0.0010	0.000099	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Styrene	0.00013	U	0.0010	0.00013	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Tetrachloroethene	0.00015	U	0.0010	0.00015	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Toluene	0.00065	U	0.0010	0.00065	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
trans-1,2-Dichloroethene	0.00026	U	0.0010	0.00026	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
trans-1,3-Dichloropropene	0.00028	U	0.0010	0.00028	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Trichloroethene	0.00015	U	0.0010	0.00015	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Trichlorofluoromethane	0.00042	U	0.0010	0.00042	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1
Vinyl chloride	0.00057	U	0.0010	0.00057	mg/Kg	☼	01/30/18 20:41	01/31/18 17:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*01/30/18 20:41*	*01/31/18 17:43*	*1*

Client Sample Results

Client: J.M. Sorge, Inc.
Project/Site: GSI New Rochelle

TestAmerica Job ID: 460-149327-1

Client Sample ID: SB-101B
Date Collected: 01/29/18 09:30
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-2
Matrix: Solid
Percent Solids: 76.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130	01/30/18 20:41	01/31/18 17:43	1
4-Bromofluorobenzene	95		70 - 130	01/30/18 20:41	01/31/18 17:43	1
Dibromofluoromethane (Surr)	103		70 - 130	01/30/18 20:41	01/31/18 17:43	1
Toluene-d8 (Surr)	101		70 - 130	01/30/18 20:41	01/31/18 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.0089	U UJ	0.43	0.0089	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
1,2,4,5-Tetrachlorobenzene	0.019	U	0.43	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,2'-oxybis[1-chloropropane]	0.0090	U	0.43	0.0090	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,3,4,6-Tetrachlorophenol	0.017	U	0.43	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4,5-Trichlorophenol	0.017	U	0.43	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4,6-Trichlorophenol	0.017	U	0.17	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4-Dichlorophenol	0.014	U	0.17	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4-Dimethylphenol	0.017	U	0.43	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4-Dinitrophenol	0.047	U	0.35	0.047	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,4-Dinitrotoluene	0.017	U	0.088	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2,6-Dinitrotoluene	0.018	U	0.088	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Chloronaphthalene	0.016	U	0.43	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Chlorophenol	0.018	U	0.43	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Methylnaphthalene	0.011	U	0.43	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Methylphenol	0.022	U	0.43	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Nitroaniline	0.010	U	0.43	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
2-Nitrophenol	0.025	U	0.43	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
3,3'-Dichlorobenzidine	0.0094	U *	0.17	0.0094	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
3-Nitroaniline	0.012	U	0.43	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4,6-Dinitro-2-methylphenol	0.028	U	0.35	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Bromophenyl phenyl ether	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Chloro-3-methylphenol	0.016	U	0.43	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Chloroaniline	0.031	U	0.43	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Chlorophenyl phenyl ether	0.012	U	0.43	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Methylphenol	**0.013**	J J-	0.43	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Nitroaniline	0.065	U UJ	0.43	0.065	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
4-Nitrophenol	0.034	U	0.88	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Acenaphthene	0.016	U	0.43	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Acenaphthylene	0.011	U	0.43	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Acetophenone	0.026	U	0.43	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Anthracene	0.015	U	0.43	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Atrazine	0.022	U	0.17	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzaldehyde	0.048	U	0.43	0.048	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzo[a]anthracene	0.011	U	0.043	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzo[a]pyrene	0.012	U	0.043	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzo[b]fluoranthene	0.013	U	0.043	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzo[g,h,i]perylene	0.029	U	0.43	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Benzo[k]fluoranthene	0.017	U	0.043	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Bis(2-chloroethoxy)methane	0.025	U	0.43	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Bis(2-chloroethyl)ether	0.017	U	0.043	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Bis(2-ethylhexyl) phthalate	0.013	U *	0.43	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Butyl benzyl phthalate	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Caprolactam	0.017	U	0.43	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1

D Sheppard 6/21/18

Client Sample ID: SB-101B

Date Collected: 01/29/18 09:30
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-2

Matrix: Solid
Percent Solids: 76.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.010	U UJ	0.43	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Chrysene	0.015	U	0.43	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Dibenz(a,h)anthracene	0.032	U	0.043	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Dibenzofuran	0.013	U	0.43	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Diethyl phthalate	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Dimethyl phthalate	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Di-n-butyl phthalate	0.0089	U	0.43	0.0089	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Di-n-octyl phthalate	0.012	U	0.43	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Fluoranthene	0.0089	U	0.43	0.0089	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Fluorene	0.010	U	0.43	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Hexachlorobenzene	0.020	U	0.043	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Hexachlorobutadiene	0.011	U	0.088	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Hexachlorocyclopentadiene	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Hexachloroethane	0.015	U	0.043	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Indeno[1,2,3-cd]pyrene	0.017	U	0.043	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Isophorone	0.014	U	0.17	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Naphthalene	0.011	U	0.43	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Nitrobenzene	0.0099	U	0.043	0.0099	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
N-Nitrosodi-n-propylamine	0.018	U	0.043	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
N-Nitrosodiphenylamine	0.014	U	0.43	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Pentachlorophenol	0.11	U	0.35	0.11	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Phenanthrene	0.012	U	0.43	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Phenol	0.015	U	0.43	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1
Pyrene	0.015	U	0.43	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 04:38	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tricosane	*0.97*	*J N*	*mg/Kg*	☼	*10.66*	*638-67-5*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Heptadecane	*1.7*	*J N*	*mg/Kg*	☼	*11.45*	*629-78-7*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Unknown alkane	*0.57*	*J*	*mg/Kg*	☼	*11.87*		*02/01/18 12:51*	*02/02/18 04:38*	*1*
Octadecane	*2.9*	*J N*	*mg/Kg*	☼	*12.32*	*593-45-3*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Heneicosane	*1.8*	*J N*	*mg/Kg*	☼	*13.25*	*629-94-7*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Octacosanol	*0.93*	*J N*	*mg/Kg*	☼	*13.28*	*557-61-9*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
2-Heptacosanone	*0.79*	*J N*	*mg/Kg*	☼	*13.35*	*7796-19-2*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Unknown	*0.56*	*J*	*mg/Kg*	☼	*13.84*		*02/01/18 12:51*	*02/02/18 04:38*	*1*
1,19-Eicosadiene	*0.81*	*J N*	*mg/Kg*	☼	*13.96*	*14811-95-1*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Tetracosane	*1.4*	*J N*	*mg/Kg*	☼	*14.23*	*646-31-1*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
17-Pentatriacontene	*1.8*	*J N*	*mg/Kg*	☼	*14.29*	*6971-40-0*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
2-Nonacosanone	*1.4*	*J N*	*mg/Kg*	☼	*14.35*	*17600-99-6*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Hentriacontane	*0.67*	*J N*	*mg/Kg*	☼	*15.39*	*630-04-6*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Unknown	*0.54*	*J*	*mg/Kg*	☼	*15.77*		*02/01/18 12:51*	*02/02/18 04:38*	*1*
Unknown	*0.52*	*J*	*mg/Kg*	☼	*15.90*		*02/01/18 12:51*	*02/02/18 04:38*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*46*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
2-Fluorobiphenyl	*58*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
2-Fluorophenol (Surr)	*54*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Nitrobenzene-d5 (Surr)	*52*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Phenol-d5 (Surr)	*50*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*
Terphenyl-d14 (Surr)	*59*		*30 - 130*	*02/01/18 12:51*	*02/02/18 04:38*	*1*

D Shipped 6/21/18

Client Sample ID: SB-101B
Date Collected: 01/29/18 09:30
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-2
Matrix: Solid
Percent Solids: 76.4

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0015	U	0.0088	0.0015	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
4,4'-DDE	0.0010	U	0.0088	0.0010	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
4,4'-DDT	0.0016	U	0.0088	0.0016	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Aldrin	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
alpha-BHC	0.00089	U	0.0026	0.00089	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
alpha-Chlordane	1.4	U	8.8	1.4	ug/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
beta-BHC	0.00098	U	0.0026	0.00098	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
delta-BHC	0.00054	U	0.0026	0.00054	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Dieldrin	0.0011	U	0.0026	0.0011	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endosulfan I	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endosulfan II	0.0023	U	0.0088	0.0023	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endosulfan sulfate	0.0011	U	0.0088	0.0011	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endrin	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endrin aldehyde	0.0021	U	0.0088	0.0021	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Endrin ketone	0.0017	U	0.0088	0.0017	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
gamma-BHC (Lindane)	0.00081	U	0.0026	0.00081	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
gamma-Chlordane	1.5	U	8.8	1.5	ug/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Heptachlor	0.0010	U	0.0088	0.0010	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Heptachlor epoxide	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Methoxychlor	0.0020	U	0.0088	0.0020	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1
Toxaphene	0.032	U	0.088	0.032	mg/Kg	☼	02/02/18 00:38	02/05/18 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*111*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:04*	*1*
DCB Decachlorobiphenyl	*123*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:04*	*1*
Tetrachloro-m-xylene	*127*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:04*	*1*
Tetrachloro-m-xylene	*123*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1221	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1232	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1242	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1248	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1254	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1260	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor 1268	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Aroclor-1262	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1
Polychlorinated biphenyls, Total	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*138*		*30 - 150*	*02/02/18 01:00*	*02/04/18 12:56*	*1*
Tetrachloro-m-xylene	*133*		*30 - 150*	*02/02/18 01:00*	*02/04/18 12:56*	*1*
DCB Decachlorobiphenyl	*140*		*30 - 150*	*02/02/18 01:00*	*02/04/18 12:56*	*1*
DCB Decachlorobiphenyl	*142*		*30 - 150*	*02/02/18 01:00*	*02/04/18 12:56*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8800**		52.4	10.7	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4

Client Sample ID: SB-101B

Lab Sample ID: 460-149327-2
Date Collected: 01/29/18 09:30
Matrix: Solid
Date Received: 01/30/18 15:20
Percent Solids: 76.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.40	U	2.6	0.40	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Antimony	0.63	~~U~~ UJ	5.2	0.63	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Arsenic	**1.6**	J	3.9	0.97	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Barium	**75.4**		52.4	4.2	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Beryllium	**0.55**	J	0.52	0.060	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Cadmium	0.16	U	1.0	0.16	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Calcium	**1740**		1310	134	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Chromium	**24.2**		2.6	0.73	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Cobalt	**8.7**	J	13.1	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Copper	**15.9**		6.5	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Iron	**14800**		39.3	7.1	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Lead	**5.8**		2.6	0.79	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Magnesium	**4440**	J-	1310	101	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Manganese	**139**	J-	3.9	0.41	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Nickel	**30.7**		10.5	0.99	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Potassium	**1930**		1310	69.7	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Selenium	1.6	U	5.2	1.6	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Sodium	**171**	J	1310	101	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Thallium	1.5	U	5.2	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Vanadium	**26.1**		13.1	1.6	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4
Zinc	**62.1**		7.9	0.68	mg/Kg	☼	02/01/18 03:44	02/05/18 14:20	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**0.017**	J	0.021	0.013	mg/Kg	☼	02/01/18 04:34	02/01/18 09:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.083	~~U~~ ~~UJ~~ UJ	0.31	0.083	mg/Kg	☼	02/05/18 12:24	02/05/18 13:34	1

DAS 6/21/18

Client Sample ID: SB-102A

Lab Sample ID: 460-149327-3
Date Collected: 01/29/18 10:45
Matrix: Solid
Date Received: 01/30/18 15:20
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00027	U	0.0012	0.00027	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,1,2,2-Tetrachloroethane	0.00025	U	0.0012	0.00025	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00035	U	0.0012	0.00035	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,1,2-Trichloroethane	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,1-Dichloroethane	0.00024	U	0.0012	0.00024	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,1-Dichloroethene	0.00027	U	0.0012	0.00027	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2,3-Trichlorobenzene	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2,4-Trichlorobenzene	0.00011	U	0.0012	0.00011	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2-Dibromo-3-Chloropropane	0.00054	U	0.0012	0.00054	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2-Dichlorobenzene	0.00017	U	0.0012	0.00017	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2-Dichloroethane	0.00035	U	0.0012	0.00035	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,2-Dichloropropane	0.00050	U	0.0012	0.00050	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,3-Dichlorobenzene	0.00019	U	0.0012	0.00019	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
1,4-Dichlorobenzene	0.00012	U	0.0012	0.00012	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1

D Sheppard 6/21/18

Client Sample ID: SB-102A
Date Collected: 01/29/18 10:45
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-3
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.011	U	0.024	0.011	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
2-Butanone (MEK)	0.0013	U	0.0059	0.0013	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
2-Hexanone	0.00092	U	0.0059	0.00092	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
4-Methyl-2-pentanone (MIBK)	0.00078	U	0.0059	0.00078	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Acetone	**0.026**		0.0059	0.0045	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Benzene	0.00030	U	0.0012	0.00030	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Bromoform	0.00050	U	0.0012	0.00050	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Bromomethane	0.00056	U	0.0012	0.00056	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Carbon disulfide	0.00031	U	0.0012	0.00031	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Carbon tetrachloride	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chlorobenzene	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chlorobromomethane	0.00033	U	0.0012	0.00033	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chlorodibromomethane	0.00023	U	0.0012	0.00023	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chloroethane	0.00062	U	0.0012	0.00062	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chloroform	0.00038	U	0.0012	0.00038	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Chloromethane	0.00051	U	0.0012	0.00051	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
cis-1,2-Dichloroethene	0.00018	U	0.0012	0.00018	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
cis-1,3-Dichloropropene	0.00032	U	0.0012	0.00032	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Cyclohexane	0.00026	U	0.0012	0.00026	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Dichlorobromomethane	0.00030	U	0.0012	0.00030	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Dichlorodifluoromethane	0.00040	U	0.0012	0.00040	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Ethylbenzene	0.00023	U	0.0012	0.00023	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Ethylene Dibromide	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Isopropylbenzene	0.00015	U	0.0012	0.00015	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Methyl acetate	**0.028**		0.0059	0.0051	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Methyl tert-butyl ether	0.00015	U	0.0012	0.00015	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Methylcyclohexane	0.00019	U	0.0012	0.00019	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Methylene Chloride	**0.0093**		0.0012	0.00019	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
m-Xylene & p-Xylene	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
o-Xylene	0.00011	U	0.0012	0.00011	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Styrene	0.00014	U	0.0012	0.00014	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Tetrachloroethene	**0.00044**	J	0.0012	0.00017	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Toluene	0.00074	U	0.0012	0.00074	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
trans-1,2-Dichloroethene	0.00029	U	0.0012	0.00029	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
trans-1,3-Dichloropropene	0.00031	U	0.0012	0.00031	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Trichloroethene	0.00017	U	0.0012	0.00017	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Trichlorofluoromethane	**0.00094**	J	0.0012	0.00048	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1
Vinyl chloride	0.00064	U	0.0012	0.00064	mg/Kg	☼	01/30/18 20:42	01/31/18 18:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1R-.alpha.-Pinene	*0.011*	*J N*	*mg/Kg*	☼	*9.98*	*7785-70-8*	*01/30/18 20:42*	*01/31/18 18:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*01/30/18 20:42*	*01/31/18 18:08*	*1*
4-Bromofluorobenzene	*99*		*70 - 130*	*01/30/18 20:42*	*01/31/18 18:08*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*01/30/18 20:42*	*01/31/18 18:08*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*01/30/18 20:42*	*01/31/18 18:08*	*1*

Client Sample ID: SB-102A
Date Collected: 01/29/18 10:45
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-3
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**0.022**	J J-	0.42	0.0086	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
1,2,4,5-Tetrachlorobenzene	0.018	U UJ	0.42	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,2'-oxybis[1-chloropropane]	0.0087	J	0.42	0.0087	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,3,4,6-Tetrachlorophenol	0.017	U	0.42	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4,5-Trichlorophenol	0.016	U	0.42	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4,6-Trichlorophenol	0.017	U	0.17	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4-Dichlorophenol	0.013	U	0.17	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4-Dimethylphenol	0.016	U	0.42	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4-Dinitrophenol	0.046	U	0.34	0.046	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,4-Dinitrotoluene	0.016	U	0.085	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2,6-Dinitrotoluene	0.017	U	0.085	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Chloronaphthalene	0.015	U	0.42	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Chlorophenol	0.017	U	0.42	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Methylnaphthalene	**0.065**	J J-	0.42	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Methylphenol	0.022	U UJ	0.42	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Nitroaniline	0.0099	U	0.42	0.0099	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
2-Nitrophenol	0.025	U	0.42	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
3,3'-Dichlorobenzidine	0.0091	U *	0.17	0.0091	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
3-Nitroaniline	0.011	U	0.42	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4,6-Dinitro-2-methylphenol	0.027	U	0.34	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Bromophenyl phenyl ether	0.013	U	0.42	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Chloro-3-methylphenol	0.016	U	0.42	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Chloroaniline	0.030	U	0.42	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Chlorophenyl phenyl ether	0.012	U	0.42	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Methylphenol	**0.017**	J J-	0.42	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Nitroaniline	0.063	U UJ	0.42	0.063	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
4-Nitrophenol	0.033	U UJ	0.85	0.033	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Acenaphthene	**0.077**	J J-	0.42	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Acenaphthylene	**0.13**	J J-	0.42	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Acetophenone	0.025	U UJ	0.42	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Anthracene	**0.36**	J J-	0.42	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Atrazine	0.022	U UJ	0.17	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzaldehyde	**0.054**	J J-	0.42	0.046	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzo[a]anthracene	**1.3**		0.042	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzo[a]pyrene	**1.4**		0.042	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzo[b]fluoranthene	**2.1**		0.042	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzo[g,h,i]perylene	**0.65**		0.42	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Benzo[k]fluoranthene	**0.78**		0.042	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Bis(2-chloroethoxy)methane	0.024	U UJ	0.42	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Bis(2-chloroethyl)ether	0.016	U UJ	0.042	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Bis(2-ethylhexyl) phthalate	**0.22**	J J-	0.42	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Butyl benzyl phthalate	**0.052**	J J-	0.42	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Caprolactam	0.016	U UJ	0.42	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Carbazole	**0.15**	J J-	0.42	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Chrysene	**1.6**		0.42	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Dibenz(a,h)anthracene	**0.22**		0.042	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Dibenzofuran	**0.082**	J J-	0.42	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Diethyl phthalate	0.014	U UJ	0.42	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Dimethyl phthalate	0.013	U UJ	0.42	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1

D Sheppard 6/21/18

Client Sample ID: SB-102A
Date Collected: 01/29/18 10:45
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-3
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	0.035	J	0.42	0.0086	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Di-n-octyl phthalate	0.012	U	0.42	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Fluoranthene	2.4		0.42	0.0086	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Fluorene	0.11	J	0.42	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Hexachlorobenzene	0.019	U	0.042	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Hexachlorobutadiene	0.011	U	0.085	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Hexachlorocyclopentadiene	0.013	U	0.42	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Hexachloroethane	0.014	U	0.042	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Indeno[1,2,3-cd]pyrene	0.88		0.042	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Isophorone	0.013	U	0.17	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Naphthalene	0.12	J	0.42	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Nitrobenzene	0.0096	U	0.042	0.0096	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
N-Nitrosodi-n-propylamine	0.018	U	0.042	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
N-Nitrosodiphenylamine	0.013	U	0.42	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Pentachlorophenol	0.11	U	0.34	0.11	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Phenanthrene	1.3		0.42	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Phenol	0.014	U	0.42	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1
Pyrene	2.3		0.42	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Propanol, 1-chloro-, phosphate (3:1)	*0.67*	*J N*	*mg/Kg*	☼	*8.71*	*13674-84-5*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.44*	*J*	*mg/Kg*	☼	*9.43*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.49*	*J*	*mg/Kg*	☼	*9.91*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Nonacosane	*0.52*	*J N*	*mg/Kg*	☼	*12.32*	*630-03-5*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Benzo[e]pyrene	*0.36*	*J N*	*mg/Kg*	☼	*13.16*	*192-97-2*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Docosane, 11-butyl-	*0.45*	*J N*	*mg/Kg*	☼	*13.25*	*13475-76-8*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.42*	*J*	*mg/Kg*	☼	*13.30*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Benzo[e]pyrene	*1.1*	*J N*	*mg/Kg*	☼	*13.40*	*192-97-2*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Tetradecanal	*0.65*	*J N*	*mg/Kg*	☼	*13.97*	*124-25-4*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.50*	*J*	*mg/Kg*	☼	*14.34*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.37*	*J*	*mg/Kg*	☼	*14.52*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.39*	*J*	*mg/Kg*	☼	*14.79*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.40*	*J*	*mg/Kg*	☼	*14.95*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.49*	*J*	*mg/Kg*	☼	*15.39*		*02/01/18 12:51*	*02/02/18 05:01*	*1*
Unknown	*0.51*	*J*	*mg/Kg*	☼	*15.78*		*02/01/18 12:51*	*02/02/18 05:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*51*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
2-Fluorobiphenyl	*64*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
2-Fluorophenol (Surr)	*60*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Nitrobenzene-d5 (Surr)	*57*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Phenol-d5 (Surr)	*55*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*
Terphenyl-d14 (Surr)	*61*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:01*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0014	U	0.0085	0.0014	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
4,4'-DDE	0.0010	U	0.0085	0.0010	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
4,4'-DDT	0.0016	U	0.0085	0.0016	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1

D Shymanski 6/21/18

Client Sample ID: SB-102A

Date Collected: 01/29/18 10:45
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-3

Matrix: Solid
Percent Solids: 79.0

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0013	U	0.0085	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
alpha-BHC	0.00086	U	0.0025	0.00086	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
alpha-Chlordane	1.3	U	8.5	1.3	ug/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
beta-BHC	0.00095	U	0.0025	0.00095	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
delta-BHC	0.00052	U	0.0025	0.00052	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Dieldrin	0.0011	U	0.0025	0.0011	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endosulfan I	0.0013	U	0.0085	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endosulfan II	0.0022	U	0.0085	0.0022	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endosulfan sulfate	0.0011	U	0.0085	0.0011	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endrin	0.0012	U	0.0085	0.0012	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endrin aldehyde	0.0020	U	0.0085	0.0020	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Endrin ketone	0.0016	U	0.0085	0.0016	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
gamma-BHC (Lindane)	0.00078	U	0.0025	0.00078	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
gamma-Chlordane	1.5	U	8.5	1.5	ug/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Heptachlor	0.0010	U	0.0085	0.0010	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Heptachlor epoxide	0.0013	U	0.0085	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Methoxychlor	0.0019	U	0.0085	0.0019	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1
Toxaphene	0.031	U	0.085	0.031	mg/Kg	☼	02/02/18 00:38	02/04/18 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*125*		*30 - 150*	*02/02/18 00:38*	*02/04/18 13:58*	*1*
DCB Decachlorobiphenyl	*135*		*30 - 150*	*02/02/18 00:38*	*02/04/18 13:58*	*1*
Tetrachloro-m-xylene	*112*		*30 - 150*	*02/02/18 00:38*	*02/04/18 13:58*	*1*
Tetrachloro-m-xylene	*116*		*30 - 150*	*02/02/18 00:38*	*02/04/18 13:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.011	U	0.085	0.011	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1221	0.011	U	0.085	0.011	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1232	0.011	U	0.085	0.011	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1242	0.011	U	0.085	0.011	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1248	0.011	U	0.085	0.011	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1254	**0.16**	J+	0.085	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1260	**0.074**	J- J+	0.085	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor 1268	0.012	U	0.085	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Aroclor-1262	0.012	U	0.085	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1
Polychlorinated biphenyls, Total	**0.23**		0.085	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*113*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:19*	*1*
Tetrachloro-m-xylene	*103*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:19*	*1*
DCB Decachlorobiphenyl	*131*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:19*	*1*
DCB Decachlorobiphenyl	*117*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9060**		46.5	9.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Silver	**1.5**	J	2.3	0.35	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Antimony	**2.4**	J+ J-	4.6	0.56	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Arsenic	**9.0**		3.5	0.86	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4

D Skippend 6/21/18

Client Sample ID: SB-102A

Date Collected: 01/29/18 10:45
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-3
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	440		46.5	3.8	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Beryllium	0.52	J	0.46	0.053	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Cadmium	2.3		0.93	0.14	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Calcium	15900		1160	118	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Chromium	35.5		2.3	0.64	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Cobalt	9.2	J	11.6	1.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Copper	300		5.8	1.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Iron	45900		34.8	6.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Lead	763		2.3	0.70	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Magnesium	6710	J	1160	89.6	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Manganese	405	J	3.5	0.36	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Nickel	49.4		9.3	0.88	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Potassium	2110		1160	61.8	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Selenium	1.4	U	4.6	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Sodium	245	J	1160	89.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Thallium	1.4	U	4.6	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Vanadium	47.2		11.6	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4
Zinc	989		7.0	0.60	mg/Kg	☼	02/01/18 03:44	02/05/18 13:29	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.54		0.021	0.014	mg/Kg	☼	02/01/18 04:34	02/01/18 09:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.080	~~U~~ ~~UJ~~ UJ	0.30	0.080	mg/Kg	☼	02/05/18 12:24	02/05/18 13:35	1

DAS 6/21/18

Client Sample ID: SB-102B

Date Collected: 01/29/18 10:55
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-4
Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00027	U	0.0012	0.00027	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,1,2,2-Tetrachloroethane	0.00025	U	0.0012	0.00025	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00035	U	0.0012	0.00035	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,1,2-Trichloroethane	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,1-Dichloroethane	0.00024	U	0.0012	0.00024	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,1-Dichloroethene	0.00026	U	0.0012	0.00026	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2,3-Trichlorobenzene	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2,4-Trichlorobenzene	0.00011	U	0.0012	0.00011	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2-Dibromo-3-Chloropropane	0.00054	U	0.0012	0.00054	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2-Dichlorobenzene	0.00017	U	0.0012	0.00017	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2-Dichloroethane	0.00035	U	0.0012	0.00035	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,2-Dichloropropane	0.00049	U	0.0012	0.00049	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,3-Dichlorobenzene	0.00019	U	0.0012	0.00019	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,4-Dichlorobenzene	0.00012	U	0.0012	0.00012	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
1,4-Dioxane	0.011	U	0.023	0.011	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
2-Butanone (MEK)	0.0074		0.0058	0.0013	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
2-Hexanone	0.00091	U	0.0058	0.00091	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1

D Shipped 6/21/18

Client Sample ID: SB-102B

Date Collected: 01/29/18 10:55
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-4

Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	0.00078	U	0.0058	0.00078	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Acetone	**0.069**		0.0058	0.0044	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Benzene	0.00030	U	0.0012	0.00030	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Bromoform	0.00050	U	0.0012	0.00050	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Bromomethane	0.00055	U	0.0012	0.00055	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Carbon disulfide	0.00031	U	0.0012	0.00031	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Carbon tetrachloride	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chlorobenzene	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chlorobromomethane	0.00033	U	0.0012	0.00033	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chlorodibromomethane	0.00023	U	0.0012	0.00023	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chloroethane	0.00061	U	0.0012	0.00061	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chloroform	0.00037	U	0.0012	0.00037	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Chloromethane	0.00051	U	0.0012	0.00051	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
cis-1,2-Dichloroethene	0.00018	U	0.0012	0.00018	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
cis-1,3-Dichloropropene	0.00032	U	0.0012	0.00032	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Cyclohexane	0.00026	U	0.0012	0.00026	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Dichlorobromomethane	0.00030	U	0.0012	0.00030	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Dichlorodifluoromethane	0.00039	U	0.0012	0.00039	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Ethylbenzene	0.00023	U	0.0012	0.00023	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Ethylene Dibromide	0.00021	U	0.0012	0.00021	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Isopropylbenzene	0.00015	U	0.0012	0.00015	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Methyl acetate	0.0050	U	0.0058	0.0050	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Methyl tert-butyl ether	0.00015	U	0.0012	0.00015	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Methylcyclohexane	0.00019	U	0.0012	0.00019	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Methylene Chloride	**0.0048**		0.0012	0.00019	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
m-Xylene & p-Xylene	**0.00022**	**J**	0.0012	0.00020	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
o-Xylene	0.00011	U	0.0012	0.00011	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Styrene	0.00014	U	0.0012	0.00014	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Tetrachloroethene	**0.0053**		0.0012	0.00017	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Toluene	0.00073	U	0.0012	0.00073	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
trans-1,2-Dichloroethene	0.00029	U	0.0012	0.00029	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
trans-1,3-Dichloropropene	0.00031	U	0.0012	0.00031	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Trichloroethene	0.00017	U	0.0012	0.00017	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Trichlorofluoromethane	0.00047	U	0.0012	0.00047	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1
Vinyl chloride	0.00064	U	0.0012	0.00064	mg/Kg	☼	01/30/18 20:43	01/31/18 18:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1R-.alpha.-Pinene	*0.20*	*J N*	*mg/Kg*	☼	*9.98*	*7785-70-8*	*01/30/18 20:43*	*01/31/18 18:33*	*1*
.beta.-Pinene	*0.053*	*J N*	*mg/Kg*	☼	*10.50*	*127-91-3*	*01/30/18 20:43*	*01/31/18 18:33*	*1*
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (S)-	*0.0094*	*J N*	*mg/Kg*	☼	*10.92*	*5989-54-8*	*01/30/18 20:43*	*01/31/18 18:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*	*01/30/18 20:43*	*01/31/18 18:33*	*1*
4-Bromofluorobenzene	*110*		*70 - 130*	*01/30/18 20:43*	*01/31/18 18:33*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*01/30/18 20:43*	*01/31/18 18:33*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*	*01/30/18 20:43*	*01/31/18 18:33*	*1*

Client Sample Results

Client: J.M. Sorge, Inc.
Project/Site: GSI New Rochelle

TestAmerica Job ID: 460-149327-1

Client Sample ID: SB-102B
Date Collected: 01/29/18 10:55
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-4
Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**0.069**	J	0.38	0.0077	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
1,2,4,5-Tetrachlorobenzene	0.017	U	0.38	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,2'-oxybis[1-chloropropane]	0.0078	U UJ	0.38	0.0078	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,3,4,6-Tetrachlorophenol	0.015	U	0.38	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4,5-Trichlorophenol	0.015	U	0.38	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4,6-Trichlorophenol	0.015	U	0.15	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4-Dichlorophenol	0.012	U	0.15	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4-Dimethylphenol	0.015	U	0.38	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4-Dinitrophenol	0.041	U UJ	0.30	0.041	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,4-Dinitrotoluene	0.015	U	0.076	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2,6-Dinitrotoluene	0.016	U	0.076	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Chloronaphthalene	0.014	U	0.38	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Chlorophenol	0.016	U UJ	0.38	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Methylnaphthalene	**0.15**	J	0.38	0.0091	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Methylphenol	0.019	U UJ	0.38	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Nitroaniline	0.0089	U	0.38	0.0089	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
2-Nitrophenol	0.022	U UJ	0.38	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
3,3'-Dichlorobenzidine	0.0082	U UJ	0.15	0.0082	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
3-Nitroaniline	0.010	U UJ	0.38	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4,6-Dinitro-2-methylphenol	0.025	U UJ	0.30	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Bromophenyl phenyl ether	0.012	U	0.38	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Chloro-3-methylphenol	0.014	U UJ	0.38	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Chloroaniline	0.027	U UJ	0.38	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Chlorophenyl phenyl ether	0.011	U	0.38	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Methylphenol	**0.012**	J J-	0.38	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Nitroaniline	0.056	U	0.38	0.056	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
4-Nitrophenol	0.030	U UJ	0.76	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Acenaphthene	**0.19**	J	0.38	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Acenaphthylene	**0.21**	J	0.38	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Acetophenone	**0.034**	J J-	0.38	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Anthracene	**0.62**		0.38	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Atrazine	0.019	U	0.15	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzaldehyde	**0.052**	J	0.38	0.041	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzo[a]anthracene	**2.1**		0.038	0.0097	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzo[a]pyrene	**2.0**		0.038	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzo[b]fluoranthene	**2.7**	J-	0.038	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzo[g,h,i]perylene	**0.82**		0.38	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Benzo[k]fluoranthene	**1.1**		0.038	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Bis(2-chloroethoxy)methane	0.022	U UJ	0.38	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Bis(2-chloroethyl)ether	0.015	U UJ	0.038	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Bis(2-ethylhexyl) phthalate	**3.4**		0.38	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Butyl benzyl phthalate	**0.17**	J	0.38	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Caprolactam	0.015	U UJ	0.38	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Carbazole	**0.17**	J	0.38	0.0091	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Chrysene	**2.2**		0.38	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Dibenz(a,h)anthracene	**0.27**		0.038	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Dibenzofuran	**0.21**	J	0.38	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Diethyl phthalate	**0.035**	J	0.38	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Dimethyl phthalate	0.012	U	0.38	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1

D Sheppard 2/21/18

Client Sample ID: SB-102B
Date Collected: 01/29/18 10:55
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-4
Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	**0.042**	J	0.38	0.0077	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Di-n-octyl phthalate	0.010	~~U~~ UJ	0.38	0.010	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Fluoranthene	**3.8**		0.38	0.0078	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Fluorene	**0.36**	J	0.38	0.0091	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Hexachlorobenzene	0.018	U	0.038	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Hexachlorobutadiene	0.0096	U	0.076	0.0096	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Hexachlorocyclopentadiene	0.012	~~U~~ UJ	0.38	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Hexachloroethane	0.013	~~U~~ UJ	0.038	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Indeno[1,2,3-cd]pyrene	**1.1**		0.038	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Isophorone	0.012	~~U~~ UJ	0.15	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Naphthalene	**0.22**	~~J~~ J -	0.38	0.0093	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Nitrobenzene	0.0087	~~U~~ UJ	0.038	0.0087	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
N-Nitrosodi-n-propylamine	0.016	~~U~~ UJ	0.038	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
N-Nitrosodiphenylamine	0.012	~~U~~ UJ	0.38	0.012	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Pentachlorophenol	0.097	~~U~~ UJ	0.30	0.097	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Phenanthrene	**2.8**		0.38	0.011	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Phenol	0.013	~~U~~ UJ	0.38	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1
Pyrene	**4.0**		0.38	0.013	mg/Kg	☼	02/01/18 12:51	02/02/18 05:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.53*	*J*	*mg/Kg*	☼	*2.59*		*02/01/18 12:51*	*02/02/18 05:25*	*1*
Unknown PAH	*0.56*	*J*	*mg/Kg*	☼	*9.33*		*02/01/18 12:51*	*02/02/18 05:25*	*1*
Phenanthrene, 1-methyl-	*0.64*	*J N*	*mg/Kg*	☼	*9.36*	*832-69-9*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
1H-Cyclopropa[l]phenanthrene,1a,9b -dihydro-	*0.97*	*J N*	*mg/Kg*	☼	*9.43*	*949-41-7*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Phenanthrene, 2,5-dimethyl-	*0.50*	*J N*	*mg/Kg*	☼	*9.87*	*3674-66-6*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Hexadecane	*0.50*	*J N*	*mg/Kg*	☼	*12.32*	*544-76-3*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Nonadecane	*0.85*	*J N*	*mg/Kg*	☼	*13.25*	*629-92-5*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Benzo[e]pyrene	*1.3*	*J N*	*mg/Kg*	☼	*13.41*	*192-97-2*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Unknown PAH2	*0.49*	*J*	*mg/Kg*	☼	*13.60*		*02/01/18 12:51*	*02/02/18 05:25*	*1*
Unknown	*0.74*	*J*	*mg/Kg*	☼	*13.97*		*02/01/18 12:51*	*02/02/18 05:25*	*1*
Heneicosane	*1.0*	*J N*	*mg/Kg*	☼	*14.24*	*629-94-7*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
28-Nor-17.alpha.(H)-hopane	*0.50*	*J N*	*mg/Kg*	☼	*14.34*	*53584-60-4*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Dotriacontane	*0.87*	*J N*	*mg/Kg*	☼	*14.79*	*544-85-4*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Eicosane	*0.68*	*J N*	*mg/Kg*	☼	*15.39*	*112-95-8*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Dibenzo[def,mno]chrysene	*0.48*	*J N*	*mg/Kg*	☼	*15.77*	*191-26-4*	*02/01/18 12:51*	*02/02/18 05:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*58*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
2-Fluorobiphenyl	*71*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
2-Fluorophenol (Surr)	*61*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Nitrobenzene-d5 (Surr)	*59*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Phenol-d5 (Surr)	*60*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*
Terphenyl-d14 (Surr)	*77*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:25*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0013	U	0.0076	0.0013	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
4,4'-DDE	**0.020**	N J	0.0076	0.00090	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
4,4'-DDT	0.0014	U	0.0076	0.0014	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1

D Sheppard 6/21/18

Client Sample ID: SB-102B

Lab Sample ID: 460-149327-4

Date Collected: 01/29/18 10:55
Date Received: 01/30/18 15:20

Matrix: Solid
Percent Solids: 87.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	0.0012	U	0.0076	0.0012	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
alpha-BHC	0.00077	U	0.0023	0.00077	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
alpha-Chlordane	**29**	**p- NJ**	7.6	1.2	ug/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
beta-BHC	0.00085	U	0.0023	0.00085	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
delta-BHC	0.00047	U	0.0023	0.00047	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Dieldrin	0.00099	U	0.0023	0.00099	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endosulfan I	0.0012	U	0.0076	0.0012	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endosulfan II	0.0020	U	0.0076	0.0020	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endosulfan sulfate	0.00096	U	0.0076	0.00096	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endrin	0.0011	U	0.0076	0.0011	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endrin aldehyde	0.0018	U	0.0076	0.0018	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Endrin ketone	0.0015	U	0.0076	0.0015	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
gamma-BHC (Lindane)	0.00071	U	0.0023	0.00071	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
gamma-Chlordane	**31**	**NJ**	7.6	1.3	ug/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Heptachlor	0.00090	U	0.0076	0.00090	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Heptachlor epoxide	0.0011	U	0.0076	0.0011	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Methoxychlor	0.0017	U	0.0076	0.0017	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1
Toxaphene	0.028	U	0.076	0.028	mg/Kg	☼	02/02/18 00:38	02/05/18 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*125*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:17*	*1*
DCB Decachlorobiphenyl	*117*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:17*	*1*
Tetrachloro-m-xylene	*105*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:17*	*1*
Tetrachloro-m-xylene	*122*		*30 - 150*	*02/02/18 00:38*	*02/05/18 10:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1221	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1232	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1242	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1248	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1254	**0.31**	**J+**	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1260	**0.13**	**J+**	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor 1268	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Aroclor-1262	0.010	U	0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1
Polychlorinated biphenyls, Total	**0.44**		0.076	0.010	mg/Kg	☼	02/02/18 01:00	02/04/18 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*122*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:43*	*1*
Tetrachloro-m-xylene	*103*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:43*	*1*
DCB Decachlorobiphenyl	*136*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:43*	*1*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*02/02/18 01:00*	*02/04/18 13:43*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**20300**		113	23.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Silver	**5.0**	**J**	5.6	0.86	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Antimony	**18.1**	**J-**	11.3	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Arsenic	**4.5**	**J**	8.5	2.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10

D Sheppard 6/21/18

Client Sample ID: SB-102B

Lab Sample ID: 460-149327-4
Date Collected: 01/29/18 10:55
Matrix: Solid
Date Received: 01/30/18 15:20
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	524		113	9.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Beryllium	0.28	J J	1.1	0.13	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Cadmium	6.0		2.3	0.34	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Calcium	24500		2820	288	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Chromium	143		5.6	1.6	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Cobalt	14.9	J	28.2	3.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Copper	955		14.1	3.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Iron	148000		84.6	15.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Lead	1680		5.6	1.7	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Magnesium	3850	J -	2820	217	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Manganese	969	J -	8.5	0.87	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Nickel	164		22.6	2.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Potassium	1110	J	2820	150	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Selenium	3.4	U	11.3	3.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Sodium	562	J	2820	217	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Thallium	3.3	U	11.3	3.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Vanadium	58.2		28.2	3.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10
Zinc	3270		16.9	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:33	10

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.66		0.018	0.012	mg/Kg	☼	02/01/18 04:34	02/01/18 09:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11	J J J	0.25	0.066	mg/Kg	☼	02/05/18 12:24	02/05/18 13:35	1

DAS 6/21/18

Client Sample ID: SB-103A

Lab Sample ID: 460-149327-5
Date Collected: 01/29/18 11:20
Matrix: Solid
Date Received: 01/30/18 15:20
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00035	U	0.0015	0.00035	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,1,2,2-Tetrachloroethane	0.00032	U	0.0015	0.00032	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00046	U	0.0015	0.00046	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,1,2-Trichloroethane	0.00027	U	0.0015	0.00027	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,1-Dichloroethane	0.00031	U	0.0015	0.00031	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,1-Dichloroethene	0.00034	U	0.0015	0.00034	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2,3-Trichlorobenzene	0.00027	U	0.0015	0.00027	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2,4-Trichlorobenzene	0.00014	U	0.0015	0.00014	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2-Dibromo-3-Chloropropane	0.00070	U	0.0015	0.00070	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2-Dichlorobenzene	0.00022	U	0.0015	0.00022	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2-Dichloroethane	0.00045	U	0.0015	0.00045	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,2-Dichloropropane	0.00064	U	0.0015	0.00064	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,3-Dichlorobenzene	0.00024	U	0.0015	0.00024	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,4-Dichlorobenzene	0.00015	U	0.0015	0.00015	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
1,4-Dioxane	0.014	U	0.030	0.014	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
2-Butanone (MEK)	0.0017	U	0.0076	0.0017	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
2-Hexanone	0.0012	U	0.0076	0.0012	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1

D Sheppard 6/21/18

Client Sample ID: SB-103A
Date Collected: 01/29/18 11:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-5
Matrix: Solid
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	0.0010	U	0.0076	0.0010	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Acetone	0.0057	U	0.0076	0.0057	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Benzene	0.00039	U	0.0015	0.00039	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Bromoform	0.00064	U	0.0015	0.00064	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Bromomethane	0.00072	U	0.0015	0.00072	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Carbon disulfide	0.00040	U	0.0015	0.00040	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Carbon tetrachloride	0.00027	U	0.0015	0.00027	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chlorobenzene	0.00027	U	0.0015	0.00027	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chlorobromomethane	0.00043	U	0.0015	0.00043	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chlorodibromomethane	0.00029	U	0.0015	0.00029	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chloroethane	0.00079	U	0.0015	0.00079	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chloroform	0.00048	U	0.0015	0.00048	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Chloromethane	0.00066	U	0.0015	0.00066	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
cis-1,2-Dichloroethene	0.00023	U	0.0015	0.00023	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
cis-1,3-Dichloropropene	0.00041	U	0.0015	0.00041	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Cyclohexane	0.00034	U	0.0015	0.00034	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Dichlorobromomethane	0.00039	U	0.0015	0.00039	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Dichlorodifluoromethane	0.00051	U	0.0015	0.00051	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Ethylbenzene	0.00030	U	0.0015	0.00030	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Ethylene Dibromide	0.00027	U	0.0015	0.00027	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Isopropylbenzene	0.00019	U	0.0015	0.00019	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Methyl acetate	0.0065	U	0.0076	0.0065	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Methyl tert-butyl ether	0.00019	U	0.0015	0.00019	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Methylcyclohexane	0.00024	U	0.0015	0.00024	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Methylene Chloride	**0.014**		0.0015	0.00025	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
m-Xylene & p-Xylene	0.00026	U	0.0015	0.00026	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
o-Xylene	0.00014	U	0.0015	0.00014	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Styrene	0.00019	U	0.0015	0.00019	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Tetrachloroethene	0.00022	U	0.0015	0.00022	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Toluene	0.00095	U	0.0015	0.00095	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
trans-1,2-Dichloroethene	0.00037	U	0.0015	0.00037	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
trans-1,3-Dichloropropene	0.00040	U	0.0015	0.00040	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Trichloroethene	0.00022	U	0.0015	0.00022	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Trichlorofluoromethane	0.00062	U	0.0015	0.00062	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1
Vinyl chloride	0.00083	U	0.0015	0.00083	mg/Kg	☼	01/30/18 20:44	01/31/18 18:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*01/30/18 20:44*	*01/31/18 18:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*	*01/30/18 20:44*	*01/31/18 18:58*	*1*
4-Bromofluorobenzene	*102*		*70 - 130*	*01/30/18 20:44*	*01/31/18 18:58*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*01/30/18 20:44*	*01/31/18 18:58*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*	*01/30/18 20:44*	*01/31/18 18:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.018	U UJ	0.87	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
1,2,4,5-Tetrachlorobenzene	0.038	U |	0.87	0.038	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,2'-oxybis[1-chloropropane]	0.018	U |	0.87	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2

D Sheppard 6/21/18

Client Sample ID: SB-103A
Date Collected: 01/29/18 11:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-5
Matrix: Solid
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,4,6-Tetrachlorophenol	0.035	U UJ	0.87	0.035	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4,5-Trichlorophenol	0.034	U	0.87	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4,6-Trichlorophenol	0.035	U	0.35	0.035	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4-Dichlorophenol	0.028	U	0.35	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4-Dimethylphenol	0.034	U	0.87	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4-Dinitrophenol	0.095	U	0.70	0.095	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,4-Dinitrotoluene	0.034	U	0.18	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2,6-Dinitrotoluene	0.036	U	0.18	0.036	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Chloronaphthalene	0.032	U	0.87	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Chlorophenol	0.036	U	0.87	0.036	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Methylnaphthalene	**0.092**	J J-	0.87	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Methylphenol	0.045	U	0.87	0.045	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Nitroaniline	0.021	U	0.87	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
2-Nitrophenol	0.051	U	0.87	0.051	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
3,3'-Dichlorobenzidine	0.019	U *	0.35	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
3-Nitroaniline	0.024	U	0.87	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4,6-Dinitro-2-methylphenol	0.057	U	0.70	0.057	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Bromophenyl phenyl ether	0.027	U	0.87	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Chloro-3-methylphenol	0.032	U	0.87	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Chloroaniline	0.062	U	0.87	0.062	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Chlorophenyl phenyl ether	0.025	U	0.87	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Methylphenol	0.026	U	0.87	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Nitroaniline	0.13	U	0.87	0.13	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
4-Nitrophenol	0.069	U	1.8	0.069	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Acenaphthene	**0.27**	J J-	0.87	0.033	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Acenaphthylene	**0.12**	J	0.87	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Acetophenone	**0.066**	J	0.87	0.052	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Anthracene	**0.64**	J	0.87	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Atrazine	0.045	U UJ	0.35	0.045	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzaldehyde	**0.097**	J J-	0.87	0.096	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzo[a]anthracene	**2.0**		0.087	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzo[a]pyrene	**1.9**		0.087	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzo[b]fluoranthene	**2.9**		0.087	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzo[g,h,i]perylene	**0.77**	J	0.87	0.058	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Benzo[k]fluoranthene	**1.0**		0.087	0.035	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Bis(2-chloroethoxy)methane	0.050	U UJ	0.87	0.050	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Bis(2-chloroethyl)ether	0.034	U UJ	0.087	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Bis(2-ethylhexyl) phthalate	**0.41**	J J-	0.87	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Butyl benzyl phthalate	**0.097**	J J-	0.87	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Caprolactam	0.034	U UJ	0.87	0.034	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Carbazole	**0.35**	J J-	0.87	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Chrysene	**2.0**		0.87	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Dibenz(a,h)anthracene	**0.30**		0.087	0.065	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Dibenzofuran	**0.19**	J	0.87	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Diethyl phthalate	0.029	U UJ	0.87	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Dimethyl phthalate	0.028	U UJ	0.87	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Di-n-butyl phthalate	**0.028**	J J-	0.87	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Di-n-octyl phthalate	0.024	U UJ	0.87	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Fluoranthene	**3.6**	J J-	0.87	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2

D Shippee 6/21/18

Client Sample ID: SB-103A

Lab Sample ID: 460-149327-5

Date Collected: 01/29/18 11:20
Date Received: 01/30/18 15:20

Matrix: Solid
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**0.28**	**J**	0.87	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Hexachlorobenzene	0.041	U	0.087	0.041	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Hexachlorobutadiene	0.022	U	0.18	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Hexachlorocyclopentadiene	0.028	U	0.87	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Hexachloroethane	0.030	U	0.087	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Indeno[1,2,3-cd]pyrene	**1.1**		0.087	0.033	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Isophorone	0.028	U	0.35	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Naphthalene	**0.21**	**J**	0.87	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Nitrobenzene	0.020	U	0.087	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
N-Nitrosodi-n-propylamine	0.037	U	0.087	0.037	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
N-Nitrosodiphenylamine	0.027	U	0.87	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Pentachlorophenol	0.22	U	0.70	0.22	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Phenanthrene	**2.4**		0.87	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Phenol	0.030	U	0.87	0.030	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2
Pyrene	**3.3**		0.87	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 08:31	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexadecane	*1.1*	*J N*	*mg/Kg*	☼	*12.32*	*544-76-3*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
17-Octadecenal	*0.92*	*J N*	*mg/Kg*	☼	*12.97*	*56554-86-0*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Nonacosane	*1.9*	*J N*	*mg/Kg*	☼	*13.25*	*630-03-5*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
1-Docosene	*1.1*	*J N*	*mg/Kg*	☼	*13.29*	*1599-67-3*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Benzo[e]pyrene	*1.4*	*J N*	*mg/Kg*	☼	*13.40*	*192-97-2*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Oxirane, hexadecyl-	*1.2*	*J N*	*mg/Kg*	☼	*13.96*	*7390-81-0*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Hentriacontane	*1.5*	*J N*	*mg/Kg*	☼	*14.23*	*630-04-6*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
28-Nor-17.alpha.(H)-hopane	*0.71*	*J N*	*mg/Kg*	☼	*14.33*	*53584-60-4*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Vitamin E	*0.85*	*J N*	*mg/Kg*	☼	*14.48*	*59-02-9*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Octadecanal	*0.86*	*J N*	*mg/Kg*	☼	*15.06*	*638-66-4*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Unknown alkane	*1.0*	*J*	*mg/Kg*	☼	*15.38*		*02/01/18 12:51*	*02/02/18 08:31*	*2*
.beta.-Sitosterol	*1.3*	*J N*	*mg/Kg*	☼	*15.77*	*83-46-5*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Stigmast-4-en-3-one	*1.0*	*J N*	*mg/Kg*	☼	*16.73*	*1058-61-3*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Unknown	*0.90*	*J*	*mg/Kg*	☼	*17.49*		*02/01/18 12:51*	*02/02/18 08:31*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*51*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
2-Fluorobiphenyl	*62*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
2-Fluorophenol (Surr)	*57*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Nitrobenzene-d5 (Surr)	*53*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Phenol-d5 (Surr)	*55*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*
Terphenyl-d14 (Surr)	*65*		*30 - 130*	*02/01/18 12:51*	*02/02/18 08:31*	*2*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0015	U	0.0088	0.0015	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
4,4'-DDE	**0.013**		0.0088	0.0010	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
4,4'-DDT	0.0016	U	0.0088	0.0016	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Aldrin	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
alpha-BHC	0.00090	U	0.0026	0.00090	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
alpha-Chlordane	**23** ~~p~~	**N J**	8.8	1.4	ug/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
beta-BHC	0.00099	U	0.0026	0.00099	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
delta-BHC	0.00054	U	0.0026	0.00054	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1

D Sheppard 6/21/18

Client Sample ID: SB-103A

Date Collected: 01/29/18 11:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-5

Matrix: Solid
Percent Solids: 75.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	0.0011	U	0.0026	0.0011	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endosulfan I	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endosulfan II	0.0023	U	0.0088	0.0023	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endosulfan sulfate	0.0011	U	0.0088	0.0011	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endrin	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endrin aldehyde	0.0021	U	0.0088	0.0021	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Endrin ketone	0.0017	U	0.0088	0.0017	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
gamma-BHC (Lindane)	0.00082	U	0.0026	0.00082	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
gamma-Chlordane	**25**		8.8	1.6	ug/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Heptachlor	0.0010	U	0.0088	0.0010	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Heptachlor epoxide	0.0013	U	0.0088	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Methoxychlor	0.0020	U	0.0088	0.0020	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1
Toxaphene	0.032	U	0.088	0.032	mg/Kg	☼	02/02/18 00:38	02/04/18 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*115*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:24*	*1*
DCB Decachlorobiphenyl	*118*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:24*	*1*
Tetrachloro-m-xylene	*116*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:24*	*1*
Tetrachloro-m-xylene	*114*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1221	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1232	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1242	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1248	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1254	**0.20**		0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1260	**0.11**		0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor 1268	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Aroclor-1262	0.012	U	0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1
Polychlorinated biphenyls, Total	**0.31**		0.088	0.012	mg/Kg	☼	02/02/18 01:00	02/04/18 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*115*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:06*	*1*
Tetrachloro-m-xylene	*106*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:06*	*1*
DCB Decachlorobiphenyl	*124*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:06*	*1*
DCB Decachlorobiphenyl	*112*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14600**		50.2	10.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Silver	**3.8**		2.5	0.38	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Antimony	**4.8**	J-	5.0	0.60	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Arsenic	**6.4**		3.8	0.93	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Barium	**305**		50.2	4.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Beryllium	**0.83**	J	0.50	0.058	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Cadmium	**3.6**		1.0	0.15	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Calcium	**16100**		1260	128	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Chromium	**58.2**		2.5	0.70	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4

D Sheppard 6/21/18

Client Sample ID: SB-103A

Date Collected: 01/29/18 11:20
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-5
Matrix: Solid
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	10.0	J	12.6	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Copper	420		6.3	1.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Iron	63600		37.7	6.8	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Lead	803		2.5	0.76	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Magnesium	5360	J-	1260	96.8	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Manganese	634	J-	3.8	0.39	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Nickel	65.0		10.0	0.95	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Potassium	2460		1260	66.8	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Selenium	1.5	U	5.0	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Sodium	476	J	1260	96.7	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Thallium	1.5	U	5.0	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Vanadium	42.7		12.6	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4
Zinc	1460		7.5	0.65	mg/Kg	☼	02/01/18 03:44	02/05/18 13:37	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.57		0.021	0.013	mg/Kg	☼	02/01/18 04:34	02/01/18 09:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.64	~~J~~ J	0.32	0.083	mg/Kg	☼	02/05/18 12:24	02/05/18 13:40	1

DAS 6/21/18

Client Sample ID: SB-104A

Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6
Matrix: Solid
Percent Solids: 47.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00070	U	0.0030	0.00070	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,1,2,2-Tetrachloroethane	0.00064	U	0.0030	0.00064	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00090	U	0.0030	0.00090	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,1,2-Trichloroethane	0.00053	U	0.0030	0.00053	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,1-Dichloroethane	0.00062	U	0.0030	0.00062	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,1-Dichloroethene	0.00068	U	0.0030	0.00068	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2,3-Trichlorobenzene	0.00054	U	0.0030	0.00054	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2,4-Trichlorobenzene	0.00028	U	0.0030	0.00028	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2-Dibromo-3-Chloropropane	0.0014	U	0.0030	0.0014	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2-Dichlorobenzene	0.00043	U	0.0030	0.00043	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2-Dichloroethane	0.00089	U	0.0030	0.00089	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,2-Dichloropropane	0.0013	U	0.0030	0.0013	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,3-Dichlorobenzene	0.00048	U	0.0030	0.00048	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,4-Dichlorobenzene	0.00030	U	0.0030	0.00030	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
1,4-Dioxane	0.028	U	0.060	0.028	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
2-Butanone (MEK)	0.0033	U	0.015	0.0033	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
2-Hexanone	0.0023	U	0.015	0.0023	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
4-Methyl-2-pentanone (MIBK)	0.0020	U	0.015	0.0020	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Acetone	0.011	U	0.015	0.011	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Benzene	0.00078	U	0.0030	0.00078	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Bromoform	0.0013	U	0.0030	0.0013	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Bromomethane	0.0014	U	0.0030	0.0014	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1

D Sheppard 6/21/18

Client Sample ID: SB-104A
Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6
Matrix: Solid
Percent Solids: 47.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.00080	U	0.0030	0.00080	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Carbon tetrachloride	0.00054	U	0.0030	0.00054	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chlorobenzene	0.00053	U	0.0030	0.00053	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chlorobromomethane	0.00084	U	0.0030	0.00084	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chlorodibromomethane	0.00058	U	0.0030	0.00058	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chloroethane	0.0016	U	0.0030	0.0016	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chloroform	0.00096	U	0.0030	0.00096	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Chloromethane	0.0013	U	0.0030	0.0013	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
cis-1,2-Dichloroethene	0.00046	U	0.0030	0.00046	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
cis-1,3-Dichloropropene	0.00082	U	0.0030	0.00082	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Cyclohexane	0.00066	U	0.0030	0.00066	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Dichlorobromomethane	0.00077	U	0.0030	0.00077	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Dichlorodifluoromethane	0.0010	U	0.0030	0.0010	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Ethylbenzene	0.00060	U	0.0030	0.00060	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Ethylene Dibromide	0.00054	U	0.0030	0.00054	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Isopropylbenzene	0.00038	U	0.0030	0.00038	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Methyl acetate	0.013	U	0.015	0.013	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Methyl tert-butyl ether	0.00038	U	0.0030	0.00038	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Methylcyclohexane	0.00048	U	0.0030	0.00048	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Methylene Chloride	**0.022**		0.0030	0.00049	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
m-Xylene & p-Xylene	0.00052	U	0.0030	0.00052	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
o-Xylene	0.00029	U	0.0030	0.00029	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Styrene	0.00037	U	0.0030	0.00037	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Tetrachloroethene	0.00043	U	0.0030	0.00043	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Toluene	0.0019	U	0.0030	0.0019	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
trans-1,2-Dichloroethene	0.00074	U	0.0030	0.00074	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
trans-1,3-Dichloropropene	0.00080	U	0.0030	0.00080	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Trichloroethene	0.00043	U	0.0030	0.00043	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Trichlorofluoromethane	0.0012	U	0.0030	0.0012	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1
Vinyl chloride	0.0016	U	0.0030	0.0016	mg/Kg	☼	01/30/18 20:45	01/31/18 19:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*01/30/18 20:45*	*01/31/18 19:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*	*01/30/18 20:45*	*01/31/18 19:24*	*1*
4-Bromofluorobenzene	*93*		*70 - 130*	*01/30/18 20:45*	*01/31/18 19:24*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*01/30/18 20:45*	*01/31/18 19:24*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*01/30/18 20:45*	*01/31/18 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.014	U UJ	0.69	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
1,2,4,5-Tetrachlorobenzene	0.031	U	0.69	0.031	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,2'-oxybis[1-chloropropane]	0.014	U	0.69	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,3,4,6-Tetrachlorophenol	0.028	U	0.69	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,4,5-Trichlorophenol	0.027	U	0.69	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,4,6-Trichlorophenol	0.028	U	0.28	0.028	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,4-Dichlorophenol	0.022	U	0.28	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,4-Dimethylphenol	0.027	U	0.69	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1

D Shippel 6/21/18

Client Sample ID: SB-104A
Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6
Matrix: Solid
Percent Solids: 47.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	0.076	U UJ	0.56	0.076	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,4-Dinitrotoluene	0.027	U	0.14	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2,6-Dinitrotoluene	0.029	U	0.14	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Chloronaphthalene	0.025	U	0.69	0.025	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Chlorophenol	0.029	U	0.69	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Methylnaphthalene	**0.018**	J J-	0.69	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Methylphenol	0.036	U UJ	0.69	0.036	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Nitroaniline	0.016	U	0.69	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
2-Nitrophenol	0.041	U	0.69	0.041	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
3,3'-Dichlorobenzidine	0.015	U *	0.28	0.015	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
3-Nitroaniline	0.019	U	0.69	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4,6-Dinitro-2-methylphenol	0.045	U	0.56	0.045	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Bromophenyl phenyl ether	0.022	U	0.69	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Chloro-3-methylphenol	0.026	U	0.69	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Chloroaniline	0.049	U	0.69	0.049	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Chlorophenyl phenyl ether	0.020	U	0.69	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Methylphenol	0.020	U	0.69	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Nitroaniline	0.10	U	0.69	0.10	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
4-Nitrophenol	0.055	U	1.4	0.055	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Acenaphthene	0.026	U	0.69	0.026	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Acenaphthylene	**0.13**	J J-	0.69	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Acetophenone	0.042	U UJ	0.69	0.042	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Anthracene	**0.15**	J J-	0.69	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Atrazine	0.036	U UJ	0.28	0.036	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzaldehyde	**0.12**	J J-	0.69	0.076	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzo[a]anthracene	**0.65**		0.069	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzo[a]pyrene	**0.67**		0.069	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzo[b]fluoranthene	**1.1**		0.069	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzo[g,h,i]perylene	**0.32**	J	0.69	0.046	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Benzo[k]fluoranthene	**0.33**		0.069	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Bis(2-chloroethoxy)methane	0.040	U UJ	0.69	0.040	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Bis(2-chloroethyl)ether	0.027	U UJ	0.069	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Bis(2-ethylhexyl) phthalate	**0.35**	J J-	0.69	0.020	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Butyl benzyl phthalate	**0.094**	J J-	0.69	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Caprolactam	0.027	U UJ	0.69	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Carbazole	**0.047**	J J-	0.69	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Chrysene	**0.70**		0.69	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Dibenz(a,h)anthracene	**0.13**		0.069	0.051	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Dibenzofuran	0.021	U UJ	0.69	0.021	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Diethyl phthalate	0.023	U	0.69	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Dimethyl phthalate	0.022	U	0.69	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Di-n-butyl phthalate	**0.034**	J J-	0.69	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Di-n-octyl phthalate	0.019	U UJ	0.69	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Fluoranthene	**1.2**	~~J~~ J-	0.69	0.014	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Fluorene DAS 6/21/18	**0.021**	J J-	0.69	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Hexachlorobenzene	0.032	U UJ	0.069	0.032	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Hexachlorobutadiene	0.018	U	0.14	0.018	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Hexachlorocyclopentadiene	0.022	U	0.69	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Hexachloroethane	0.023	U	0.069	0.023	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1

D Skipper 6/21/18

Client Sample ID: SB-104A

Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6

Matrix: Solid
Percent Solids: 47.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.44	J-	0.069	0.027	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Isophorone	0.022	U UJ	0.28	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Naphthalene	0.027	J J-	0.69	0.017	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Nitrobenzene	0.016	U UJ	0.069	0.016	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
N-Nitrosodi-n-propylamine	0.029	U	0.069	0.029	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
N-Nitrosodiphenylamine	0.022	U	0.69	0.022	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Pentachlorophenol	0.18	U	0.56	0.18	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Phenanthrene	0.29	J J-	0.69	0.019	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Phenol	0.024	U UJ	0.69	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1
Pyrene	1.1	J-	0.69	0.024	mg/Kg	☼	02/01/18 12:51	02/02/18 05:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
4-((1E)-3-Hydroxy-1-propenyl) -2-methoxyphenol	*4.8*	*J N*	*mg/Kg*	☼	*8.52*	*1000297-95-5*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Unknown	*1.7*	*J*	*mg/Kg*	☼	*9.56*		*02/01/18 12:51*	*02/02/18 05:48*	*1*
Heptadecane	*1.2*	*J N*	*mg/Kg*	☼	*12.32*	*629-78-7*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Nonacosane	*1.9*	*J N*	*mg/Kg*	☼	*13.25*	*630-03-5*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Cyclotetracosane	*1.2*	*J N*	*mg/Kg*	☼	*13.29*	*297-03-0*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Octadecanal	*0.99*	*J N*	*mg/Kg*	☼	*13.96*	*638-66-4*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Octacosane	*1.5*	*J N*	*mg/Kg*	☼	*14.23*	*630-02-4*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Vitamin E	*0.96*	*J N*	*mg/Kg*	☼	*14.48*	*59-02-9*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Pregn-5-en-3-ol, 21-bromo-20-methyl-, (3.beta.)-	*2.9*	*J N*	*mg/Kg*	☼	*15.77*	*55103-80-5*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Unknown	*0.99*	*J*	*mg/Kg*	☼	*16.13*		*02/01/18 12:51*	*02/02/18 05:48*	*1*
Urs-12-ene	*1.2*	*J N*	*mg/Kg*	☼	*16.25*	*464-97-1*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Unknown	*1.4*	*J*	*mg/Kg*	☼	*16.56*		*02/01/18 12:51*	*02/02/18 05:48*	*1*
Unknown	*2.4*	*J*	*mg/Kg*	☼	*16.73*		*02/01/18 12:51*	*02/02/18 05:48*	*1*
D:C-Friedours-7-en-3-one	*0.99*	*J N*	*mg/Kg*	☼	*16.82*	*6895-55-2*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Unknown	*11*	*J*	*mg/Kg*	☼	*17.51*		*02/01/18 12:51*	*02/02/18 05:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*60*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
2-Fluorobiphenyl	*69*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
2-Fluorophenol (Surr)	*63*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Nitrobenzene-d5 (Surr)	*60*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Phenol-d5 (Surr)	*61*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*
Terphenyl-d14 (Surr)	*72*		*30 - 130*	*02/01/18 12:51*	*02/02/18 05:48*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0024	U	0.014	0.0024	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
4,4'-DDE	0.0017	U	0.014	0.0017	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
4,4'-DDT	0.018		0.014	0.0026	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Aldrin	0.0021	U	0.014	0.0021	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
alpha-BHC	0.0014	U	0.0042	0.0014	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
alpha-Chlordane	2.2	U	14	2.2	ug/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
beta-BHC	0.0016	U	0.0042	0.0016	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
delta-BHC	0.00086	U	0.0042	0.00086	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Dieldrin	0.0018	U	0.0042	0.0018	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Endosulfan I	0.0021	U	0.014	0.0021	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Endosulfan II	0.0036	U	0.014	0.0036	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1

D Shymal 6/21/18

Client Sample ID: SB-104A

Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6

Matrix: Solid
Percent Solids: 47.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	0.0018	U	0.014	0.0018	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Endrin	0.0020	U	0.014	0.0020	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Endrin aldehyde	0.0033	U	0.014	0.0033	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Endrin ketone	0.0027	U	0.014	0.0027	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
gamma-BHC (Lindane)	0.0013	U	0.0042	0.0013	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
gamma-Chlordane	2.5	U	14	2.5	ug/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Heptachlor	0.0017	U	0.014	0.0017	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Heptachlor epoxide	0.0021	U	0.014	0.0021	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Methoxychlor	0.0032	U	0.014	0.0032	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1
Toxaphene	0.051	U	0.14	0.051	mg/Kg	☼	02/02/18 00:38	02/04/18 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*128*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:37*	*1*
DCB Decachlorobiphenyl	*133*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:37*	*1*
Tetrachloro-m-xylene	*129*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:37*	*1*
Tetrachloro-m-xylene	*124*		*30 - 150*	*02/02/18 00:38*	*02/04/18 14:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1221	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1232	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1242	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1248	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1254	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1260	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor 1268	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Aroclor-1262	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1
Polychlorinated biphenyls, Total	0.019	U	0.14	0.019	mg/Kg	☼	02/02/18 01:00	02/04/18 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*128*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:29*	*1*
Tetrachloro-m-xylene	*122*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:29*	*1*
DCB Decachlorobiphenyl	*137*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:29*	*1*
DCB Decachlorobiphenyl	*136*		*30 - 150*	*02/02/18 01:00*	*02/04/18 14:29*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10900**		79.0	16.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Silver	0.60	U	4.0	0.60	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Antimony	**1.9**	J- J-	7.9	0.95	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Arsenic	**22.1**		5.9	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Barium	**154**		79.0	6.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Beryllium	**0.62**	J- J	0.79	0.091	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Cadmium	**2.2**		1.6	0.24	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Calcium	**19100**		1980	201	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Chromium	**41.0**		4.0	1.1	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Cobalt	**8.9**	J	19.8	2.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Copper	**60.3**		9.9	2.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Iron	**27100**		59.3	10.7	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4

D Skippert 6/21/18

Client Sample ID: SB-104A

Date Collected: 01/29/18 11:40
Date Received: 01/30/18 15:20

Lab Sample ID: 460-149327-6

Matrix: Solid
Percent Solids: 47.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	166		4.0	1.2	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Magnesium	7200	J-	1980	152	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Manganese	399	J-	5.9	0.61	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Nickel	31.5		15.8	1.5	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Potassium	2900		1980	105	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Selenium	2.4	U	7.9	2.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Sodium	201	J	1980	152	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Thallium	2.3	U	7.9	2.3	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Vanadium	39.8		19.8	2.4	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4
Zinc	351		11.9	1.0	mg/Kg	☼	02/01/18 03:44	02/05/18 13:40	4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.14		0.033	0.022	mg/Kg	☼	02/01/18 04:34	02/01/18 09:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.88	~~F1~~ ~~J~~ J	0.50	0.13	mg/Kg	☼	02/05/18 12:24	02/05/18 13:41	1

DAS 6/21/18

D Sheppard 6/21/18

EPA Qualifier Definitions

U	**The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.**
J	**The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.**
J+	**The result is an estimated quantity, but the result may be biased high.**
J-	**The result is an estimated quantity, but the result may be biased low.**
NJ	**The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.**
UJ	**The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.**
R	**The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.**

ATTACHMENT B

CHAIN OF CUSTODY RECORD
Laboratory Job No. J149327

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
J. VanderVliet / C. Amerman	J. Yost	GSI New Rochelle
Company	**P. O. #**	**State (Location of site):** NJ: ☐ NY: ☒ Other:
JM Sorge Inc	2015.191	**Regulatory Program:** DKQP: ☐
Address	**Analysis Turnaround Time**	
57 Fourth St	Standard ☒ 5 day JMS Std	
City / **State**	Rush Charges Authorized For:	
Somerville / NJ	2 Week ☐	
Phone / **Fax**	1 Week ☐	
908.218.0066	Other ☐	

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: 149327

Sample Identification	Date	Time	Matrix	No. of Cont.	TCL/TAL+30	Sample Numbers
SB-101A	01/29/18	09:20	SO	6	X	1
SB-101B		09:30			X	2
SB-102A		10:45			X	3
SB-102B		10:55			X	4
SB-103A		11:20			X	5
SB-104A		11:40			X	6

SHORT HOLD

460-149327 Chain of Custody

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other DI H_2O, 7 = Other CH_3OH

Soil: 1,6,7
Water:

Special Instructions X=run

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1)	JM Sorge Inc	1/30/18 | 11:20	1)	TA Edi
Relinquished by	Company	Date / Time	Received by	Company
2)	TA Edi	1/30/18 | 15:20	2)	TA Edi
Relinquished by	Company	Date / Time	Received by	Company
3)		|	3)	
Relinquished by	Company	Date / Time	Received by	Company
4)		|	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

NoCs 1 R#11 2.0°C

ATTACHMENT C

SELECTED PAGES FROM DATA PACKAGE -
QC EXCEEDANCES AND VALIDATION ISSUES
Laboratory Job No. J149327

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
SB-101A	460-149327-1	66	61	63	72	61	74
SB-101B	460-149327-2	54	50	52	58	46	59
SB-102A	460-149327-3	60	55	57	64	51	61
SB-102B	460-149327-4	61	60	59	71	58	77
SB-103A	460-149327-5	57	55	53	62	51	65
SB-104A	460-149327-6	63	61	60	69	60	72
	MB 460-494320/1-A	74	70	70	74	51	79
	LCS 460-494320/2-A	81	88	84	85	91	86
	LCS 460-494320/3-A	76	72	74	80	57	85
	460-149301-A-4-A MS	67	63	63	70	60	81
	460-149301-A-4-B MSD	68	65	63	76	66	87

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	30-130
PHL = Phenol-d5 (Surr)	30-130
NBZ = Nitrobenzene-d5 (Surr)	30-130
FBP = 2-Fluorobiphenyl	30-130
TBP = 2,4,6-Tribromophenol (Surr)	30-130
TPHL = Terphenyl-d14 (Surr)	30-130

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: L207119.d

Lab ID: LCS 460-494320/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	3.33	2.77	83	70-130	
1,2,4,5-Tetrachlorobenzene	3.33	2.76	83	70-130	
2,2'-oxybis[1-chloropropane]	3.33	2.68	80	70-130	
2,3,4,6-Tetrachlorophenol	3.33	2.80	84	70-130	
2,4,5-Trichlorophenol	3.33	2.80	84	20-160	
2,4,6-Trichlorophenol	3.33	2.86	86	20-160	
2,4-Dichlorophenol	3.33	2.85	86	70-130	
2,4-Dimethylphenol	3.33	2.76	83	70-130	
2,4-Dinitrophenol	6.67	3.64	55	20-160	
2,4-Dinitrotoluene	3.33	3.03	91	70-130	
2,6-Dinitrotoluene	3.33	3.03	91	70-130	
2-Chloronaphthalene	3.33	2.76	83	70-130	
2-Chlorophenol	3.33	2.72	82	70-130	
2-Methylnaphthalene	3.33	2.65	80	70-130	
2-Methylphenol	3.33	2.76	83	70-130	
2-Nitroaniline	3.33	2.93	88	20-160	
2-Nitrophenol	3.33	2.68	80	70-130	
3,3'-Dichlorobenzidine	3.33	1.52	46	70-130	*
3-Nitroaniline	3.33	2.11	63	20-160	
4,6-Dinitro-2-methylphenol	6.67	5.28	79	20-160	
4-Bromophenyl phenyl ether	3.33	3.00	90	70-130	
4-Chloro-3-methylphenol	3.33	2.83	85	20-160	
4-Chloroaniline	3.33	1.34	40	20-160	
4-Chlorophenyl phenyl ether	3.33	2.83	85	70-130	
4-Methylphenol	3.33	2.62	79	70-130	
4-Nitroaniline	3.33	2.55	77	20-160	
4-Nitrophenol	6.67	6.11	92	20-160	
Acenaphthene	3.33	2.86	86	70-130	
Acenaphthylene	3.33	2.82	85	70-130	
Acetophenone	3.33	2.58	77	70-130	
Anthracene	3.33	2.96	89	70-130	
Benzo[a]anthracene	3.33	2.97	89	70-130	
Benzo[a]pyrene	3.33	3.10	93	70-130	
Benzo[b]fluoranthene	3.33	3.03	91	70-130	
Benzo[g,h,i]perylene	3.33	3.12	94	70-130	
Benzo[k]fluoranthene	3.33	3.12	93	70-130	
Bis(2-chloroethoxy)methane	3.33	2.70	81	70-130	
Bis(2-chloroethyl)ether	3.33	2.68	80	70-130	
Bis(2-ethylhexyl) phthalate	3.33	3.22	97	70-130	
Butyl benzyl phthalate	3.33	3.15	95	70-130	
Carbazole	3.33	2.94	88	70-130	
Chrysene	3.33	2.98	90	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X266442.d

Lab ID: 460-149301-A-4-A MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	4.22	0.0086 U	3.10	73	70-130	
1,2,4,5-Tetrachlorobenzene	4.22	0.018 U	2.95	70	70-130	
2,2'-oxybis[1-chloropropane]	4.22	0.0087 U	1.63	39	70-130	F1
2,3,4,6-Tetrachlorophenol	4.22	0.017 U	2.77	65	70-130	F1
2,4,5-Trichlorophenol	4.22	0.016 U	3.01	71	20-160	
2,4,6-Trichlorophenol	4.22	0.017 U	3.12	74	20-160	
2,4-Dichlorophenol	4.22	0.013 U	2.93	69	70-130	F1
2,4-Dimethylphenol	4.22	0.016 U	2.83	67	70-130	F1
2,4-Dinitrophenol	8.45	0.046 U	1.88	22	20-160	
2,4-Dinitrotoluene	4.22	0.016 U	3.68	87	70-130	
2,6-Dinitrotoluene	4.22	0.017 U	3.50	83	70-130	
2-Chloronaphthalene	4.22	0.015 U	3.13	74	70-130	
2-Chlorophenol	4.22	0.017 U	3.01	71	70-130	
2-Methylnaphthalene	4.22	0.010 U	2.98	71	70-130	
2-Methylphenol	4.22	0.022 U	2.67	63	70-130	F1
2-Nitroaniline	4.22	0.0099 U	2.45	58	20-160	
2-Nitrophenol	4.22	0.025 U	3.15	75	70-130	
3,3'-Dichlorobenzidine	4.22	0.0091 U	1.79	42	70-130	F1
3-Nitroaniline	4.22	0.011 U	2.06	49	20-160	
4,6-Dinitro-2-methylphenol	8.45	0.027 U	3.15	37	20-160	
4-Bromophenyl phenyl ether	4.22	0.013 U	2.95	70	70-130	
4-Chloro-3-methylphenol	4.22	0.016 U	2.98	71	20-160	
4-Chloroaniline	4.22	0.030 U	0.967	23	20-160	
4-Chlorophenyl phenyl ether	4.22	0.012 U	2.95	70	70-130	
4-Methylphenol	4.22	0.012 U	2.81	67	70-130	F1
4-Nitroaniline	4.22	0.063 U	3.01	71	20-160	
4-Nitrophenol	8.45	0.033 U	5.47	65	20-160	
Acenaphthene	4.22	0.016 U	2.88	68	70-130	F1
Acenaphthylene	4.22	0.011 U	3.14	74	70-130	
Acetophenone	4.22	0.025 U	2.59	61	70-130	F1
Anthracene	4.22	0.015 U	3.32	79	70-130	
Atrazine	8.45	0.022 U	6.80	81	70-130	
Benzaldehyde	8.45	0.046 U	4.23	50	20-160	
Benzo[a]anthracene	4.22	0.011 U	3.73	88	70-130	
Benzo[a]pyrene	4.22	0.012 U	4.00	95	70-130	
Benzo[b]fluoranthene	4.22	0.013 U	4.05	96	70-130	
Benzo[g,h,i]perylene	4.22	0.028 U	3.51	83	70-130	
Benzo[k]fluoranthene	4.22	0.017 U	3.74	89	70-130	
Bis(2-chloroethoxy)methane	4.22	0.024 U	2.70	64	70-130	F1
Bis(2-chloroethyl)ether	4.22	0.016 U	2.82	67	70-130	F1
Bis(2-ethylhexyl) phthalate	4.22	0.012 U	4.08	97	70-130	
Butyl benzyl phthalate	4.22	0.014 U	4.23	100	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X266442.d

Lab ID: 460-149301-A-4-A MS Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Caprolactam	8.45	0.016 U	6.01	71	20-160	
Carbazole	4.22	0.010 U	3.39	80	70-130	
Chrysene	4.22	0.014 U	3.75	89	70-130	
Dibenz(a,h)anthracene	4.22	0.031 U	3.57	84	70-130	
Dibenzofuran	4.22	0.013 U	3.13	74	70-130	
Diethyl phthalate	4.22	0.014 U	3.44	81	70-130	
Dimethyl phthalate	4.22	0.013 U	3.31	78	70-130	
Di-n-butyl phthalate	4.22	0.0086 U	3.62	86	70-130	
Di-n-octyl phthalate	4.22	0.012 U	4.46	106	70-130	
Fluoranthene	4.22	0.0086 U	3.38	80	70-130	
Fluorene	4.22	0.010 U	3.04	72	70-130	
Hexachlorobenzene	4.22	0.020 U	2.75	65	70-130	F1
Hexachlorobutadiene	4.22	0.011 U	2.86	68	70-130	F1
Hexachlorocyclopentadiene	4.22	0.013 U	1.74	41	20-160	
Hexachloroethane	4.22	0.014 U	2.89	68	70-130	F1
Indeno[1,2,3-cd]pyrene	4.22	0.016 U	4.20	99	70-130	
Isophorone	4.22	0.013 U	2.64	62	70-130	F1
Naphthalene	4.22	0.018 J	2.98	70	70-130	
Nitrobenzene	4.22	0.0096 U	2.90	69	70-130	F1
N-Nitrosodi-n-propylamine	4.22	0.018 U	2.55	60	70-130	F1
N-Nitrosodiphenylamine	4.22	0.013 U	3.33	79	70-130	
Pentachlorophenol	8.45	0.11 U	2.68	32	20-160	
Phenanthrene	4.22	0.012 U	3.25	77	70-130	
Phenol	4.22	0.014 U	2.70	64	20-160	
Pyrene	4.22	0.030 J	3.86	91	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X266443.d

Lab ID: 460-149301-A-4-B MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	4.22	3.30	78	6	30	70-130	
1,2,4,5-Tetrachlorobenzene	4.22	3.07	73	4	30	70-130	
2,2'-oxybis[1-chloropropane]	4.22	1.62	38	1	30	70-130	F1
2,3,4,6-Tetrachlorophenol	4.22	3.01	71	8	30	70-130	
2,4,5-Trichlorophenol	4.22	3.32	79	10	30	20-160	
2,4,6-Trichlorophenol	4.22	3.31	78	6	30	20-160	
2,4-Dichlorophenol	4.22	3.07	73	4	30	70-130	
2,4-Dimethylphenol	4.22	2.93	69	4	30	70-130	F1
2,4-Dinitrophenol	8.45	2.16	26	14	30	20-160	
2,4-Dinitrotoluene	4.22	3.96	94	7	30	70-130	
2,6-Dinitrotoluene	4.22	3.81	90	9	30	70-130	
2-Chloronaphthalene	4.22	3.31	78	6	30	70-130	
2-Chlorophenol	4.22	2.97	70	1	30	70-130	
2-Methylnaphthalene	4.22	2.97	70	0	30	70-130	
2-Methylphenol	4.22	2.72	64	2	30	70-130	F1
2-Nitroaniline	4.22	2.62	62	7	30	20-160	
2-Nitrophenol	4.22	3.08	73	2	30	70-130	
3,3'-Dichlorobenzidine	4.22	2.07	49	14	30	70-130	F1 *
3-Nitroaniline	4.22	2.42	57	16	30	20-160	
4,6-Dinitro-2-methylphenol	8.45	3.49	41	10	30	20-160	
4-Bromophenyl phenyl ether	4.22	3.21	76	8	30	70-130	
4-Chloro-3-methylphenol	4.22	3.28	78	9	30	20-160	
4-Chloroaniline	4.22	1.19	28	21	30	20-160	
4-Chlorophenyl phenyl ether	4.22	3.21	76	8	30	70-130	
4-Methylphenol	4.22	2.86	68	2	30	70-130	F1
4-Nitroaniline	4.22	3.29	78	9	30	20-160	
4-Nitrophenol	8.45	5.72	68	4	30	20-160	
Acenaphthene	4.22	3.08	73	7	30	70-130	
Acenaphthylene	4.22	3.37	80	7	30	70-130	
Acetophenone	4.22	2.61	62	1	30	70-130	F1
Anthracene	4.22	3.56	84	7	30	70-130	
Atrazine	8.45	7.25	86	6	30	70-130	
Benzaldehyde	8.45	4.28	51	1	30	20-160	
Benzo[a]anthracene	4.22	3.99	94	7	30	70-130	
Benzo[a]pyrene	4.22	4.29	102	7	30	70-130	
Benzo[b]fluoranthene	4.22	4.30	102	6	30	70-130	
Benzo[g,h,i]perylene	4.22	3.79	90	7	30	70-130	
Benzo[k]fluoranthene	4.22	4.05	96	8	30	70-130	
Bis(2-chloroethoxy)methane	4.22	2.70	64	0	30	70-130	F1
Bis(2-chloroethyl)ether	4.22	2.97	70	5	30	70-130	
Bis(2-ethylhexyl) phthalate	4.22	4.38	104	7	30	70-130	
Butyl benzyl phthalate	4.22	4.49	106	6	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X266443.d

Lab ID: 460-149301-A-4-B MSD Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Caprolactam	8.45	6.55	78	9	30	20-160	
Carbazole	4.22	3.65	86	7	30	70-130	
Chrysene	4.22	3.95	94	5	30	70-130	
Dibenz(a,h)anthracene	4.22	3.85	91	8	30	70-130	
Dibenzofuran	4.22	3.35	79	7	30	70-130	
Diethyl phthalate	4.22	3.75	89	9	30	70-130	
Dimethyl phthalate	4.22	3.63	86	9	30	70-130	
Di-n-butyl phthalate	4.22	3.88	92	7	30	70-130	
Di-n-octyl phthalate	4.22	4.79	113	7	30	70-130	
Fluoranthene	4.22	3.64	86	7	30	70-130	
Fluorene	4.22	3.35	79	10	30	70-130	
Hexachlorobenzene	4.22	2.95	70	7	30	70-130	
Hexachlorobutadiene	4.22	2.84	67	1	30	70-130	F1
Hexachlorocyclopentadiene	4.22	1.70	40	2	30	20-160	
Hexachloroethane	4.22	2.77	66	4	30	70-130	F1
Indeno[1,2,3-cd]pyrene	4.22	4.38	104	4	30	70-130	
Isophorone	4.22	2.72	64	3	30	70-130	F1
Naphthalene	4.22	2.88	68	3	30	70-130	F1
Nitrobenzene	4.22	2.93	69	1	30	70-130	F1
N-Nitrosodi-n-propylamine	4.22	2.59	61	2	30	70-130	F1
N-Nitrosodiphenylamine	4.22	3.62	86	8	30	70-130	
Pentachlorophenol	8.45	2.95	35	10	30	20-160	
Phenanthrene	4.22	3.51	83	8	30	70-130	
Phenol	4.22	2.76	65	2	30	20-160	
Pyrene	4.22	4.07	96	5	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 493775

SDG No.:

Instrument ID: CBNAMS12 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/31/2018 13:19 Calibration End Date: 01/31/2018 18:14 Calibration ID: 66368

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD05 460-493775/20	L207004.d
Level 2	STD1 460-493775/9	L206999.d
Level 3	STD2 460-493775/8	L206998.d
Level 4	STD5 460-493775/7	L206997.d
Level 5	STD10 460-493775/6	L206996.d
Level 6	STD20 460-493775/5	L206995.d
Level 7	ICIS 460-493775/2	L206992.d
Level 8	STD80 460-493775/4	L206994.d
Level 9	STD120 460-493775/3	L206993.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4401	0.4733	0.5296	0.4861 0.5189	0.4798	Ave		0.4880				6.6		20.0			
N-Nitrosodimethylamine	0.7411	0.8178	0.8926	0.7555 0.8962	0.7547	Ave		0.8096				8.8		20.0			
Pyridine	1.3267	1.4175	1.5202	1.3249 1.5337	1.3388	Ave		1.4103				6.9		20.0			
Phenol	1.6827	1.7835	1.9486	1.7067 1.9023	1.6715	Ave		1.7826			0.8000	6.6		20.0			
Aniline	1.9365	2.0503	2.2427	1.9487 2.1971	1.9427	Ave		2.0530				6.7		20.0			
Bis(2-chloroethyl)ether	1.1452 1.1980	1.3740 1.2786	1.1340 1.3714	1.3070 1.3384	1.2426	Ave		1.2655			0.7000	7.2		20.0			
2-Chlorophenol	1.3101	1.3669	1.4775	1.3671 1.4614	1.2921	Ave		1.3792			0.8000	5.5		20.0			
n-Decane	1.8818	1.9328	2.0488	2.0974 1.9525	1.9525	Ave		1.9776				4.0		20.0			
1,3-Dichlorobenzene	1.4457	1.5130	1.6246	1.5539 1.5914	1.4602	Ave		1.5315				4.7		20.0			
1,4-Dichlorobenzene	1.4616	1.5333	1.6272	1.5798 1.6061	1.4781	Ave		1.5477				4.4		20.0			
Benzyl alcohol	0.8413	0.8986	0.9838	0.8484 0.9566	0.8264	Ave		0.8925				7.3		20.0			
1,2-Dichlorobenzene	1.3961	1.4477	1.5560	1.4513 1.5272	1.4097	Ave		1.4647				4.4		20.0			
2-Methylphenol	1.1667	1.2195	1.3086	1.2195 1.2825	1.1986	Ave		1.2326			0.7000	4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 493775

SDG No.:

Instrument ID: CBNAMS12 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/31/2018 13:19 Calibration End Date: 01/31/2018 18:14 Calibration ID: 66368

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	2.4756	2.5400	2.6751	2.7240 2.5434	2.5404	Ave		2.5831			0.0100	3.7		20.0			
Acetophenone	1.8192	1.8926	2.0117	1.9598 1.9246	1.8467	Ave		1.9091			0.0100	3.7		20.0			
N-Nitrosodi-n-propylamine	0.8822 0.9745	0.9464 0.9954	0.9606 1.0756	1.0348 1.0307	0.9788	Ave		0.9865			0.5000	5.7		20.0			
3 & 4 Methylphenol	1.3424	1.3637	1.4697	1.3918 1.4251	1.2861	Ave		1.3798				4.7		20.0			
4-Methylphenol	1.3424	1.3637	1.4697	1.3918 1.4251	1.2861	Ave		1.3798			0.6000	4.7		20.0			
Hexachloroethane	0.6405 0.5552	0.5851 0.5790	0.6107 0.6225	0.5981 0.6103	0.5535	Ave		0.5950			0.3000	5.0		20.0			
Nitrobenzene	0.4080 0.5990	0.5069 0.6276	0.5755 0.6762	0.6278 0.6577	0.5855	Lin2	-0.117	0.6356			0.2000				0.9980		0.9900
n,n'-Dimethylaniline	1.9760 1.8546	1.8549 2.0745	1.9786 2.0542	1.9449 2.0690	1.7847	Ave		1.9546				5.3		20.0			
Isophorone	0.6094	0.6450	0.5895 0.6954	0.6563 0.6759	0.6143	Ave		0.6408			0.4000	6.0		20.0			
2-Nitrophenol	0.1655	0.1831	0.1979	0.1723 0.1935	0.1673	Ave		0.1799			0.1000	7.6		20.0			
2,4-Dimethylphenol	0.2812	0.3032	0.3218	0.2959 0.3147	0.2796	Ave		0.2994			0.2000	5.8		20.0			
Bis(2-chloroethoxy)methane	0.3814	0.4057	0.4276	0.4116 0.4194	0.3883	Ave		0.4057			0.3000	4.4		20.0			
Benzoic acid	0.0964	0.1681	0.1969	0.0365 0.2129	0.0351	Qua	-1.233	0.1738	0.0004217						0.9990		0.9900
2,4-Dichlorophenol	0.2680	0.2923	0.2344 0.3130	0.2722 0.3044	0.2647	Ave		0.2784			0.2000	9.7		20.0			
1,2,4-Trichlorobenzene	0.3132 0.2902	0.2829 0.3169	0.2931 0.3338	0.3111 0.3257	0.2964	Ave		0.3070				5.6		20.0			
Naphthalene	0.9332	0.9916	1.0450	1.0168 1.0134	0.9450	Ave		0.9909			0.7000	4.4		20.0			
4-Chloroaniline	0.3956	0.4195	0.4448	0.4106 0.4314	0.3938	Ave		0.4159			0.0100	4.8		20.0			
Hexachlorobutadiene	0.1600	0.1743 0.1792	0.1725 0.1894	0.1676 0.1831	0.1599	Ave		0.1732			0.0100	6.1		20.0			
4-Chloro-3-methylphenol	0.2723	0.2969	0.3204	0.2761 0.3120	0.2739	Ave		0.2919			0.2000	7.2		20.0			
2-Methylnaphthalene	0.6442	0.6877	0.7218	0.6843 0.7076	0.6522	Ave		0.6830			0.4000	4.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 493775

SDG No.:

Instrument ID: CBNAMS12 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/31/2018 13:19 Calibration End Date: 01/31/2018 18:14 Calibration ID: 66368

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6061	0.6514	0.6806	0.6719 0.6618	0.6146	Ave		0.6477				4.7		20.0			
Hexachlorocyclopentadiene	0.2619	0.3723	0.4067	0.2085 0.4216	0.2358	Qua	-1.576	0.3834	0.0004437		0.0500				0.9990		0.9900
1,2,4,5-Tetrachlorobenzene	0.6157	0.6884	0.7029	0.6702 0.6864	0.6158	Ave		0.6633			0.0100	5.8		20.0			
2-tertbutyl-4-methylphenol	0.4110	0.4551	0.4530	0.4236 0.4632	0.3859	Ave		0.4320				7.0		20.0			
2,4,6-Trichlorophenol	0.3843	0.4732	0.3442 0.4682	0.3899 0.4496	0.3990	Ave		0.4155			0.2000	11.7		20.0			
2,4,5-Trichlorophenol	0.4475	0.4708	0.5012	0.4179 0.5145	0.4099	Ave		0.4603			0.2000	9.3		20.0			
1,1'-Biphenyl	1.6285	1.7847	1.7994	1.7607 1.7417	1.6457	Ave		1.7268			0.0100	4.2		20.0			
2-Chloronaphthalene	1.2068	1.3362	1.3547	1.3193 1.3224	1.2405	Ave		1.2967			0.8000	4.5		20.0			
Phenyl ether	0.8010	0.9327	0.9001	0.8625 0.9112	0.7686	Ave		0.8627				7.6		20.0			
2-Nitroaniline	0.4960	0.5464	0.5554	0.5139 0.5440	0.4868	Ave		0.5237			0.0100	5.5		20.0			
1,3-Dimethylnaphthalene	1.0058	1.1482	1.1039	1.0718 1.1259	0.9768	Ave		1.0721				6.3		20.0			
Dimethyl phthalate	1.4130	1.5606	1.5628	1.5507 1.5294	1.4574	Ave		1.5123			0.0100	4.1		20.0			
Coumarin	0.2199	0.2469	0.2484	0.2397 0.2506	0.2111	Ave		0.2361				7.0		20.0			
2,6-Dinitrotoluene	0.2986	0.2365 0.3446	0.2829 0.3460	0.3098 0.3444	0.3025	Ave		0.3082			0.2000	12.2		20.0			
Acenaphthylene	1.8829	2.0485	2.0827	2.0050 2.0265	1.9088	Ave		1.9924			0.9000	4.0		20.0			
3-Nitroaniline	0.3512	0.3955	0.4114	0.3629 0.4048	0.3567	Ave		0.3804			0.0100	7.0		20.0			
3,5-di-tert-butyl-4-hydroxytol	1.0145	1.1949	1.1376	1.0205 1.1381	0.9808	Ave		1.0811				8.0		20.0			
Acenaphthene	1.1538	1.2859	1.2919	1.2309 1.2175	1.1519	Ave		1.2220			0.9000	5.0		20.0			
2,4-Dinitrophenol	0.1786	0.2247	0.0508 0.2419	0.1295 +++++	0.1466	Qua	-0.871	0.1982	0.0003123		0.0100				1.0000		0.9900
4-Nitrophenol	0.2714	0.3079	0.3315	0.2587 0.3255	0.2528	Ave		0.2913			0.0100	11.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 493775

SDG No.:

Instrument ID: CBNAMS12 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/31/2018 13:19 Calibration End Date: 01/31/2018 18:14 Calibration ID: 66368

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,4-Dinitrotoluene	0.4064	0.3199 0.4616	0.3657 0.4689	0.4183 0.4638	0.3981	Ave		0.4128			0.2000	12.7		20.0			
Dibenzofuran	1.8103	1.9625	1.9747	1.9635 1.8930	1.8061	Ave		1.9017			0.8000	4.1		20.0			
2,3,4,6-Tetrachlorophenol	0.3396	0.3813	0.4075	0.3178 0.4058	0.3187	Ave		0.3618			0.0100	11.5		20.0			
Diethyl phthalate	1.4950	1.6135	1.6548	1.6096 1.6177	1.5043	Ave		1.5825			0.0100	4.2		20.0			
Fluorene	1.4193	1.5392	1.5617	1.5029 1.5037	1.4449	Ave		1.4953			0.9000	3.6		20.0			
4-Chlorophenyl phenyl ether	0.6480	0.7086	0.7206	0.7019 0.6890	0.6546	Ave		0.6871			0.4000	4.3		20.0			
4-Nitroaniline	0.3728	0.3944	0.3997	0.3789 0.3922	0.3636	Ave		0.3836			0.0100	3.7		20.0			
4,6-Dinitro-2-methylphenol	0.1057	0.1215	0.0606 +++++	0.0870 +++++	0.0916	Lin2	-0.219	0.1123			0.0100				0.9920		0.9900
N-Nitrosodiphenylamine	0.5159	0.5517	0.5757	0.5474 0.5615	0.5184	Ave		0.5451			0.0100	4.4		20.0			
1,2-Diphenylhydrazine	0.7498	0.7898	0.8318	0.8068 0.8101	0.7692	Ave		0.7929				3.8		20.0			
4-Bromophenyl phenyl ether	0.2023	0.2207	0.2326	0.2022 0.2317	0.2015	Ave		0.2152			0.1000	7.0		20.0			
Hexachlorobenzene	0.2200 0.2213	0.2465 0.2418	0.2334 0.2585	0.2430 0.2510	0.2229	Ave		0.2376			0.1000	5.9		20.0			
Pentachlorophenol	0.1132	0.1397	0.0591 0.1647	0.0895 +++++	0.0986	Qua	-0.173	0.1009	0.0004057		0.0500				1.0000		0.9900
Pentachloronitrobenzene	0.0917	0.1069	0.1099	0.0875 0.1101	0.0835	Ave		0.0983			0.0100	12.3		20.0			
n-Octadecane	0.6567	0.6893	0.7215	0.6954 0.6818	0.6577	Ave		0.6837				3.6		20.0			
Phenanthrene	1.0490	1.1178	1.1635	1.1389 1.1224	1.0530	Ave		1.1074			0.7000	4.2		20.0			
Anthracene	1.0841	1.1363	1.1970	1.1623 1.1555	1.0963	Ave		1.1386			0.7000	3.7		20.0			
Carbazole	0.9974	1.0702	1.1121	1.0692 1.0649	1.0225	Ave		1.0561			0.0100	3.8		20.0			
Di-n-butyl phthalate	1.2443	1.3407	1.4165	1.2970 1.3497	1.2619	Ave		1.3183			0.0100	4.8		20.0			
Fluoranthene	1.1619	1.2370	1.2814	1.2240 1.2367	1.1527	Ave		1.2156			0.6000	4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 493775

SDG No.:

Instrument ID: CBNAMS12 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/31/2018 13:19 Calibration End Date: 01/31/2018 18:14 Calibration ID: 66368

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Benzidine	0.6213	0.6974	0.7436	0.4198 0.7610	0.5869	Lin2	-1.669	0.7471			0.0100				0.9980		0.9900
Pyrene	1.2768	1.2902	1.4857	1.3783 1.4324	1.2850	Ave		1.3581			0.6000	6.5		20.0			
Bisphenol-A	0.5472	0.5818	0.6734	0.5161 0.6684	0.5227	Ave		0.5849				12.0		20.0			
Butyl benzyl phthalate	0.6026	0.6149	0.7039	0.6021 0.6887	0.5859	Ave		0.6330			0.0100	7.9		20.0			
2,3,7,8-TCDD		0.1383				Ave		0.1383						20.0			
Carbamazepine	0.5222	0.5474	0.6118	0.4599 0.6219	0.4553	Ave		0.5364				13.4		20.0			
3,3'-Dichlorobenzidine	0.4342	0.4428	0.2985 0.5077	0.4099 0.5067	0.3975	Lin2	-0.365	0.4747			0.0100				0.9940		0.9900
Benzo[a]anthracene	1.3577 1.1219	1.2291 1.1457	1.2301 1.2739	1.2129 1.2439	1.1457	Ave		1.2179			0.8000	6.0		20.0			
Chrysene	1.0962	1.0561	1.2344	1.1696 1.1515	1.0843	Ave		1.1320			0.7000	5.8		20.0			
Bis(2-ethylhexyl) phthalate	0.8475	0.8587	0.9837	0.8293 0.9536	0.8422	Ave		0.8858			0.0100	7.4		20.0			
Di-n-octyl phthalate	1.4033	1.5694	1.6581	1.3114 1.6128	1.3094	Ave		1.4774			0.0100	10.5		20.0			
Benzo[b]fluoranthene	0.9367 1.0803	1.0298 1.2094	1.0418 1.2444	1.1562 1.3031	1.0895	Ave		1.1212			0.7000	10.4		20.0			
Benzo[k]fluoranthene	1.1457 1.1127	1.1301 1.2322	1.1237 1.3302	1.1570 1.2250	1.0852	Ave		1.1713			0.7000	6.6		20.0			
Benzo[a]pyrene	0.9505 1.0346	0.9925 1.1489	0.9801 1.2160	1.0486 1.2039	1.0216	Ave		1.0663			0.7000	9.2		20.0			
Indeno[1,2,3-cd]pyrene	0.8126 1.0147	0.8770 1.1610	0.8578 1.2335	0.9606 1.2914	0.9528	Ave		1.0179			0.5000	16.9		20.0			
Dibenz(a,h)anthracene	0.8004 1.0124	0.9181 1.1491	0.9816 1.2056	1.0207 1.1977	1.0132	Ave		1.0332			0.4000	12.9		20.0			
Benzo[g,h,i]perylene	1.0530	1.1843	1.2343	1.0719 1.2339	1.0304	Ave		1.1346			0.5000	8.2		20.0			
2-Fluorophenol (Surr)	0.3181 1.1885	0.9144 1.3212	1.0215 1.4376	1.1587 1.4803	1.1124	Lin2	-0.492	1.3186			0.0100				0.9910		0.9900
Phenol-d5 (Surr)	1.2009 1.5198	1.4299 1.6668	1.3481 1.8138	1.5422 1.8634	1.5346	Ave		1.5466				13.7		20.0			
Nitrobenzene-d5 (Surr)	0.2996 0.3435	0.3670 0.3816	0.3387 0.4047	0.3527 0.4106	0.3399	Ave		0.3598				9.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD05 460-490526/10	X265953.d
Level 2	STD1 460-490526/9	X265952.d
Level 3	STD2 460-490526/8	X265951.d
Level 4	STD5 460-490526/7	X265950.d
Level 5	STD10 460-490526/6	X265949.d
Level 6	STD20 460-490526/5	X265948.d
Level 7	ICIS 460-490526/2	X265945.d
Level 8	STD80 460-490526/4	X265947.d
Level 9	STD120 460-490526/3	X265946.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5944	0.6383	0.6961	0.6246 0.6949	0.6085	Ave		0.6428				6.8		20.0			
N-Nitrosodimethylamine	0.9752	1.0324	1.1218	1.0224 1.1189	0.9836	Ave		1.0424				6.2		20.0			
Pyridine	1.6747	1.8029	1.9199	1.7484 1.9128	1.7017	Ave		1.7934				5.8		20.0			
Phenol	1.7794	1.9256	2.0772	1.8818 2.1221	1.8078	Ave		1.9323			0.8000	7.3		20.0			
Aniline	2.2137	2.3523	2.4851	2.3257 2.5463	2.2331	Ave		2.3594				5.7		20.0			
Bis(2-chloroethyl)ether	1.6007 1.4285	1.5750 1.5271	1.4486 1.6362	1.4959 1.6255	1.4551	Ave		1.5325			0.7000	5.2		20.0			
2-Chlorophenol	1.3337	1.4244	1.5155	1.4158 1.5162	1.3352	Ave		1.4234			0.8000	5.7		20.0			
n-Decane	1.8350	1.9399	2.0650	1.9147 2.0209	1.8455	Ave		1.9368				4.8		20.0			
1,3-Dichlorobenzene	1.4762	1.5821	1.6982	1.5998 1.7051	1.5015	Ave		1.5938				6.0		20.0			
1,4-Dichlorobenzene	1.4829	1.6102	1.7113	1.6115 1.7055	1.5157	Ave		1.6062				5.9		20.0			
Benzyl alcohol	0.9334	0.9788	1.0686	0.9516 1.0751	0.9354	Ave		0.9905				6.6		20.0			
1,2-Dichlorobenzene	1.4144	1.4945	1.6119	1.5100 1.6168	1.4365	Ave		1.5140				5.6		20.0			
2-Methylphenol	1.2582	1.3442	1.4291	1.3182 1.4523	1.2790	Ave		1.3468			0.7000	5.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	2.2914	2.3758	2.5310	2.4703 2.4648	2.3287	Ave		2.4103			0.0100	3.9		20.0			
3 & 4 Methylphenol	1.4595	1.5699	1.6399	1.5113 1.5963	1.4475	Ave		1.5374				5.0		20.0			
4-Methylphenol	1.4595	1.5699	1.6399	1.5113 1.5963	1.4475	Ave		1.5374			0.6000	5.0		20.0			
N-Nitrosodi-n-propylamine	1.0850 1.0458	1.0222 1.1431	1.0333 1.2078	1.1048 1.1816	1.0507	Ave		1.0972			0.5000	6.1		20.0			
Acetophenone	1.9044	2.0435	2.1502	2.0435 2.0816	1.9214	Ave		2.0241			0.0100	4.7		20.0			
Hexachloroethane	0.5620 0.5506	0.5982 0.5921	0.5735 0.6526	0.5990 0.6523	0.5523	Ave		0.5925			0.3000	6.5		20.0			
Nitrobenzene	0.6642 0.7026	0.6724 0.7555	0.6889 0.8134	0.7370 0.8010	0.7095	Ave		0.7272			0.2000	7.4		20.0			
n,n'-Dimethylaniline	2.1780 2.0817	2.0951 2.3513	2.1288 2.3175	2.1840 2.3597	1.9663	Ave		2.1847				6.2		20.0			
Isophorone	0.6770	0.7207	0.6483 0.7692	0.7070 0.7625	0.6681	Ave		0.7076			0.4000	6.6		20.0			
2-Nitrophenol	0.1748	0.1912	0.2121	0.1733 0.2099	0.1684	Ave		0.1883			0.1000	10.2		20.0			
2,4-Dimethylphenol	0.3033	0.3235	0.3519	0.3109 0.3489	0.3009	Ave		0.3232			0.2000	7.0		20.0			
Bis(2-chloroethoxy)methane	0.4110	0.4501	0.4771	0.4380 0.4777	0.4151	Ave		0.4448			0.3000	6.5		20.0			
Benzoic acid	0.1869	0.2082	0.2356	0.1641 0.2405	0.1586	Ave		0.1990				17.6		20.0			
2,4-Dichlorophenol	0.2676	0.2868	0.2612 0.3093	0.2750 0.3060	0.2625	Ave		0.2812			0.2000	7.1		20.0			
1,2,4-Trichlorobenzene	0.3180 0.2882	0.3132 0.3153	0.2970 0.3428	0.3063 0.3460	0.2851	Ave		0.3124				6.9		20.0			
Naphthalene	0.9923	1.0542	1.1200	1.0768 1.0922	0.9859	Ave		1.0536			0.7000	5.2		20.0			
4-Chloroaniline	0.4009	0.4434	0.4795	0.4209 0.4716	0.3967	Ave		0.4355			0.0100	8.1		20.0			
Hexachlorobutadiene	0.1561	0.1649 0.1764	0.1611 0.1909	0.1704 0.1915	0.1618	Ave		0.1716			0.0100	7.9		20.0			
4-Chloro-3-methylphenol	0.2707	0.2968	0.3251	0.2796 0.3288	0.2676	Ave		0.2948			0.2000	9.1		20.0			
2-Methylnaphthalene	0.6428	0.7112	0.7562	0.6941 0.7450	0.6523	Ave		0.7003			0.4000	6.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6097	0.6746	0.7126	0.6645 0.6983	0.6211	Ave		0.6634				6.2		20.0			
Hexachlorocyclopentadiene	0.3436	0.4213	0.4584	0.3104 0.4517	0.3231	Ave		0.3847			0.0500	17.3		20.0			
1,2,4,5-Tetrachlorobenzene	0.5626	0.6481	0.6716	0.6127 0.6496	0.5796	Ave		0.6207			0.0100	7.0		20.0			
2-tertbutyl-4-methylphenol	0.4001	0.4623	0.4808	0.4188 0.4977	0.3819	Ave		0.4403				10.6		20.0			
2,4,6-Trichlorophenol	0.3692	0.4027	0.3749 0.4341	0.3793 0.4427	0.3744	Ave		0.3968			0.2000	7.7		20.0			
2,4,5-Trichlorophenol	0.3901	0.4382	0.4523	0.4075 0.4563	0.3949	Ave		0.4232			0.2000	6.9		20.0			
1,1'-Biphenyl	1.4926	1.6898	1.7267	1.6085 1.6485	1.5276	Ave		1.6156			0.0100	5.7		20.0			
2-Chloronaphthalene	1.1441	1.2715	1.3124	1.2399 1.3187	1.1681	Ave		1.2425			0.8000	5.9		20.0			
Phenyl ether	0.7699	0.8927	0.8774	0.8289 0.8919	0.7524	Ave		0.8355				7.5		20.0			
2-Nitroaniline	0.4875	0.5393	0.5662	0.4967 0.5630	0.4889	Ave		0.5236			0.0100	7.1		20.0			
1,3-Dimethylnaphthalene	0.9553	1.1386	1.0917	1.0156 1.1294	0.9427	Ave		1.0456				8.3		20.0			
Dimethyl phthalate	1.2605	1.4116	1.4447	1.3664 1.4543	1.3008	Ave		1.3730			0.0100	5.7		20.0			
Coumarin	0.2248	0.2540	0.2601	0.2339 0.2704	0.2107	Ave		0.2423				9.4		20.0			
2,6-Dinitrotoluene	0.2931	0.2494 0.3278	0.2644 0.3460	0.2982 0.3420	0.2969	Ave		0.3022			0.2000	11.5		20.0			
Acenaphthylene	1.7213	1.8871	1.9479	1.7953 1.8835	1.7613	Ave		1.8327			0.9000	4.7		20.0			
3-Nitroaniline	0.3423	0.3851	0.4023	0.3498 0.3961	0.3442	Ave		0.3699			0.0100	7.4		20.0			
3,5-di-tert-butyl-4-hydroxytol	1.0991	1.2892	1.2583	1.1424 1.2689	1.0627	Ave		1.1868				8.2		20.0			
Acenaphthene	1.2494	1.3249	1.3123	1.3019 1.2627	1.2468	Ave		1.2830			0.9000	2.7		20.0			
2,4-Dinitrophenol	0.1848	0.2180	0.1032 0.2453	0.1341 +++++	0.1603	Qua	-0.429	0.1780	0.0004384		0.0100				1.0000		0.9900
4-Nitrophenol	0.2891	0.3216	0.3466	0.2971 0.3380	0.2905	Ave		0.3138			0.0100	8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,4-Dinitrotoluene	0.3843	0.3175 0.4359	0.3720 0.4560	0.3941 0.4700	0.3831	Ave		0.4016			0.2000	12.4		20.0			
Dibenzofuran	1.6033	1.8076	1.8269	1.7437 1.8346	1.6996	Ave		1.7526			0.8000	5.1		20.0			
2,3,4,6-Tetrachlorophenol	0.3323	0.3730	0.3986	0.3453 0.3983	0.3348	Ave		0.3637			0.0100	8.4		20.0			
Diethyl phthalate	1.2298	1.3827	1.4564	1.2834 1.3934	1.2494	Ave		1.3325			0.0100	6.8		20.0			
4-Chlorophenyl phenyl ether	0.6672	0.7464	0.7650	0.7082 0.7123	0.6640	Ave		0.7105			0.4000	5.7		20.0			
Fluorene	1.3375	1.4916	1.5241	1.4319 1.4367	1.3543	Ave		1.4294			0.9000	5.1		20.0			
4-Nitroaniline	0.3779	0.4197	0.4356	0.3887 0.4115	0.3776	Ave		0.4018			0.0100	6.0		20.0			
4,6-Dinitro-2-methylphenol	0.1175	0.1340	0.0788 0.1540	0.1029 +++++	0.1080	QuaF		0.1022	0.0003237		0.0100				1.0000		0.9900
N-Nitrosodiphenylamine	0.5121	0.5619	0.6103	0.5445 0.5962	0.5193	Ave		0.5574			0.0100	7.2		20.0			
1,2-Diphenylhydrazine	0.8506	0.8990	0.9719	0.8810 0.9454	0.8445	Ave		0.8987				5.7		20.0			
4-Bromophenyl phenyl ether	0.2196	0.2445	0.2675	0.2231 0.2625	0.2201	Ave		0.2396			0.1000	9.1		20.0			
Hexachlorobenzene	0.2580 0.2597	0.2712 0.2892	0.2680 0.3145	0.2745 0.3165	0.2617	Ave		0.2792			0.1000	8.1		20.0			
Pentachlorophenol	0.1689	0.1923	0.1352 0.2129	0.1542 0.2004	0.1554	Ave		0.1742			0.0500	16.3		20.0			
Pentachloronitrobenzene	0.0843	0.1002	0.1084	0.0863 0.1135	0.0777	Ave		0.0951			0.0100	15.2		20.0			
n-Octadecane	0.5655	0.6043	0.6474	0.5509 0.6235	0.5466	Ave		0.5897				7.0		20.0			
Phenanthrene	1.0305	1.1144	1.1816	1.0974 1.1596	1.0302	Ave		1.1023			0.7000	5.7		20.0			
Anthracene	1.0679	1.1530	1.2404	1.1126 1.2085	1.0536	Ave		1.1393			0.7000	6.6		20.0			
Carbazole	0.9745	1.0429	1.1289	1.0034 1.0898	0.9558	Ave		1.0325			0.0100	6.5		20.0			
Di-n-butyl phthalate	1.1375	1.2578	1.3907	1.1240 1.3380	1.1167	Ave		1.2275			0.0100	9.7		20.0			
Fluoranthene	1.1077	1.2248	1.3003	1.0851 1.2780	1.0672	Ave		1.1772			0.6000	8.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Benzidine	0.6356	0.6722	0.8014	0.4520 0.8374	0.5755	QuaF		0.6150	0.0019120						0.9980		0.9900
Pyrene	1.1006	1.0878	1.2738	1.1641 1.3148	1.1075	Ave		1.1747			0.6000	8.3		20.0			
Bisphenol-A	0.4926	0.5109	0.6204	0.4570 0.6578	0.4737	Ave		0.5354				15.5		20.0			
Butyl benzyl phthalate	0.4807	0.5022	0.5969	0.4644 0.6235	0.4677	Ave		0.5226			0.0100	13.3		20.0			
2,3,7,8-TCDD		0.1961				Ave		0.1961						20.0			
Carbamazepine	0.4343	0.4634	0.5374	0.3897 0.5851	0.3870	Ave		0.4661				17.3		20.0			
3,3'-Dichlorobenzidine	0.4478	0.4644	0.3018 0.5584	0.4172 0.5945	0.4103	Qua	-0.320	0.4292	0.0014287		0.0100				0.9990		0.9900
Benzo[a]anthracene	1.2601 1.0733	1.1710 1.0913	1.1190 1.2861	1.1292 1.3055	1.0861	Ave		1.1691			0.8000	7.8		20.0			
Bis(2-ethylhexyl) phthalate	0.7065	0.7246	0.8627	0.6914 0.8491	0.6890	Ave		0.7539			0.0100	10.6		20.0			
Chrysene	1.0081	1.0267	1.2203	1.1176 1.2303	1.0506	Ave		1.1089			0.7000	8.8		20.0			
Di-n-octyl phthalate	1.0350	1.2107	1.2949	0.9530 1.2934	0.9921	Ave		1.1299			0.0100	13.7		20.0			
Benzo[b]fluoranthene	0.8125 0.9721	0.8291 1.1332	0.8543 1.2251	0.9300 1.2955	0.9696	Ave		1.0024			0.7000	17.6		20.0			
Benzo[k]fluoranthene	1.0466 1.1313	1.0656 1.2407	1.0866 1.3005	1.1895 1.2214	1.0671	Ave		1.1499			0.7000	7.9		20.0			
Benzo[a]pyrene	0.8237 0.9672	0.8217 1.1049	0.8751 1.1640	0.9408 1.1747	0.9328	Ave		0.9783			0.7000	14.1		20.0			
Indeno[1,2,3-cd]pyrene	0.5878 0.9278	0.6266 1.0982	0.6595 1.2348	0.8004 +++++	0.8542	QuaF		0.8407	0.0049532		0.5000				1.0000		0.9900
Dibenz(a,h)anthracene	0.5244 0.9929	0.7289 1.1471	0.8447 1.2146	0.9531 1.1954	0.9713	Lin2	-0.309	1.0863			0.4000				0.9910		0.9900
Benzo[g,h,i]perylene	0.9742	1.1182	1.1803	0.9419 1.1721	0.9621	Ave		1.0581			0.5000	10.5		20.0			
2-Fluorophenol (Surr)	1.3138	1.3798 1.4519	1.3149 1.5715	1.3676 1.6098	1.3120	Ave		1.4152				8.4		20.0			
Phenol-d5 (Surr)	1.8222 1.6544	1.7812 1.8611	1.6499 1.9867	1.7165 2.0329	1.6699	Ave		1.7972				7.9		20.0			
Nitrobenzene-d5 (Surr)	0.3710 0.3656	0.3970 0.4038	0.3748 0.4408	0.3891 0.4523	0.3699	Ave		0.3961				8.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-149327-1 Analy Batch No.: 490526

SDG No.:

Instrument ID: CBNAMS5 GC Column: Rtxi-5Sil M ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/15/2018 15:55 Calibration End Date: 01/15/2018 19:00 Calibration ID: 66092

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Fluorobiphenyl	1.5730 1.3582	1.5699 1.5437	1.4998 1.5936	1.4483 1.5884	1.4065	Ave		1.5090				5.7		20.0			
2,4,6-Tribromophenol (Surr)	0.2714	0.2467 0.3150	0.2659 0.3348	0.2748 0.3413	0.2748	Ave		0.2906				12.0		20.0			
Terphenyl-d14 (Surr)	0.9687 0.9131	0.9373 0.8626	0.9118 1.0941	0.9502 1.1296	0.8963	Ave		0.9626				9.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Lab Sample ID: CCVIS 460-494421/2 Calibration Date: 02/01/2018 21:38

Instrument ID: CBNAMS5 Calib Start Date: 01/15/2018 15:55

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 01/15/2018 19:00

Lab File ID: X266435.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6428	0.5550	0.0100	43200	50000	-13.7	20.0
N-Nitrosodimethylamine	Ave	1.042	0.8634		41400	50000	-17.2	20.0
Pyridine	Ave	1.793	1.492		83200	100000	-16.8	20.0
Phenol	Ave	1.932	1.812	0.8000	46900	50000	-6.2	20.0
Aniline	Ave	2.359	2.049		43400	50000	-13.2	20.0
Bis(2-chloroethyl)ether	Ave	1.533	1.409	0.7000	46000	50000	-8.1	20.0
2-Chlorophenol	Ave	1.423	1.453	0.8000	51000	50000	2.1	20.0
n-Decane	Ave	1.937	1.058	0.0100	27300	50000	-45.4*	20.0
1,3-Dichlorobenzene	Ave	1.594	1.552		48700	50000	-2.6	20.0
1,4-Dichlorobenzene	Ave	1.606	1.546		48100	50000	-3.8	20.0
Benzyl alcohol	Ave	0.9905	0.9382	0.0100	47400	50000	-5.3	20.0
1,2-Dichlorobenzene	Ave	1.514	1.461		48300	50000	-3.5	20.0
2-Methylphenol	Ave	1.347	1.214	0.7000	45100	50000	-9.8	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.410	1.283	0.0100	26600	50000	-46.8*	20.0
Acetophenone	Ave	2.024	1.811	0.0100	44700	50000	-10.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.097	0.9027	0.5000	41100	50000	-17.7	20.0
3 & 4 Methylphenol	Ave	1.537	1.349		43900	50000	-12.2	20.0
4-Methylphenol	Ave	1.537	1.349	0.6000	43900	50000	-12.2	20.0
Hexachloroethane	Ave	0.5925	0.5989	0.3000	50500	50000	1.1	20.0
n,n'-Dimethylaniline	Ave	2.185	2.126	0.0100	48700	50000	-2.7	20.0
Nitrobenzene	Ave	0.7272	0.6961	0.2000	47900	50000	-4.3	20.0
Isophorone	Ave	0.7076	0.6550	0.4000	46300	50000	-7.4	20.0
2-Nitrophenol	Ave	0.1883	0.2019	0.1000	53600	50000	7.2	20.0
2,4-Dimethylphenol	Ave	0.3232	0.3182	0.2000	49200	50000	-1.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.4448	0.4076	0.3000	45800	50000	-8.4	20.0
Benzoic acid	Ave	0.1990	0.1938		48700	50000	-2.6	20.0
2,4-Dichlorophenol	Ave	0.2812	0.2844	0.2000	50600	50000	1.1	20.0
1,2,4-Trichlorobenzene	Ave	0.3124	0.3187		51000	50000	2.0	20.0
Naphthalene	Ave	1.054	1.022	0.7000	48500	50000	-3.0	20.0
4-Chloroaniline	Ave	0.4355	0.4224	0.0100	48500	50000	-3.0	20.0
Hexachlorobutadiene	Ave	0.1716	0.1696	0.0100	49400	50000	-1.2	20.0
4-Chloro-3-methylphenol	Ave	0.2948	0.3075		52200	50000	4.3	20.0
2-Methylnaphthalene	Ave	0.7003	0.6940	0.4000	49600	50000	-0.9	20.0
1-Methylnaphthalene	Ave	0.6634	0.6593	0.0100	49700	50000	-0.6	20.0
Hexachlorocyclopentadiene	Ave	0.3847	0.2160	0.0500	28100	50000	-43.9*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6207	0.6144	0.0100	49500	50000	-1.0	20.0
2-tertbutyl-4-methylphenol	Ave	0.4403	0.4789	0.0100	54400	50000	8.8	20.0
2,4,6-Trichlorophenol	Ave	0.3968	0.4148	0.2000	52300	50000	4.5	20.0
2,4,5-Trichlorophenol	Ave	0.4232	0.4452	0.2000	52600	50000	5.2	20.0
1,1'-Biphenyl	Ave	1.616	1.661	0.0100	51400	50000	2.8	20.0
2-Chloronaphthalene	Ave	1.242	1.310	0.8000	52700	50000	5.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Lab Sample ID: CCVIS 460-494421/2 Calibration Date: 02/01/2018 21:38

Instrument ID: CBNAMS5 Calib Start Date: 01/15/2018 15:55

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 01/15/2018 19:00

Lab File ID: X266435.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Phenyl ether	Ave	0.8355	0.8921	0.0100	53400	50000	6.8	20.0
2-Nitroaniline	Ave	0.5236	0.4230	0.0100	40400	50000	-19.2	20.0
1,3-Dimethylnaphthalene	Ave	1.046	1.127	0.0100	53900	50000	7.8	20.0
Dimethyl phthalate	Ave	1.373	1.483	0.0100	54000	50000	8.0	20.0
Coumarin	Ave	0.2423	0.2535	0.0100	52300	50000	4.6	20.0
2,6-Dinitrotoluene	Ave	0.3022	0.3618	0.2000	59900	50000	19.7	20.0
Acenaphthylene	Ave	1.833	1.928	0.9000	52600	50000	5.2	20.0
3-Nitroaniline	Ave	0.3699	0.4036	0.0100	54500	50000	9.1	20.0
3,5-di-tert-butyl-4-hydroxytol	Ave	1.187	1.228	0.0100	51800	50000	3.5	20.0
Acenaphthene	Ave	1.283	1.202	0.9000	46800	50000	-6.3	20.0
2,4-Dinitrophenol	Qua		0.2156	0.0100	99300	100000	-0.7	20.0
4-Nitrophenol	Ave	0.3138	0.2823	0.0100	90000	100000	-10.0	20.0
2,4-Dinitrotoluene	Ave	0.4016	0.4715	0.2000	58700	50000	17.4	20.0
Dibenzofuran	Ave	1.753	1.804	0.8000	51500	50000	2.9	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3637	0.3432	0.0100	47200	50000	-5.6	20.0
Diethyl phthalate	Ave	1.333	1.472	0.0100	55200	50000	10.5	20.0
n-Octadecane	Ave	0.5897	0.4463	0.0100	37800	50000	-24.3*	20.0
4-Chlorophenyl phenyl ether	Ave	0.7105	0.6804	0.4000	47900	50000	-4.2	20.0
Fluorene	Ave	1.429	1.425	0.9000	49900	50000	-0.3	20.0
4-Nitroaniline	Ave	0.4018	0.4134	0.0100	51400	50000	2.9	20.0
4,6-Dinitro-2-methylphenol	QuaF		0.1305	0.0100	97600	100000	-2.4	20.0
N-Nitrosodiphenylamine	Ave	0.5574	0.5777	0.0100	51800	50000	3.6	20.0
1,2-Diphenylhydrazine	Ave	0.8987	0.7843	0.0100	43600	50000	-12.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2396	0.2199	0.1000	45900	50000	-8.2	20.0
Hexachlorobenzene	Ave	0.2792	0.2347	0.1000	42000	50000	-15.9	20.0
Pentachlorophenol	Ave	0.1742	0.0951	0.0500	54600	100000	-45.4*	20.0
Pentachloronitrobenzene	Ave	0.0951	0.1015	0.0100	53400	50000	6.8	20.0
Phenanthrene	Ave	1.102	1.091	0.7000	49500	50000	-1.1	20.0
Anthracene	Ave	1.139	1.152	0.7000	50500	50000	1.1	20.0
Carbazole	Ave	1.033	1.051	0.0100	50900	50000	1.7	20.0
Di-n-butyl phthalate	Ave	1.227	1.320	0.0100	53800	50000	7.6	20.0
Fluoranthene	Ave	1.177	1.205	0.6000	51200	50000	2.4	20.0
Benzidine	QuaF		0.6289		44900	50000	-10.3	20.0
Pyrene	Ave	1.175	1.260	0.6000	53600	50000	7.3	20.0
Bisphenol-A	Ave	0.5354	0.6196		57900	50000	15.7	20.0
Butyl benzyl phthalate	Ave	0.5226	0.6249	0.0100	59800	50000	19.6	20.0
2,3,7,8-TCDD	Ave	0.1961	0.2056	0.0100	524	500	4.9	20.0
Carbamazepine	Ave	0.4661	0.5711	0.0100	61300	50000	22.5*	20.0
3,3'-Dichlorobenzidine	Qua		0.4841	0.0100	49100	50000	-1.8	20.0
Benzo[a]anthracene	Ave	1.169	1.226	0.8000	52500	50000	4.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Lab Sample ID: CCVIS 460-494421/2 Calibration Date: 02/01/2018 21:38

Instrument ID: CBNAMS5 Calib Start Date: 01/15/2018 15:55

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 01/15/2018 19:00

Lab File ID: X266435.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Bis(2-ethylhexyl) phthalate	Ave	0.7539	0.8405	0.0100	55700	50000	11.5	20.0
Chrysene	Ave	1.109	1.161	0.7000	52400	50000	4.7	20.0
Di-n-octyl phthalate	Ave	1.130	1.525	0.0100	67500	50000	35.0*	20.0
Benzo[b]fluoranthene	Ave	1.002	1.225	0.7000	61100	50000	22.3*	20.0
Benzo[k]fluoranthene	Ave	1.150	1.258	0.7000	54700	50000	9.4	20.0
Benzo[a]pyrene	Ave	0.9783	1.171	0.7000	59900	50000	19.7	20.0
Indeno[1,2,3-cd]pyrene	QuaF		1.353	0.5000	59600	50000	19.1	20.0
Dibenz(a,h)anthracene	Lin2		1.149	0.4000	53200	50000	6.4	20.0
Benzo[g,h,i]perylene	Ave	1.058	1.121	0.5000	53000	50000	6.0	20.0
2-Fluorophenol (Surr)	Ave	1.415	1.437		50800	50000	1.5	20.0
Phenol-d5 (Surr)	Ave	1.797	1.672		46500	50000	-7.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3961	0.3734		47100	50000	-5.7	20.0
2-Fluorobiphenyl	Ave	1.509	1.541		51000	50000	2.1	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.2906	0.2482		42700	50000	-14.6	20.0
Terphenyl-d14 (Surr)	Ave	0.9626	0.9457		49100	50000	-1.8	20.0

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Client Sample ID: SB-101A Lab Sample ID: 460-149327-1

Instrument ID (1): CPESTGC5 Instrument ID (2): CPESTGC5

Date Analyzed (1): 02/04/2018 13:32 Date Analyzed (2): 02/04/2018 13:32

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
gamma-Chlordane	1		3.34	3.32	3.34	13		15.0
	2		3.96	3.94	3.96	11		
alpha-Chlordane	1		3.44	3.42	3.44	29		69.7
	2		4.12	4.10	4.12	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Client Sample ID: SB-102B Lab Sample ID: 460-149327-4

Instrument ID (1): CPESTGC5 Instrument ID (2): CPESTGC5

Date Analyzed (1): 02/05/2018 10:17 Date Analyzed (2): 02/05/2018 10:17

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
gamma-Chlordane	1		3.33	3.32	3.34	23		28.6
	2		3.95	3.94	3.96	31		
alpha-Chlordane	1		3.43	3.42	3.44	47		46.8
	2		4.11	4.10	4.12	29		
4,4'-DDE	1		3.49	3.48	3.50	0.020		31.4
	2		4.29	4.28	4.30	0.014		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Client Sample ID: SB-103A Lab Sample ID: 460-149327-5

Instrument ID (1): CPESTGC5 Instrument ID (2): CPESTGC5

Date Analyzed (1): 02/04/2018 14:24 Date Analyzed (2): 02/04/2018 14:24

GC Column (1): Rtx-CLP ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
gamma-Chlordane	1		3.34	3.32	3.34	23		9.1
	2		3.96	3.94	3.96	25		
alpha-Chlordane	1		3.44	3.42	3.44	47		67.6
	2		4.12	4.10	4.12	23		
4,4'-DDE	1		3.50	3.48	3.50	0.013		19.6
	2		4.30	4.28	4.30	0.011		

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCBP1 #	DCBP2 #
SB-101A	460-149327-1	128	132	133	136
SB-101B	460-149327-2	133	138	142	140
SB-102A	460-149327-3	103	113	117	131
SB-102B	460-149327-4	103	122	118	136
SB-103A	460-149327-5	106	115	112	124
SB-104A	460-149327-6	122	128	136	137
	MB 460-494460/1-A	131	138	141	140
	LCS 460-494460/2-A	125	132	135	133
	460-149324-E-1-C MS	119	133	124	137
	460-149324-E-1-D MSD	117	130	120	134

	QC LIMITS
TCX = Tetrachloro-m-xylene	30-150
DCBP = DCB Decachlorobiphenyl	30-150

Column to be used to flag recovery values

FORM II 8082A

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB-101A MS
Lab ID: 460-149327-1 MS
Lab Name: TestAmerica Edison
Job No.: 460-149327-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 40.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	6434		6160		485	57	75-125	4	6010C
Silver	11.71		0.74	U	12.1	97	75-125		6010C
Antimony	101.4		1.2	U	121	84	75-125		6010C
Arsenic	480.6		2.7	J	485	99	75-125		6010C
Barium	644.4		141		485	104	75-125		6010C
Beryllium	12.87		0.37	J	12.1	103	75-125		6010C
Cadmium	13.15		0.60	J	12.1	104	75-125		6010C
Calcium	32680		39700		4850	-145	75-125	4	6010C
Chromium	68.22		17.0		48.5	106	75-125		6010C
Cobalt	135.6		5.1	J	121	108	75-125		6010C
Copper	102.4		38.9		60.6	105	75-125		6010C
Iron	12340		11300		242	432	75-125	4	6010C
Lead	189.8		78.2		121	92	75-125		6010C
Magnesium	12090		10400		4850	35	75-125	F1	6010C
Manganese	421.3		345		121	63	75-125	F1	6010C
Nickel	144.4		15.4	J	121	106	75-125		6010C
Potassium	6424		1370	J	4850	104	75-125		6010C
Selenium	491.7		2.9	U	485	101	75-125		6010C
Sodium	4849		187	U	4850	100	75-125		6010C
Thallium	518.3		2.9	U	485	107	75-125		6010C
Vanadium	145.0		26.4		121	98	75-125		6010C
Zinc	272.9		161		121	92	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SB-101A PDS | Lab ID: 460-149327-1 PDS

Lab Name: TestAmerica Edison | Job No.: 460-149327-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7501		6160		970	139	80-120		6010C
Silver	20.84		0.74	U	24.2	86	80-120		6010C
Antimony	205.9		1.2	U	242	85	80-120		6010C
Arsenic	828.2		2.7	J	970	85	80-120		6010C
Barium	1023		141		970	91	80-120		6010C
Beryllium	22.20		0.37	J	24.2	90	80-120		6010C
Cadmium	22.03		0.60	J	24.2	88	80-120		6010C
Calcium	51640		39700		9700	123	80-120		6010C
Chromium	105.4		17.0		97.0	91	80-120		6010C
Cobalt	227.5		5.1	J	242	92	80-120		6010C
Copper	148.2		38.9		121	90	80-120		6010C
Iron	12460		11300		485	NC	80-120		6010C
Lead	291.6		78.2		242	88	80-120		6010C
Magnesium	19420		10400		9700	93	80-120		6010C
Manganese	586.7		345		242	100	80-120		6010C
Nickel	233.6		15.4	J	242	90	80-120		6010C
Potassium	9634		1370	J	9700	85	80-120		6010C
Selenium	835.9		2.9	U	970	86	80-120		6010C
Sodium	8524		187	U	9700	88	80-120		6010C
Thallium	885.4		2.9	U	970	91	80-120		6010C
Vanadium	245.0		26.4		242	90	80-120		6010C
Zinc	386.9		161		242	93	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: SB-101A DU | Lab ID: 460-149327-1 DU

Lab Name: TestAmerica Edison | Job No.: 460-149327-1

SDG No.:

% Solids for Sample: 40.4 | % Solids for Duplicate: 40.4

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	95.1	6160		6206		0.8		6010C
Silver	4.8	0.74	U	0.73	U	NC		6010C
Antimony	9.5	1.2	U	1.1	U	NC		6010C
Arsenic	7.1	2.7	J	2.83	J	5		6010C
Barium	95.1	141		141.4		0.5		6010C
Beryllium	0.95	0.37	J	0.296	J	23		6010C
Cadmium	1.9	0.60	J	0.549	J	8		6010C
Calcium	2380	39700		39960		0.6		6010C
Chromium	4.8	17.0		17.05		0.5		6010C
Cobalt	23.8	5.1	J	5.03	J	1		6010C
Copper	11.9	38.9		39.30		0.9		6010C
Iron	71.3	11300		11330		0.4		6010C
Lead	4.8	78.2		78.37		0.2		6010C
Magnesium	2380	10400		10340		0.5		6010C
Manganese	7.1	345		347.1		0.7		6010C
Nickel	19.0	15.4	J	15.61	J	1		6010C
Potassium	2380	1370	J	1383	J	1		6010C
Selenium	9.5	2.9	U	2.9	U	NC		6010C
Sodium	2380	187	U	185.8	J	NC		6010C
Thallium	9.5	2.9	U	2.8	U	NC		6010C
Vanadium	23.8	26.4		26.72		1		6010C
Zinc	14.3	161		161.1		0.06		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCSSRM 460-494181/2-A

Lab Name: TestAmerica Edison Job No.: 460-149327-1

Sample Matrix: Solid LCS Source: ME_LCSS_97_00007

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	8000	7733		96.7	47.4	152.5		6010C
Silver	40.7	42.84		105.3	79.6	120.4		6010C
Antimony	65.1	42.67		65.5	0.2	212.0		6010C
Arsenic	147	154.2		104.9	83.0	117.0		6010C
Barium	314	348.0		110.8	82.2	117.8		6010C
Beryllium	53.4	60.49		113.3	82.8	117.2		6010C
Cadmium	193	208.2		107.9	82.4	117.6		6010C
Calcium	4580	4761		103.9	80.8	119.0		6010C
Chromium	82.6	88.86		107.6	81.8	118.2		6010C
Cobalt	81.3	92.57		113.9	83.4	116.6		6010C
Copper	171	184.2		107.7	83.6	116.4		6010C
Iron	14100	14700		104.3	60.4	139.7		6010C
Lead	92.3	102.2		110.7	82.8	117.0		6010C
Magnesium	2240	2222		99.2	75.4	125.0		6010C
Manganese	222	235.3		106.0	82.0	118.0		6010C
Nickel	137	155.5		113.5	82.5	118.2		6010C
Potassium	2000	1908		95.4	69.5	130.5		6010C
Selenium	187	200.2		107.1	79.1	121.4		6010C
Sodium	216	210.4	J	97.4	72.2	127.8		6010C
Thallium	153	172.3		112.6	81.0	119.0		6010C
Vanadium	86.6	90.35		104.3	77.6	122.4		6010C
Zinc	189	204.5		108.2	79.9	120.1		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-149327-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 495045		Date: 02/05/2018 13:22	Prep Batch: 495031			Date: 02/05/2018 12:24					
						LCS Source: WTcyanideSO_00024					
9012B	LCSSRM 460-495031/2-A ^20	Cyanide, Total	54.72		mg/Kg	157	34.9	23.5-11	0.2		

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

Laboratory Reports

(Laboratory Reports attached as separate files)