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29 June 2018

Mr. David Chiusano  
Remedial Bureau E, Section A  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, NY 12233-7017

RE: Groundwater Monitoring and Inspection Report March 2018  
Metal Etching Co., Inc. Site (130110), Freeport, New York  
Contract/Work Assignment No.: D007624  
EA Project No. 14907.09

Dear Mr. Chiusano:

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) are pleased to provide a summary of the annual groundwater sampling event and site inspection completed at the Metal Etching Co., Inc. Site (Site) in March 2018.

The Site is in Freeport, Nassau County, New York (**Figure 1**). The Site was remediated by select excavation and disposal of impacted site soil, and placement of fill material above the low-tide groundwater elevation. Engineering controls installed as part of the remedial action include site cover in the form of asphalt, porous pavement, and stone. There is also one active sub-slab depressurization system at the office building located on the Site. Site monitoring and inspection activities were performed in accordance with the Site Management Plan (SMP) (EA 2014)<sup>1</sup>. The purpose of this letter report is to summarize the results of the March 2018 groundwater monitoring event and site inspection.

## 1. OBJECTIVES

Environmental monitoring locations are periodically maintained and sampled to assess the potential for residual impacts to the environment immediately surrounding the Site. Additionally, the data generated during monitoring events is used to evaluate groundwater quality conditions onsite and in the vicinity of the Site, and provide documentation supporting eventual site closure.

The SMP requires that monitoring wells identified in the Metal Etching Co., Inc. Site Monitoring Wells list be gauged and sampled on a semi-annual basis. The SMP was updated in 2017, which changed the status of sampling to an annual basis. A site and engineering controls inspection

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<sup>1</sup> EA. 2014. Site Management Plan. Metal Etching Co. Site, Nassau County, Freeport, New York. Final Revised. April.



must also be completed. **Figure 2** presents the current monitoring well locations that were sampled during the March 2018 monitoring event.

| Monitoring Well ID  |         |
|---------------------|---------|
| MW-04               | MW-09DR |
| MW-05R              | MW-10S  |
| MW-06               | MW-10D  |
| MW-08SR             | MW-10M  |
| MW-08DR             | MW-11S  |
| MW-09SR             | MW-11D  |
| NOTES:              |         |
| ID = Identification |         |

Groundwater samples collected from the monitoring wells during the March 2018 sampling event were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260C, metals/mercury by EPA Methods 6010C/7470A, and monitored natural attenuation (MNA) parameters including chloride, nitrate, sulfate, sulfide, total organic carbon (TOC), and dissolved gasses; methane, ethane and ethane, per the SMP and recommendations from previous monitoring events. In addition, groundwater samples were analyzed for perfluorinated compounds (PFCs) by EPA Method E537. Groundwater purging and sampling were conducted using a peristaltic pump. The quality control duplicate sample was collected from monitoring well MW-11S.

## 2. MONITORING ACTIVITIES

### 2.1 WATER LEVEL GAUGING

The existing monitoring wells at the site consist of 5 deep and shallow monitoring well pairs, as well as 2 solitary shallow monitoring wells. There are 7 shallow wells with depths ranging from approximately 13 to 18 feet (ft) below ground surface (bgs), and 5 deep wells with depths ranging from 27 to 32 ft bgs. The Site is located directly adjacent to Freeport Creek, which connects to the Atlantic Ocean through a series of salt marshes; and therefore, is tidally influenced. Due to the proximity of the Site to these waters, site groundwater elevation is tidally influenced, and typically ranges between 3 to 5 ft bgs. Groundwater sampling during the March 2018 event was performed during the 4-hour period surrounding high tide. High tide occurred at 11:42 a.m. on 6 March 2018; at 12:12 a.m. and 12:31 p.m. on 7 March 2018; and at 1:00 a.m. and 1:21 p.m. on 8 March 2018. Groundwater sampling took place from 9:42 a.m. to 1:42 p.m. on 6 March 2018; 10:30 a.m. to 2:30 p.m. on 7 March 2018; and 11:30 a.m. to 3:30 p.m. on 8 March 2018. Each monitoring well within the site monitoring well network was gauged during a complete round of gauging following on 8 March 2018 within a half hour of high tide. The complete round of gauging was used to assess potentiometric surface elevations and evaluate groundwater flow patterns at the Site during high tide.



Groundwater elevation data from the March 2018 gauging event is summarized in the following table.

| Well ID                                                             | Well Casing Elevation (ft AMSL) | Depth to Water (ft btoc) 8 March 2018 | Water Elevation (ft AMSL) 8 March 2018 |
|---------------------------------------------------------------------|---------------------------------|---------------------------------------|----------------------------------------|
| MW-06                                                               | 4.34                            | 1.84                                  | 2.50                                   |
| MW-05R                                                              | 4.02                            | 0.42                                  | 3.60                                   |
| MW-04                                                               | 6.02                            | 3.31                                  | 2.74                                   |
| MW-08DR                                                             | 5.24                            | 2.62                                  | 2.62                                   |
| MW-08SR                                                             | 5.41                            | 2.43                                  | 2.98                                   |
| MW-9D                                                               | 4.16                            | 1.58                                  | 2.58                                   |
| MW-9S                                                               | 4.27                            | 1.60                                  | 2.67                                   |
| MW-10D                                                              | 5.30                            | 2.65                                  | 2.65                                   |
| MW-10M                                                              | 5.37                            | 2.74                                  | 2.63                                   |
| MW-10S                                                              | 5.09                            | 2.41                                  | 2.68                                   |
| MW-11S                                                              | 4.05                            | 1.33                                  | 2.72                                   |
| MW-11D                                                              | 3.96                            | 1.29                                  | 2.67                                   |
| NOTES:<br>btoc = Below top of casing<br>AMSL = Above mean sea level |                                 |                                       |                                        |

Interpreted shallow groundwater potentiometric surface flow patterns for the March 2018 gauging event are presented on **Figure 2**. Groundwater fluctuates with the tides, and typically flows from northwest to southeast across the Site during low tides and southeast to northwest during high tides. The March 2018 gauging event was completed during high tide, with groundwater flowing in a northwest direction.

## 2.2 GROUNDWATER SAMPLING PROCEDURES

Groundwater monitoring wells were purged with a peristaltic pump. Field groundwater quality parameters were collected using a water quality meter that was calibrated in accordance with manufacturer's specifications prior to use (i.e., pH, dissolved oxygen, temperature, conductivity, turbidity, and oxidation reduction potential [ORP]).

Purging was considered complete once three consecutive field parameter readings satisfied the following criteria:

| Parameter                                                                                                                      | Definition of Stability                |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Turbidity                                                                                                                      | <5 NTU, or within 10 percent of each   |
| DO                                                                                                                             | <0.5 mg/L or within 10 percent of each |
| Conductance                                                                                                                    | Within 3 percent of each               |
| pH                                                                                                                             | +/- 0.1 unit                           |
| ORP                                                                                                                            | +/- 10 mV                              |
| NOTES:<br>DO = Dissolved oxygen<br>mg/L = Milligram(s) per kilogram<br>mV = Millivolt(s)<br>NTU = Nephelometric turbidity unit |                                        |



Groundwater quality data were recorded on field purging and sampling forms and are provided in **Attachment A**. Daily field reports are provided in **Attachment B**.

Samples from each well location were also analyzed for PFCs as part of this sampling event. Due to the high sensitivity of these parameters and the potential sources of trace levels of PFCs, several precautions were taken to reduce the risk of false detections within samples.

The following general preparations were taken prior to and during the sampling event:

- ***Food Considerations:***

- Field personnel avoided the use of paper bags, paper packaging, aluminum foil, and coated paper packaging or coated textiles to be in contact with food products.
- Avoided eating any fried foods.
- Did not eat snacks or meals within the immediate vicinity of the monitoring wells or inside the vehicle.
- Removed gloves prior to eating.
- Meals were eaten downwind of the well locations, if necessary.

- ***Field Gear:***

- Field personnel avoided plastic coating or glued materials, waterproof field books/paper, pens and sharpie markers. The use of aluminum clipboards was allowed with loose leaf paper.
- Disposable nitrile gloves were always worn and changed frequently.
- Did not wear water resistant, waterproof, or stain-treated clothing. Field clothing was laundered with minimal use of soap, and no fabric softeners or scented products were used. Clothing was rinsed with water after the initial cleaning.

- ***Field Vehicle:***

- The field vehicle seats were covered with a well laundered cotton blanket for the duration of the sampling event.

- ***Personal Hygiene:***

- Field personnel did not use shampoo, conditioner, hand cream, etc. as part of their personal cleaning/showering routine on the day of the sampling event. A shower the night before the sampling event, or a rinse with water the day of was acceptable.





- Moisturizers, cosmetics, sunscreen or insect repellent were not used throughout the duration of the sampling event.
- Handwashing with soap was allowed and the field personnel allowed extra rinsing time with water after use of soap.

Samples were collected using a high-density polyethylene (HDPE) tubing. The tubing that was connected to the Horiba during the collection of water quality parameters was cut prior to sampling. Sample tubing did not touch the sample jars during sample collection. Dedicated tubing was used at each well.

After collected, samples were placed in a cooler with ice that was bagged in HDPE bags for shipment to the laboratory. Groundwater samples for PFCs were submitted to Con-Test Analytical Laboratory located in East Longmeadow, Massachusetts. Groundwater samples for VOCs, metals, and MNA parameters were submitted to Eurofins Spectrum Analytical located in Agawam, Massachusetts. Both are New York State Department of Health Environmental Laboratory Analytical Program-certified laboratories.

The following table summarizes groundwater quality data readings prior to sample collection in March 2018.

| Well ID                                                               | pH   | Temperature (°C) | Conductivity (mS/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) |
|-----------------------------------------------------------------------|------|------------------|----------------------|-------------------------|-----------------|----------|
| MW-04                                                                 | 7.42 | 11.01            | 0.282                | 1.26                    | 0.0             | -51      |
| MW-05R                                                                | 7.06 | 7.03             | 1.61                 | 1.78                    | 1.7             | -181     |
| MW-06                                                                 | 7.18 | 10.06            | 3.360                | 0.0                     | 12.5            | -103     |
| MW-8DR                                                                | 6.84 | 16.01            | 0.902                | 0.0                     | 4.7             | -46      |
| MW-8SR                                                                | 7.93 | 10.88            | 0.573                | 0.0                     | 0.9             | 55       |
| MW-9D                                                                 | 7.33 | 9.52             | 0.714                | 5.93                    | 12.1            | -115     |
| MW-9S                                                                 | 7.70 | 7.81             | 0.119                | 2.64                    | 28.7            | -61      |
| MW-10D                                                                | 6.72 | 10.86            | 0.420                | 1.17                    | 5.2             | -78      |
| MW-10M                                                                | 6.98 | 10.91            | 0.997                | 0.0                     | 3.5             | -30      |
| MW-10S                                                                | 7.51 | 9.99             | 0.832                | 0.0                     | 3.5             | -120     |
| MW-11D                                                                | 7.01 | 11.82            | 1.460                | 0.43                    | 0.0             | -25      |
| MW-11S                                                                | 7.74 | 10.81            | 0.883                | 0.43                    | 21.3            | -260     |
| NOTES:<br>°C = Degrees Celsius<br>mS/cm = MilliSiemens per centimeter |      |                  |                      |                         |                 |          |

### 3. ANALYTICAL RESULTS

Summaries of detected analytes in groundwater collected during the March 2018 monitoring event are provided in **Tables 1 through 4**. Analytical results for aqueous and associated quality assurance/quality control samples collected from site-related monitoring wells were compared against NYSDEC Ambient Water Quality Standards (AWQS) for Class GA groundwater criteria. **Figure 3** shows interpreted isopleths of tetrachloroethene (PCE) concentrations during the



March 2018 sampling event. Laboratory Analytical results and Data Usability Summary Reports are provided in **Attachment C**.

### **3.1 ORGANIC PARAMETERS – REQUIRED BY SITE MANAGEMENT PLAN**

Analytical results associated with groundwater samples collected in March 2018 were submitted for VOC analysis and are summarized in **Table 1** along with prior sampling results.

Notable results included:

- Benzene was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 1 microgram per liter ( $\mu\text{g/L}$ ) in monitoring well MW-06 (1.13  $\mu\text{g/L}$ ).
- Cis-1,2-Dichloroethene (cis-1,2-DCE) was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 5  $\mu\text{g/L}$  in monitoring wells MW-08DR (5.25  $\mu\text{g/L}$ ) and MW-09D (84.2  $\mu\text{g/L}$ ) during the March 2018 sampling event.
- PCE was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 5  $\mu\text{g/L}$  in monitoring well MW-08DR (725  $\mu\text{g/L}$ ) during the March 2018 sampling event.
- Trichloroethene (TCE) was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 5  $\mu\text{g/L}$  in monitoring wells MW-08DR (5.2  $\mu\text{g/L}$ ), and MW-09D (12.4  $\mu\text{g/L}$ ).
- Vinyl chloride was detected at a concentration exceeding the NYSDEC AWQS Class GA criteria of 2  $\mu\text{g/L}$  in MW-09D with a concentration of 21.5  $\mu\text{g/L}$ .

### **3.2 INORGANIC PARAMETERS – REQUIRED BY SITE MANAGEMENT PLAN**

Analytical results associated with groundwater samples that were collected in March 2018 and submitted for metals and mercury analysis are summarized in **Table 2** along with prior sampling results. Presented are exceedences of NYSDEC AWQS Class GA criteria:

- Iron was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 0.3 mg/L in 11 of the 12 site monitoring wells during the March 2018 sampling event with concentrations ranging from 0.0716 mg/L (MW-08SR) to 25.6 mg/L (MW-11S).
- Magnesium was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 35 mg/L in monitoring well MW-06 during the March 2018 sampling event with a concentration of 47.7 mg/L.
- Arsenic was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 0.005 mg/L in MW-09SR (0.0144 mg/L) and MW-09DR (0.016 mg/L) during the March 2018 sampling event.



- Copper was detected in monitoring well MW-09D (1.35 mg/L) and in monitoring well MW-09S (1.0 mg/L) above the NYSDEC AWQS Class GA criteria of 0.2 mg/L during the March 2018 sampling event.
- Manganese was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 0.3 mg/L in 9 of the 12 site monitoring wells during the March 2018 sampling event. Concentrations ranged from 0.329 mg/L (MW-08DR) to 0.87 mg/L (MW-05R).
- Sodium was detected at concentrations exceeding the NYSDEC AWQS Class GA criteria of 20 mg/L in 11 of the 12 site monitoring wells during both sampling events. Concentrations ranged from 24.8 mg/L (MW-09DR) to 319 mg/L (MW-06).

### **3.3 MONITORED NATURAL ATTENUATION PARAMETERS – REQUIRED BY SITE MANAGEMENT PLAN**

As part of the groundwater monitoring program, groundwater samples collected in March 2018 were submitted for MNA parameter analysis including chloride, sulfate, sulfide, nitrate, methane, ethane, ethene, and total organic carbon and are summarized along with prior sampling results in **Table 3**.

Notable monitored natural attenuation parameters include:

- Natural attenuation of chlorinated volatile organic compounds (CVOCs) primarily occurs under anaerobic conditions that are reflected by DO concentrations below 0.5 mg/L and ORP less than 0.0 mV. This condition was observed in 6 of the 12 monitoring wells at the Site, including monitoring well MW-08DR, which typically contain CVOCs.
- A TOC concentration less than 20 mg/L is a limiting factor in the availability of electron donors required for reductive dechlorination of CVOCs. TOC was detected in monitoring wells MW-09S (343 mg/L) and MW-09D (230 mg/L) at a concentration greater than 20 mg/L in March 2018.
- If nitrate concentrations are less than 1 mg/L, along with DO concentrations less than 0.5 mg/L and increased sulfide concentrations, it can be concluded that anaerobic conditions exist at the Site. Nitrate concentrations were less than 1 mg/L or not detected in all monitoring wells at the Site except for monitoring wells MW-8DR and MW-11D. DO was less than 0.5 mg/L in 7 of the 12 wells. Sulfide had previously never been detected in any of the monitoring wells. During the March 2018 sampling event, sulfide was detected in 4 wells that ranged from 0.07 through 0.45 mg/L.
- Sulfate concentrations greater than 20 mg/L can cause competitive exclusion of reductive dechlorination. Sulfate concentrations were less than 20 mg/L in monitoring wells MW-04, MW-05R, MW-09S, MW-09D, and MW10D.
- Chloride was detected above 250 mg/L in 4 of the 12 site monitoring wells; however, it is a major contributor to the ion composition of natural seawater, typically found at



concentrations of roughly 19,000 mg/L. Therefore, it is not a reliable metric for measuring MNA in sites influenced by tides.

- Ethene, and ultimately ethane are the products of reductive dehalogenation of chlorinated ethenes; ethane and/or ethene were detected in 2 of the 12 site monitoring wells.

### 3.4 PERFLUORINATED COMPOUNDS

Analytical results associated with groundwater samples that were collected in March 2018 and submitted for PFC analysis, are summarized in **Table 4** along with prior sampling results.

Presented are exceedances of NYSDEC AWQS Class GA criteria:

- PFCs were detected above the EPA health advisory level of 70 nanograms per liter for drinking water in 4 of the 12 site monitoring wells.

## 4. SITE INSPECTION RESULTS

### 4.1 SITE INSPECTION

The inspection of the site and its appurtenances was conducted on 8 March 2018. Findings and observations were recorded on the site-specific inspection forms (**Attachment D**).

Detailed notable findings include:

- Overall, the Site was in good condition. There was no evidence of vandalism.
- The porous pavement was tested for permeability with several gallons of water in three areas. Infiltration occurred at a moderately slow pace, with water spreading out before it started to infiltrate. There is some evidence of ponding on the porous pavement – the puddles were small in size and evident based on dried dirt/staining in an area that looked as though it had settled.
- The front fence is fully intact, and the electric fence opener is functional.
- The concrete around the east drain is cracking and damaged.
- The sub-slab depressurization system on the office building was in operation at the time of the site inspection. The manometer read 4.4 pounds per square inch in March 2018. Cracking was observed in the elbow of the system vent piping.
- The system on the warehouse has been decommissioned and was not in operation.
- Monitoring wells are in generally good condition and are serving the intended purpose.



- Monitoring wells MW-04 and MW-06 showed some minor cracking around the well collars.

## **5. DISCUSSION AND RECOMMENDATIONS**

### **5.1 ANALYTICAL DATA SUMMARY**

The main VOC contaminants of concern, PCE and breakdown analytes TCE, cis-1,2-DCE, and vinyl chloride have consistently been detected at concentrations exceeding the NYSDEC AWQS in monitoring wells MW-08DR and MW-09D. Overall, concentrations in monitoring wells MW-08DR and MW-09D have fluctuated, though the concentrations of PCE and TCE in MW-09D were the lowest they have been observed since post-remediation monitoring began in 2012.

Concentrations of metals detected in monitoring well samples during the March 2018 event were generally consistent with concentrations detected during previous events. MNA parameters were collected during the March 2018 sampling event. DO and ORP were at levels favorable to reductive dechlorination in 6 of the monitoring wells, including monitoring well MW-08DR. Concentrations of sulfate, ethane, and ethene indicate that anaerobic reductive dechlorination may be occurring, although concentrations of other MNA parameters were not favorable to dechlorination.

### **5.2 RECOMMENDATIONS**

Groundwater sampling for VOCs, metals, MNA parameters, and PFCs, along with site inspections, shall continue to be conducted on an annual basis to continue to monitor site groundwater during high and low tides.

Some of the site drainage features need maintenance and repair; the following actions are recommended:

- Porous pavement should be vacuumed to remove pore-clogging sediment and improve permeability.
- Repairs should be made to the east drain.

If you have any questions regarding the results of this report, please do not hesitate to contact me at (315) 431-4610, Ext. 1860.

Sincerely,

EA SCIENCE AND TECHNOLOGY

A handwritten signature in black ink that reads 'Megan Miller'.

Megan Miller  
Project Manager

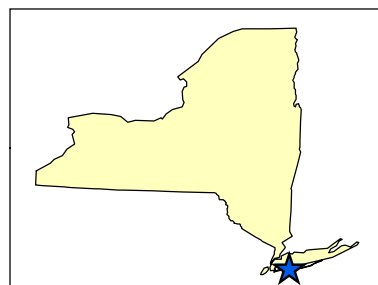
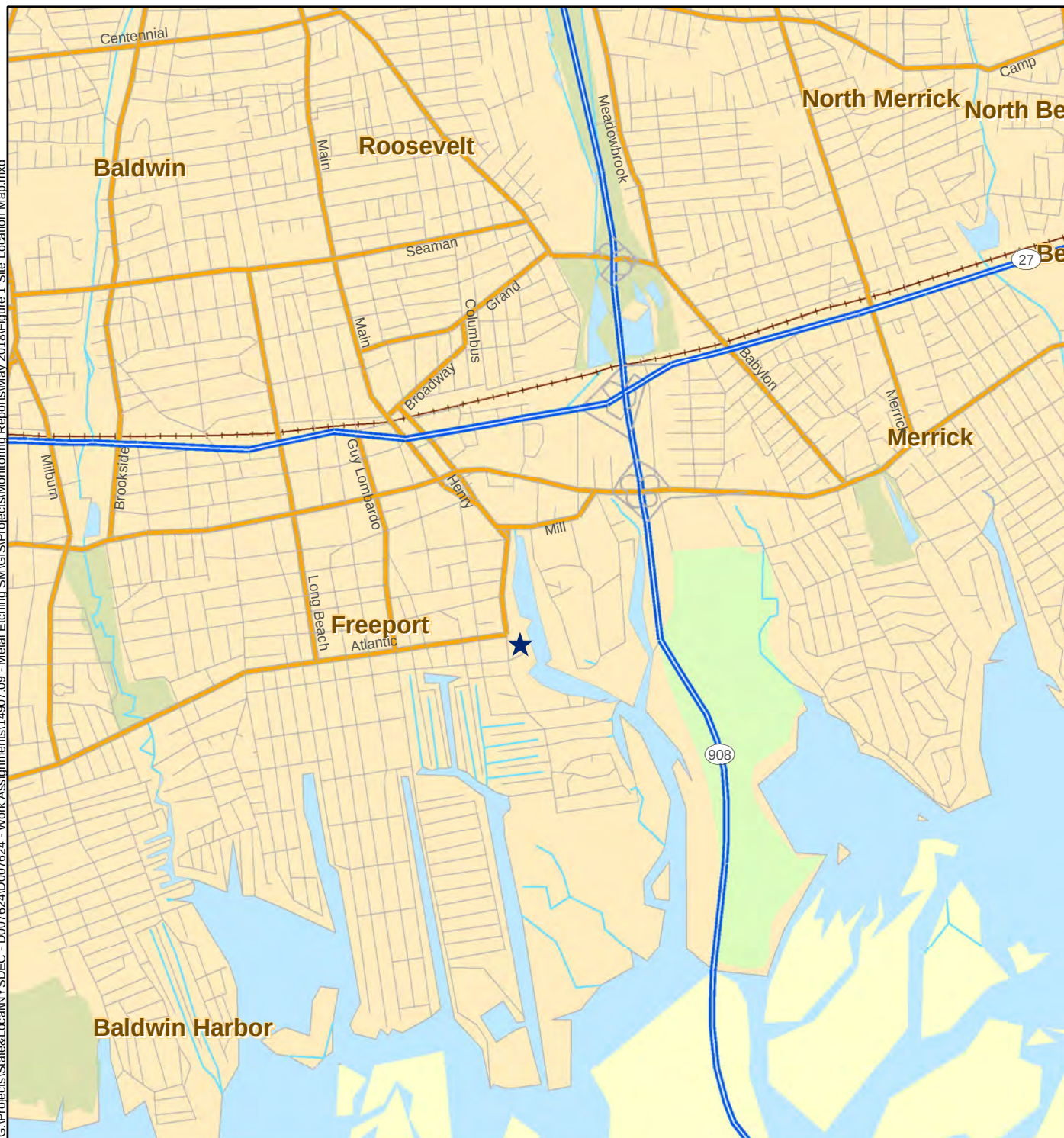
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## Figures

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G:\Projects\State&Local\NYSDEC - D007624\D007624 - Work Assignments\14907.09 - Metal Etching SM\GIS\Projects\Monitoring Reports\May 2018\Figure 1 Site Location Map.mxd



**Legend**  
★ Site Location

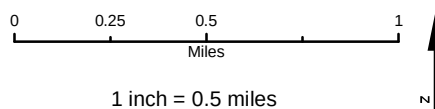
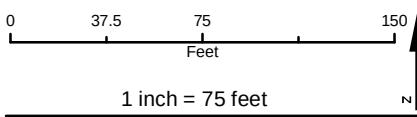
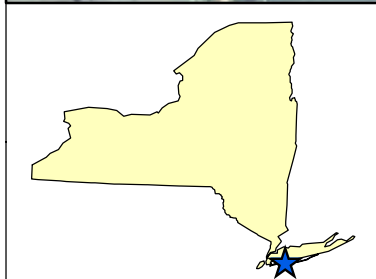


Figure 1  
Site Location Map  
Metal Etching Co., Inc. Site (130110)  
Freeport, New York

Map Date: 5/22/2018  
Projection: NAD 1983 State Plane New York Long Island FIPS 3104 Feet





**Legend**

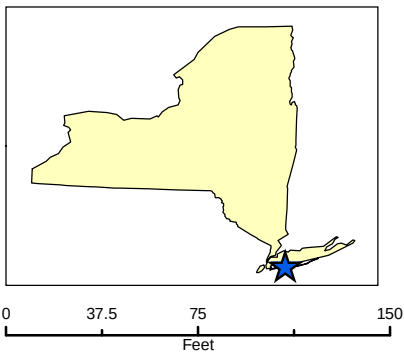
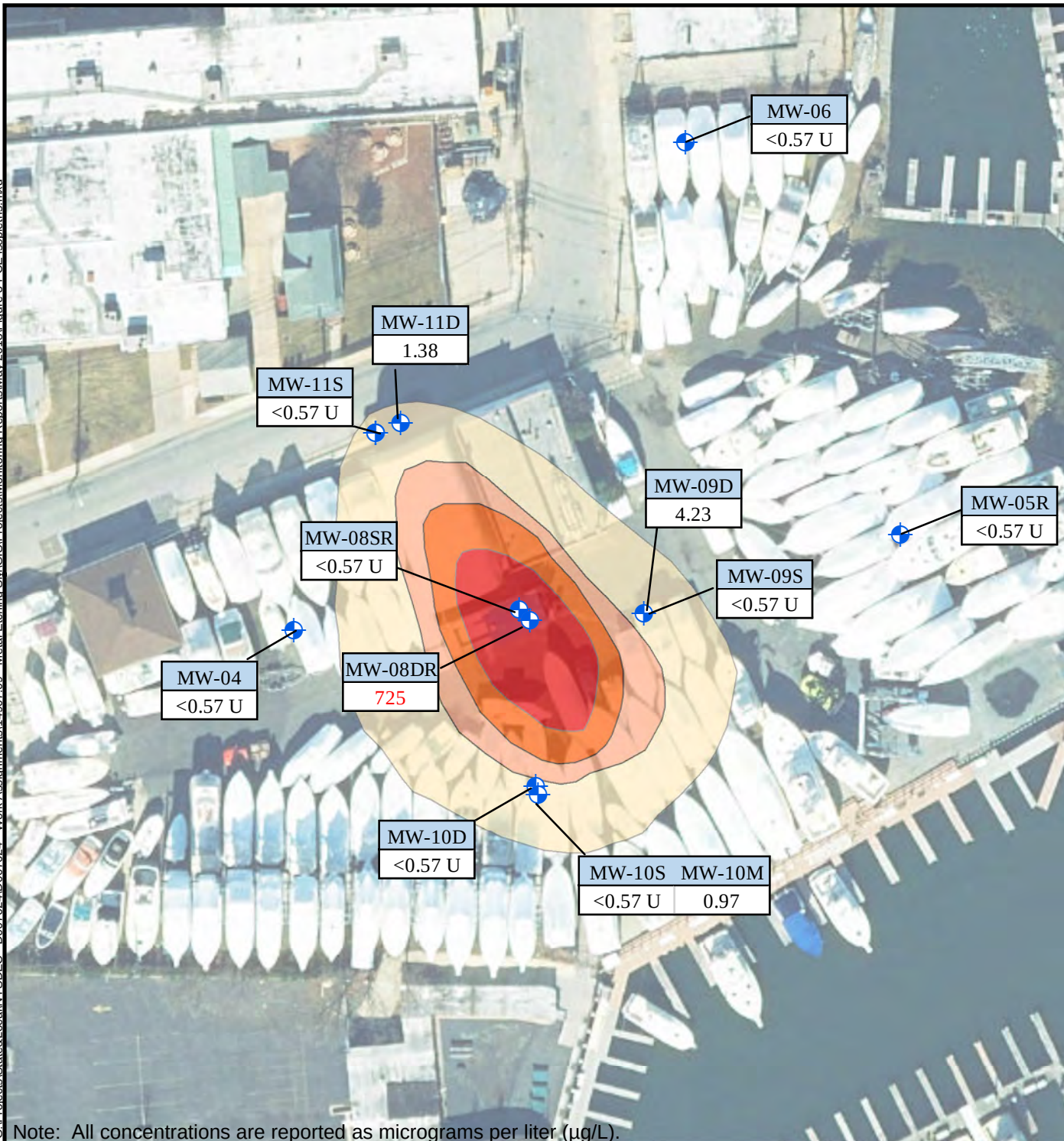
- Existing Monitoring Well
- Shallow Groundwater Contours
- (0.5) Groundwater Elevation in feet above mean sea level
- Groundwater Flow Direction

Figure 2  
Shallow Groundwater Contours  
High-Tide Conditions March 2018  
Metal Etching Site (130110)  
Freeport, New York

Map Date: 5/24/2018  
Projection: NAD 1983 State Plane New York Long Island FIPS 3104 Feet



G:\Projects\State&Local\NYSDEC - D007624\007624 - Work Assignments\14907.09 - Metal Etching SM\GIS\Projects\Monitoring Reports\May 2018\Figure 3 PCE isopleths.mxd



#### Legend



Monitoring Wells

| Well Identification                           |
|-----------------------------------------------|
| Tetrachloroethene µg/L                        |
| Red value indicates exceedance of NYSDEC AWQS |

- 1 - 5 µg/L
- 5 - 10 µg/L
- 10 - 100 µg/L
- 100 - 1,000 µg/L

Figure 3  
Tetrachloroethene Isopleths  
March 2018  
Metal Etching Site (130110)  
Freeport, New York

Map Date: 6/6/2018  
Projection: NAD 1983 State Plane New York Long Island FIPS 3104 Feet

AWQS = Ambient Water Quality Standard  
NYSDEC = New York State Department of Environmental Conservation



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## Tables

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Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Location ID   | MW-04       |   |             |   |             |    |             |    |             |   |             |   |             |   |             |    |             |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |   |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|---|-------------|---|-------------|----|-------------|----|-------------|---|-------------|---|-------------|---|-------------|----|-------------|---|----------------------------------------------------------|---|--------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Laboratory ID | 12K0749-02  |   | 13E0755-07  |   | 13K0947-02  |    | 14F0194-07  |    | 14K0664-04  |   | 15E0606-07  |   | 15K0954-03  |   | 16E0858-06  |    | SC34122-01  |   | SC44537-05                                               |   |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater                                              |   |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sample Date   | 11/19/2012  |   | 5/20/2013   |   | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |   | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |    | 4/27/2017   |   | 3/6/2018                                                 |   |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Tidal Phase   | Ebb         |   | Low/Flood   |   | High/Ebb    |    | Flood/High  |    | Ebb         |   | Low         |   | High        |   | Low         |    | Low         |   | High                                                     |   |        |
| 1,1-dichloroethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.21)     | U | (<0.16)     | U  | (<0.3)      | U | (<0.69)                                                  | U | 5 (s)  |
| 1,2,4-trimethylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.18)     | U | (<0.18)     | U  | (<0.4)      | U | (<0.36)                                                  | U | 5 (s)  |
| Acetone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<50)       | U | (<50)       | U | (<50)       | UJ | (<50)       | U  | (<50)       | U | (<50)       | U | (<4.9)      | U | (<4.9)      | U  | (<0.8)      | U | (<0.8)                                                   | U | 50 (g) |
| Benzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |    | (<0.3)      | U | (<0.28)                                                  | U | 1 (s)  |
| Butyl alcohol, tert-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | µg/L          | (<20)       | R | (<20)       | R | (<20)       | R  | (<20)       | R  | (<20)       | U | (<20)       | U | (<2.2)      | U | (<2.2)      | UJ | (<5.9)      | U | (<5.9)                                                   | U | ---    |
| Carbon disulfide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | µg/L          | (<4)        | U | (<4)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U | (<4)        | U |             |    |             |   | (<0.41)                                                  | U | ---    |
| Chloroform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U |             |    |             |   | (<0.33)                                                  | U | 7 (s)  |
| Chloromethane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |    | (<0.4)      | U | (<0.37)                                                  | U | ---    |
| cis-1,2-dichloroethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | µg/L          | (<1)        | U | 1.1         |   | 1.1         |    | 2.4         |    | (<1)        | U | 1.1         | U | (<0.15)     | U | (<0.15)     | U  | 0.64        | J | 0.60                                                     | J | 5 (s)  |
| Dichlorodifluoromethane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | UJ | (<2)        | U | (<2)        | U | (<0.18)     | U | (<0.18)     | U  | (<0.6)      | U | (<0.58)                                                  |   | ---    |
| Di-isopropyl ether                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | µg/L          | (<0.5)      | U | (<0.5)      | U | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U | (<0.5)      | U | (<0.5)      | U | (<0.18)     | U  | (<0.29)     | U | (<0.29)                                                  | U | 5 (s)  |
| Ethanol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | (<31)       | U | (<30.9)                                                  | U | ---    |
| Isopropylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.12)     | U | (<0.12)     | U  | (<0.4)      | U | (<0.36)                                                  | U | 5 (s)  |
| M,P-xylene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |    | (<0.4)      | U | (<0.38)                                                  | U | 5 (s)  |
| methyl ethyl keytone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | (<1.1)      | U | (<1.07)                                                  | U | 50 (g) |
| Methylcyclohexane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          |   | --          |   | (<0.63)     | U  | --          |   | --                                                       |   | ---    |
| Methyl tert-butyl ether                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.09)     | U | (<0.09)     | U  | (<0.24)     | U | (<0.24)                                                  | U | 5 (s)  |
| Naphthalene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |    | (<0.4)      | U | (<0.35)                                                  | U | 10 (g) |
| N-Butylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | (<0.15)     | U  | (<0.4)      | U | (<0.41)                                                  | U | 5 (s)  |
| N-propylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.13)     | U  | (<0.3)      | U | (<0.34)                                                  | U | 5 (s)  |
| O-xylene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |    | (<0.3)      | U | (<0.28)                                                  | U | 5 (s)  |
| Sec-butylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.13)     | U  | (<0.3)      | U | (<0.33)                                                  | U | ---    |
| Styrene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U |             | U  | (<0.4)      | U | (<0.4)                                                   | U | 5 (s)  |
| Tert-butylbenzene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.11)     | U  | (<0.3)      | U | (<0.32)                                                  | U | 10 (g) |
| Tetrachloroethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | µg/L          | 2           |   | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.17)     | U | (<0.17)     | U  | 1.28        |   | (<0.57)                                                  | U | 5(s)   |
| Toluene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U |             | U  | (<0.3)      | U | (<0.3)                                                   | U | 5(s)   |
| trans-1,2-dichloroethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.15)     | U | (<0.15)     | U  | (<0.4)      | U | (<0.38)                                                  | U | 5(s)   |
| Trichloroethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | µg/L          | 1           |   | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.2)      | U | (<0.2)      | U  | (<0.5)      | U | (<0.5)                                                   | U | 5 (s)  |
| Vinyl chloride                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | µg/L          | (<2.0)      | U | (<2.0)      | U | (<2.0)      | U  | (<2.0)      | U  | (<2.0)      | U | (<2.0)      | U | (<0.13)     | U | (<0.13)     | U  | (<0.5)      | U | (<0.47)                                                  | U | 2 (s)  |
| (a) 6 NYCRR Part 703.5 Class GA Groundwater Quality Regulations, as presented in the Division of Water Technical and Operational Guidance Series 1.1.1, 1998, as amended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |               |             |   |             |   |             |    |             |    |             |   |             |   |             |   |             |    |             |   |                                                          |   |        |
| NOTES:<br><br>EPA = U.S. Environmental Protection Agency<br>ID = Identification<br>-- = Not analyzed<br>NYSDEC = New York State Department of Environmental Conservation<br>ppb = Parts per billion<br>µg/L = Microgram(s) per liter<br>U = The analyte was analyzed for, but was not detected above the sample reporting limit.<br>J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.<br>UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.<br>R = Non-detect result rejected due to exceedence of 20% deviation and/or average RRF values <0.05 in the initial or continuing calibration. The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.<br><br>Data provided by Con-Test Analytical Laboratory from 2016-2016. Only analytes that were detected in at least one sample are shown.<br>2017 Data is provided by Eurofins Spectrum Analytical. Data validation services provided by Environmental Data Services.<br>Concentration values in <b>BOLD</b> indicate that analyte was detected above the NYSDEC Ambient Water Quality Standards (s) or Guidance Values (g). |               |             |   |             |   |             |    |             |    |             |   |             |   |             |   |             |    |             |   |                                                          |   |        |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA<br>Method 8260C | Location ID   | MW-05R      |    |             |    |             |   |             |   |             |   |             |    |             |   |             |   | NYSDEC Ambient<br>Water Quality<br>Standard Class<br>GA(a) (µg/L) |
|------------------------------------|---------------|-------------|----|-------------|----|-------------|---|-------------|---|-------------|---|-------------|----|-------------|---|-------------|---|-------------------------------------------------------------------|
|                                    | Laboratory ID | 13K0947-03  |    | 14F0194-02  |    | 14K0664-01  |   | 15E0606-01  |   | 15K0954-02  |   | 16E0858-01  |    | SC34122-11  |   | SC44537-02  |   |                                                                   |
|                                    | Sample Type   | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater |   |                                                                   |
|                                    | Sample Date   | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |   | 5/12/2015   |   | 11/19/2015  |   | 5/18/2016   |    | 4/28/2017   |   | 3/6/2018    |   |                                                                   |
|                                    | Tidal Phase   | High/Ebb    |    | Flood/High  |    | Ebb         |   | Low         |   | High        |   | Low         |    | Low         |   | High        |   |                                                                   |
| 1,1-dichloroethene                 | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.21$ ) | U | ( $<0.16$ ) | U  | ( $<0.3$ )  | U | ( $<0.69$ ) | U |                                                                   |
| 1,2,4-trimethylbenzene             | µg/L          | ( $<1$ )    | U  | 1           |    | ( $<1$ )    | U | 1.2         |   | 1.1         |   | 1           |    | ( $<0.36$ ) | U | 0.76        | J |                                                                   |
| Acetone                            | µg/L          | ( $<50$ )   | UJ | ( $<50$ )   | U  | ( $<50$ )   | U | ( $<50$ )   | U | ( $<4.9$ )  | U | ( $<4.9$ )  | U  | ( $<0.80$ ) | U | 7.81        | J |                                                                   |
| Benzene                            | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<1$ )    | U | --          |    | 0.38        | J | ( $<0.28$ ) | U |                                                                   |
| Butyl alcohol, tert-               | µg/L          | ( $<20$ )   | R  | ( $<20$ )   | R  | ( $<20$ )   | U | ( $<20$ )   | U | ( $<2.2$ )  | U | ( $<2.2$ )  | UJ | ( $<5.9$ )  | U | ( $<5.9$ )  | U |                                                                   |
| Carbon disulfide                   | µg/L          | ( $<4$ )    | U  | ( $<4$ )    | U  | ( $<4$ )    | U | ( $<4$ )    | U | ( $<4$ )    | U |             |    |             |   | (0.41)      | U |                                                                   |
| Chloroform                         | µg/L          | ( $<2$ )    | U  | ( $<2$ )    | U  | ( $<2$ )    | U | ( $<2$ )    | U | ( $<2$ )    | U |             |    |             |   | ( $<0.33$ ) | U |                                                                   |
| Chloromethane                      | µg/L          | ( $<2$ )    | U  | ( $<5$ )    | U  | ( $<2$ )    | U | ( $<2$ )    | U | ( $<2$ )    | U | --          |    | 0.41        | J | ( $<0.37$ ) | U |                                                                   |
| cis-1,2-dichloroethene             | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.15$ ) | U | ( $<0.15$ ) | U  | ( $<0.3$ )  | U | ( $<0.33$ ) | U |                                                                   |
| Dichlorodifluoromethane            | µg/L          | ( $<2$ )    | U  | ( $<2$ )    | UJ | ( $<2$ )    | U | 2.7         |   | ( $<0.18$ ) | U | ( $<0.18$ ) | U  | ( $<0.6$ )  | U | ( $<0.58$ ) | U |                                                                   |
| Diisopropyl ether                  | µg/L          | 0.88        |    | ( $<0.5$ )  | U  | ( $<0.5$ )  | U | ( $<0.5$ )  | U | ( $<0.5$ )  | U | ( $<0.18$ ) | U  | ( $<0.29$ ) | U | 0.33        | J |                                                                   |
| Ethanol                            | µg/L          | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | ( $<31$ )   | U | ( $<30.9$ ) | U |                                                                   |
| Isopropylbenzene                   | µg/L          | 2.7         |    | 2.9         |    | 1.9         |   | 1.9         |   | ( $<0.12$ ) | U | ( $<0.12$ ) | U  | 0.82        | J | ( $<0.36$ ) | U |                                                                   |
| M,P-xylene                         | µg/L          | ( $<2$ )    | U  | ( $<2$ )    | U  | ( $<2$ )    | U | ( $<2$ )    | U | ( $<2$ )    | U | --          |    | 0.53        | J | 0.4         | J |                                                                   |
| methyl ethyl keytone               | µg/L          | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | 3.89        |   | ( $<1.07$ ) | U |                                                                   |
| Methylcyclohexane                  | µg/L          | --          |    | --          |    | --          |   | --          |   | --          |   | 1.1         |    | --          |   | --          |   |                                                                   |
| Methyl tert-butyl ether            | µg/L          | 4.3         |    | 3.4         |    | 2           |   | 2.6         |   | 1.4         |   | 1.3         |    | 1.28        |   | 1.19        |   |                                                                   |
| Naphthalene                        | µg/L          | ( $<2$ )    | U  | ( $<2$ )    | U  | ( $<2$ )    | U | ( $<2$ )    | U | ( $<2$ )    | U | ( $<2$ )    | U  | ( $<2$ )    | U | ( $<0.35$ ) | U |                                                                   |
| N-Butylbenzene                     | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.15$ ) | U  | 0.61        | J | ( $<0.41$ ) | U |                                                                   |
| N-propylbenzene                    | µg/L          | 1           |    | 1.3         |    | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.11$ ) | U | ( $<0.13$ ) | U  | ( $<0.34$ ) | U | ( $<0.34$ ) | U |                                                                   |
| O-xylene                           | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<1$ )    | U | --          |    | 0.61        | J | ( $<0.28$ ) | U |                                                                   |
| Sec-butylbenzene                   | µg/L          | ( $<1$ )    | U  | 1.1         |    | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.11$ ) | U | ( $<0.13$ ) | U  | 0.55        | J | ( $<0.33$ ) | U |                                                                   |
| Styrene                            | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<1$ )    | U |             | U  | ( $<0.4$ )  | U | ( $<0.4$ )  | U |                                                                   |
| Tert-butylbenzene                  | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.11$ ) | U | ( $<0.11$ ) | U  | 0.61        | J | 0.4         | J |                                                                   |
| Tetrachloroethene                  | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.17$ ) | U | ( $<0.17$ ) | U  | ( $<0.6$ )  | U | (0.57)      | U |                                                                   |
| Toluene                            | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<1$ )    | U |             | U  | ( $<0.3$ )  | U | 0.83        | J |                                                                   |
| trans-1,2-dichloroethene           | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.15$ ) | U | ( $<0.15$ ) | U  | ( $<0.4$ )  | U | ( $<0.38$ ) | U |                                                                   |
| Trichloroethene                    | µg/L          | ( $<1$ )    | U  | ( $<1$ )    | U  | ( $<1$ )    | U | ( $<1$ )    | U | ( $<0.2$ )  | U | ( $<0.2$ )  | U  | ( $<0.5$ )  | U | ( $<0.5$ )  | U |                                                                   |
| Vinyl chloride                     | µg/L          | ( $<2$ )    | U  | ( $<2$ )    | U  | ( $<2$ )    | U | ( $<2$ )    | U | ( $<0.13$ ) | U | ( $<0.13$ ) | U  | ( $<0.5$ )  | U | ( $<0.47$ ) | U |                                                                   |



Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA<br>Method 8260C | Location ID   | MW-06       |   |             |    |             |    |             |    |             |    |             |   |             |   |             |    |             |   | NYSDEC Ambient<br>Water Quality<br>Standard Class<br>GA(a) (µg/L) |   |        |
|------------------------------------|---------------|-------------|---|-------------|----|-------------|----|-------------|----|-------------|----|-------------|---|-------------|---|-------------|----|-------------|---|-------------------------------------------------------------------|---|--------|
|                                    | Laboratory ID | 12K0749-01  |   | 13E0755-01  |    | 13K0947-01  |    | 14F0194-01  |    | 14K0664-07  |    | 15E0606-02  |   | 15K0954-01  |   | 16E0858-02  |    | SC34122-06  |   | SC44624-01                                                        |   |        |
|                                    | Sample Type   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater                                                       |   |        |
|                                    | Sample Date   | 11/19/2012  |   | 5/20/2013   |    | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |    | 5/12/2015   |   | 11/19/2015  |   | 5/18/2016   |    | 4/26/2017   |   | 3/6/2018                                                          |   |        |
|                                    | Tidal Phase   | Ebb         |   | Low/Flood   |    | High/Ebb    |    | Flood/High  |    | Ebb         |    | Low         |   | High        |   | Low         |    | Low         |   | High                                                              |   |        |
| 1,1-dichloroethene                 | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.42)     | U | (<0.32)     | U  | (<0.3)      | U | (<0.69)                                                           | U | 5 (s)  |
| 1,2,4-trimethylbenzene             | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.36)     | U | (<0.36)     | U  | (<0.4)      | U | (<0.36)                                                           | U | 5 (s)  |
| Acetone                            | µg/L          | (<50)       | U | (<100)      | U  | (<100)      | UJ | (<100)      | U  | (<100)      | U  | (<100)      | U | (<9.7)      | U | (<9.7)      | U  | (<0.8)      | U | (<0.8)                                                            | U | 50 (g) |
| Benzene                            | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | 0.34        | J | <b>1.13</b>                                                       |   | 1 (s)  |
| Butyl alcohol, tert-               | µg/L          | (<20)       | U | (<40)       | UJ | (<40)       | R  | (<40)       | R  | (<40)       | U  | (<40)       | U | (<4.3)      | U | (<4.3)      | UJ | (<5.9)      | U | (<5.9)                                                            | U | ---    |
| Carbon disulfide                   | µg/L          | (<4)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U |             |    |             |   | (<0.41)                                                           | U | ---    |
| Chloroform                         | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U |             |    |             |   | (<0.33)                                                           | U | 7 (s)  |
| Chloromethane                      | µg/L          | (<2)        | U | (<4)        | U  | (<4)        | U  | (<10)       | U  | (<4)        | UJ | (<4)        | U | (<4)        | U | --          |    | (<0.4)      | U | (<0.37)                                                           | U | ---    |
| cis-1,2-dichloroethene             | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.29)     | U | (<0.29)     | U  | (<0.3)      | U | (<0.33)                                                           | U | 5 (s)  |
| Dichlorodifluoromethane            | µg/L          | (<2)        | U | (<4)        | U  | (<4)        | U  | (<4)        | UJ | (<4)        | U  | (<4)        | U | (<0.36)     | U | (<0.36)     | U  | (<0.6)      | U | (<0.58)                                                           | U | ---    |
| Diisopropyl ether                  | µg/L          | < 0.5       | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.36)     | U  | (<0.29)     | U | (<0.29)                                                           | U | 5 (s)  |
| Ethanol                            | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | --          |    | (<31)       | U | (<30.9)                                                           | U | ---    |
| Isopropylbenzene                   | µg/L          | (<1.0)      | U | 2.8         |    | 2.1         |    | 3           |    | 2.2         |    | 4.4         | D | 2.2         |   | 2.4         | D  | 2.32        |   | 2.93                                                              |   | 5 (s)  |
| M,P-xylene                         | µg/L          | (<2)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U | --          |    | 1.88        | J | 2.84                                                              |   | 5 (s)  |
| methyl ethyl keytone               | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | --          |    | (<1.1)      | U | (<1.07)                                                           |   | 50 (g) |
| Methylcyclohexane                  | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | 3.4         | D  | --          |   | --                                                                |   | ---    |
| Methyl tert-butyl ether            | µg/L          | 1.5         |   | 3           |    | (<2.0)      | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.18)     | U | (<0.18)     | U  | (<0.34)     | U | 0.51                                                              | J | 5 (s)  |
| Naphthalene                        | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | (<0.5)      | U | (<0.35)                                                           | U | 10 (g) |
| N-Butylbenzene                     | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<0.3)      | U  | 0.81        | J | (<0.41)                                                           | U | 5 (s)  |
| N-propylbenzene                    | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.22)     | U | (<0.26)     | U  | (<0.34)     | U | 0.82                                                              | J | 5 (s)  |
| O-xylene                           | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | 0.47        | J | 0.3                                                               | J | 5 (s)  |
| Sec-butylbenzene                   | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.22)     | U | (<0.26)     | U  | 0.87        | J | 0.61                                                              | J | ---    |
| Styrene                            | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U |             | U  | (<0.4)      | U | (<0.41)                                                           | U | 5 (s)  |
| Tert-butylbenzene                  | µg/L          | 1.1         |   | (<2)        | U  | 2.2         |    | 3.6         |    | 3           |    | 3.7         | D | 3.8         |   | 2.6         | D  | 1.98        |   | 2.26                                                              |   | 10 (g) |
| Tetrachloroethene                  | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.34)     | U | (<0.34)     | U  | (<0.6)      | U | (<0.57)                                                           | U | 5(s)   |
| Toluene                            | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | 0.87        | J | 1.06                                                              |   | 5(s)   |
| trans-1,2-dichloroethene           | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.3)      | U | (<0.3)      | U  | (<0.4)      | U | (<0.38)                                                           | U | 5(s)   |
| Trichloroethene                    | µg/L          | (<1)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.4)      | U | (<0.4)      | U  | (<0.5)      | U | (<0.5)                                                            | U | 5 (s)  |
| Vinyl chloride                     | µg/L          | (<2)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U | (0.27)      | U | (0.27)      | U  | (<0.5)      | U | (<0.47)                                                           | U | 2 (s)  |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-08D      |   | MW-08DR     |             |        |             |          |             |        |             |         |             |        |             |         |             | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |    |
|---------------------------------|---------------|-------------|---|-------------|-------------|--------|-------------|----------|-------------|--------|-------------|---------|-------------|--------|-------------|---------|-------------|----------------------------------------------------------|----|
|                                 | Laboratory ID | 12K0749-06  |   | 13K0947-10  | 14F0194-11  |        | 14K0664-11  |          | 15E0606-13  |        | 15K1033-02  |         | 16E0858-10  |        | SC34122-13  |         | SC44621-02  |                                                          |    |
|                                 | Sample Type   | Groundwater |   | Groundwater | Groundwater |        | Groundwater |          | Groundwater |        | Groundwater |         | Groundwater |        | Groundwater |         | Groundwater |                                                          |    |
|                                 | Sample Date   | 11/20/2012  |   | 11/21/2013  | 6/4/2014    |        | 11/11/2014  |          | 5/13/2015   |        | 11/20/2015  |         | 5/18/2016   |        | 4/28/2017   |         | 3/8/2018    |                                                          |    |
|                                 | Tidal Phase   | Flood       |   | High/Ebb    | Flood/High  |        | Ebb         |          | Ebb         |        | High        |         | Low         |        | Low         |         | High        |                                                          |    |
| 1,1-dichloroethene              | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<5.2)  | U           | (<1.6) | U           | (<1.62) | U           | (<3.46)                                                  | U  |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<4.5)  | U           | (<1.8) | U           | (<1.78) | U           | (<1.78)                                                  | U  |
| Acetone                         | µg/L          | (<50)       | U | (<1,000)    | UJ          | (<500) | U           | (<1,000) | U           | (<250) | U           | (<120)  | UJ          | (<49)  | U           | (<4.02) | U           | (<4.02)                                                  | U  |
| Benzene                         | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<25)   | U           | --     |             | (<1.42) | U           | (<1.42)                                                  | U  |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R | (<400)      | R           | (<200) | R           | (<400)   | U           | (<100) | U           | (<54)   | U           | (<22)  | UJ          | (<29.5) | U           | (<29.5)                                                  | U  |
| Carbon disulfide                | µg/L          | (<4)        | U | (<4)        | U           | (<4)   | U           | (<4)     | U           | (<4)   | U           | (<4)    | U           |        |             |         |             | (<2.06)                                                  | U  |
| Chloroform                      | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)     | U           | (<2)   | U           | (<2)    | U           |        |             |         |             | (<1.63)                                                  | U  |
| Chloromethane                   | µg/L          | (<2)        | U | (<40)       | U           | (<20)  | U           | (<40)    | U           | (<10)  | U           | (<50)   | U           | --     |             | 7.95    | J           | (<1.84)                                                  | U  |
| cis-1,2-dichloroethene          | µg/L          | 52          |   | 220         |             | (<10)  | U           | 450      |             | 97     | D           | 250     |             | 24     | D           | 15.7    |             | 5.25                                                     |    |
| Dichlorodifluoromethane         | µg/L          | (<2.0)      | U | (<40)       | U           | (<20)  | UJ          | (<40)    | U           | (<10)  | U           | (<4.5)  | U           | (<1.8) | U           | (<2.92) | U           | (<2.92)                                                  | UJ |
| Diisopropyl ether               | µg/L          | (<0.5)      | U | (<10)       | U           | (<5.0) | U           | (<10)    | U           | (<2.5) | U           | (<12.0) | U           | (<1.8) | U           | (<1.43) | U           | (<1.43)                                                  | U  |
| Ethanol                         | µg/L          | --          |   | --          |             | --     |             | --       |             | --     |             | --      |             | --     |             | 571     | J           | (<154)                                                   | U  |
| Isopropylbenzene                | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<3.0)  | U           | (<1.2) | U           | (<1.8)  | U           | (<1.8)                                                   | U  |
| M,P-xylene                      | µg/L          | (<2)        | U | (<40)       | U           | (<50)  | U           | (<40)    | U           | (<10)  | U           | (<50)   | U           | --     |             | (<1.9)  | U           | (<1.9)                                                   | U  |
| methyl ethyl keytone            | µg/L          | --          |   | --          |             | --     |             | --       |             | --     |             | --      |             | --     |             | (<5.35) | U           | (<5.35)                                                  | U  |
| Methylcyclohexane               | µg/L          | --          |   | --          |             | --     |             | --       |             | --     |             | --      |             | (<6.3) | U           |         |             | ---                                                      |    |
| Methyl tert-butyl ether         | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<2.2)  | U           | (<0.9) | U           | (<1.18) | U           | (<1.18)                                                  | U  |
| Naphthalene                     | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)     | U           | (<2)   | U           | (<2)    | U           | (<2)   | U           | (<1.76) | U           | (<1.76)                                                  | U  |
| N-Butylbenzene                  | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<25)   | U           | (<1.5) | U           | (<2.06) | U           | (<2.06)                                                  | U  |
| N-propylbenzene                 | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<2.8)  | U           | (<1.3) | U           | (<1.72) | U           | (<1.72)                                                  | U  |
| O-xylene                        | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<25)   | U           | --     |             | (<1.42) | U           | (<1.42)                                                  | U  |
| Sec-butylbenzene                | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<2.8)  | U           | (<1.3) | U           | (<1.63) | U           | (<1.63)                                                  | U  |
| Styrene                         | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<25)   | U           |        | U           | (<2.02) | U           | (<2.02)                                                  | U  |
| Tert-butylbenzene               | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<2.8)  | U           | (<1.1) | U           | (<1.58) | U           | (<1.58)                                                  | U  |
| Tetrachloroethene               | µg/L          | 1,900       |   | 750         |             | 1,900  |             | 530      |             | 93     | D           | 970     |             | 400    | D           | 142     |             | 690                                                      |    |
| Toluene                         | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5)   | U           | (<25)   | U           | --     |             | (<1.5)  | U           | (<1.5)                                                   | U  |
| trans-1,2-dichloroethene        | µg/L          | (<1)        | U | (<20)       | U           | (<10)  | U           | (<20)    | U           | (<5.0) | U           | (<3.8)  | U           | (<1.5) | U           | (<1.88) | U           | (<1.88)                                                  | U  |
| Trichloroethene                 | µg/L          | 70          |   | 630         |             | 73     |             | 200      |             | 12     | D           | 150     |             | 15     | D           | 10.8    |             | 5.2                                                      |    |
| Vinyl chloride                  | µg/L          | 3.3         |   | (<40)       | U           | (<20)  | U           | (<40)    | U           | (<10)  | U           | (<3.3)  | U           | (<1.3) | U           | 3.7     | J           | (<2.36)                                                  | U  |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-08S      |   | MW-08SR     |             |        |             |        |             |        |             |         |             |         |             |         |             | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |   |
|---------------------------------|---------------|-------------|---|-------------|-------------|--------|-------------|--------|-------------|--------|-------------|---------|-------------|---------|-------------|---------|-------------|----------------------------------------------------------|---|
|                                 | Laboratory ID | 12K0749-07  |   | 13K0947-09  | 14F0194-10  |        | 14K0664-10  |        | 15E0606-12  |        | 15K1033-01  |         | 16E0858-09  |         | SC34122-12  |         | SC44621-01  |                                                          |   |
|                                 | Sample Type   | Groundwater |   | Groundwater | Groundwater |        | Groundwater |        | Groundwater |        | Groundwater |         | Groundwater |         | Groundwater |         | Groundwater |                                                          |   |
|                                 | Sample Date   | 11/20/2012  |   | 11/21/2013  | 6/4/2014    |        | 11/11/2014  |        | 5/13/2015   |        | 11/19/2015  |         | 5/18/2016   |         | 4/28/2017   |         | 3/8/2018    |                                                          |   |
|                                 | Tidal Phase   | Flood       |   | High/Ebb    | Flood/High  |        | Ebb         |        | Ebb         |        | High        |         | Low         |         | Low         |         | High        |                                                          |   |
| 1,1-dichloroethene              | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.21) | U           | (<0.16) | U           | (<0.32) | U           | (<0.69)                                                  | U |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.18) | U           | (<0.18) | U           | (<0.36) | U           | (<0.36)                                                  | U |
| Acetone                         | µg/L          | 74          |   | (<50)       | U           | (<50)  | U           | (<50)  | U           | (<50)  | U           | (<4.9)  | UJ          | (<4.9)  | U           | (<0.80) | U           | (<0.8)                                                   | U |
| Benzene                         | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           |         |             |         |             | (<0.28) | U           | (<0.28)                                                  | U |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R | 130         | J           | (<20)  | R           | (<20)  | U           | 44     |             | (<2.2)  | U           | (<2.2)  | UJ          | (<5.9)  | U           | (<5.9)                                                   | U |
| Carbon disulfide                | µg/L          | (<4)        | U | (<4)        | U           | (<4)   | U           | (<4)   | U           | (<4)   | U           |         |             |         |             |         |             | (<0.41)                                                  | U |
| Chloroform                      | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)   | U           | (<2)   | U           |         |             |         |             |         |             | (<0.33)                                                  | U |
| Chloromethane                   | µg/L          | (<2)        | U | (<2)        | U           | (<5)   | U           | (<2)   | U           | (<2)   | U           | --      |             | --      |             | (<0.37) | U           | (<0.37)                                                  | U |
| cis-1,2-dichloroethene          | µg/L          | 85          |   | 6.3         |             | 5.4    |             | 2.4    |             | 2.5    |             | 1.4     |             | 2.2     |             | 1.46    |             | 1.53                                                     |   |
| Dichlorodifluoromethane         | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | UJ          | (<2)   | U           | (<2)   | U           | (<0.18) | U           | (<0.18) | U           | (<0.58) | U           | (<0.58)                                                  | U |
| Diisopropyl ether               | µg/L          | (<0.5)      | U | (<0.5)      | U           | (<0.5) | U           | (<0.5) | U           | (<0.5) | U           | (<0.5)  | U           | (<0.18) | U           | (<0.29) | U           | (<0.29)                                                  | U |
| Ethanol                         | µg/L          | --          |   | --          |             | --     |             | --     |             | --     |             | --      |             | --      |             | (<30.9) | U           | (<30.9)                                                  | U |
| Isopropylbenzene                | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.12) | U           | (<0.12) | U           | (<0.36) | U           | (<0.36)                                                  | U |
| M,P-xylene                      | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)   | U           | (<2)   | U           |         |             |         |             | (<0.38) | U           | (<0.38)                                                  | U |
| methyl ethyl ketone             | µg/L          | --          |   | --          |             | --     |             | --     |             | --     |             | --      |             | --      |             | (<1.07) | U           | (<1.07)                                                  | U |
| Methylcyclohexane               | µg/L          | --          |   | --          |             | --     |             | --     |             | --     |             | --      |             | (<0.63) | U           | --      |             | ---                                                      |   |
| Methyl tert-butyl ether         | µg/L          | 1.5         |   | 8.3         |             | 3.8    |             | 2.2    |             | 7.6    |             | 1.4     |             | 1.5     |             | 0.56    | J           | (<0.24)                                                  | U |
| Naphthalene                     | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)   | U           | (<2)   | U           |         |             | --      |             | (<0.35) | U           | (<0.35)                                                  | U |
| N-Butylbenzene                  | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<1)    | U           | (<0.15) | U           | (<0.41) | U           | (<0.41)                                                  | U |
| N-propylbenzene                 | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.11) | U           | (<0.13) | U           | (<0.34) | U           | (<0.34)                                                  | U |
| O-xylene                        | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           |         |             | --      |             | (<0.28) | U           | (<0.28)                                                  | U |
| Sec-butylbenzene                | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.11) | U           | (<0.13) | U           | (<0.33) | U           | (<0.33)                                                  | U |
| Styrene                         | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           |         |             | U       |             | (<0.4)  | U           | (<0.4)                                                   | U |
| Tert-butylbenzene               | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.11) | U           | (<0.11) | U           | (<0.32) | U           | (<0.32)                                                  | U |
| Tetrachloroethene               | µg/L          | 100         |   | 2.4         |             | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.17) | U           | (<0.17) | U           | (<0.57) | U           | (<0.57)                                                  | U |
| Toluene                         | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           |         |             | --      |             | (<0.3)  | U           | (<0.3)                                                   | U |
| trans-1,2-dichloroethene        | µg/L          | (<1)        | U | (<1)        | U           | (<1)   | U           | (<1)   | U           | (<1)   | U           | (<0.15) | U           | (<0.15) | U           | (<0.38) | U           | (<0.38)                                                  | U |
| Trichloroethene                 | µg/L          | 140         |   | 5.2         |             | 1.6    |             | 1.4    |             | 1      |             | 2.3     |             | 1.1     |             | 0.92    | J           | 2.01                                                     |   |
| Vinyl chloride                  | µg/L          | (<2)        | U | (<2)        | U           | (<2)   | U           | (<2)   | U           | (<2)   | U           | (<0.13) | U           | (<0.13) | U           | (<0.47) | U           | (<0.47)                                                  | U |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-09D      |   |             |   |             |    |             |    |             |   |             |   |             |   |             |    |             |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |             |        |
|---------------------------------|---------------|-------------|---|-------------|---|-------------|----|-------------|----|-------------|---|-------------|---|-------------|---|-------------|----|-------------|---|----------------------------------------------------------|-------------|--------|
|                                 | Laboratory ID | 12K0749-08  |   | 13E0755-02  |   | 13K0947-08  |    | 14F0194-09  |    | 14K0664-09  |   | 15E0606-11  |   | 15K0954-08  |   | 16E0858-08  |    | SC34122-08  |   |                                                          | SC44621-04  |        |
|                                 | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   |                                                          | Groundwater |        |
|                                 | Sample Date   | 11/20/2012  |   | 5/20/2013   |   | 11/21/2013  |    | 6/4/2014    |    | 11/11/2014  |   | 5/13/2015   |   | 11/19/2015  |   | 5/17/2016   |    | 4/27/2017   |   |                                                          | 3/6/2018    |        |
|                                 | Tidal Phase   | Flood       |   | Low/Flood   |   | High/Ebb    |    | Flood/High  |    | Ebb         |   | Ebb         |   | High        |   | Low         |    | Low         |   |                                                          | High        |        |
| 1,1-dichloroethene              | µg/L          | 2           |   | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<2.1)      | U | (<0.63)     | U  | (<1.62)     | U | (<0.69)                                                  | U           | 5 (s)  |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.8)      | U | (<0.72)     | U  | (<1.78)     | U | (<0.36)                                                  | U           | 5 (s)  |
| Acetone                         | µg/L          | 250         |   | (<100)      | U | (< 100)     | UJ | (<250)      | U  | (<1,200)    | U | (<250)      | U | (<49)       | U | (<19)       | U  | (<4.02)     | U | 7.41                                                     | J           | 50 (g) |
| Benzene                         | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<10)       | U | --          |    | (<1.42)     | U | (<0.28)                                                  | U           | 1 (s)  |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R | (<40)       | R | (<40)       | R  | (<100)      | R  | (<500)      | U | (<100)      | U | (<22)       | U | (<8.7)      | UJ | 46.6        | J | (<5.9)                                                   | U           | ---    |
| Carbon disulfide                | µg/L          | (<4)        | U | (<84)       | U | (<8)        | U  | (<20)       | U  | (<100)      | U | (<20)       | U | (<40)       | U |             |    |             |   | (<0.41)                                                  | U           | ---    |
| Chloroform                      | µg/L          | (<2)        | U | (<4)        | U | (<4)        | U  | (<10)       | U  | (<50)       | U | (<10)       | U | (<20)       | U |             |    |             |   | (<0.33)                                                  | U           | 7 (s)  |
| Chloromethane                   | µg/L          | (<2)        | U | (<2)        | U | (<4)        | UJ | (<10)       | U  | (<50)       | U | (<10)       | U | (<20)       | U | --          |    |             |   | (<0.37)                                                  | U           | ---    |
| cis-1,2-dichloroethene          | µg/L          | 530         |   | 12          |   | 260         |    | 72          |    | 160         |   | 190         | D | 180         |   | 110         | D  | 241         |   | 84.2                                                     |             | 5 (s)  |
| Dichlorodifluoromethane         | µg/L          | (<2)        | U | (<4)        | U | (<4)        | U  | (<10)       | UJ | (<50)       | U | (<10)       | U | (<1.8)      | U | (<0.72)     | U  | (<2.92)     | U | (<0.58)                                                  | U           | ---    |
| Diisopropyl ether               | µg/L          | (<0.5)      | U | (<1)        | U | (<1)        | U  | (<2.5)      | U  | (<12)       | U | (<2.5)      | U | (<5)        | U | (<0.72)     | U  | (<1.43)     | U | (<0.29)                                                  | U           | 5 (s)  |
| Ethanol                         | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | 342         | J | 682                                                      |             | ---    |
| Isopropylbenzene                | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.2)      | U | (<0.48)     | U  | (<1.8)      | U | (<0.36)                                                  | U           | 5 (s)  |
| M,P-xylene                      | µg/L          | (<2)        | U | (<4)        | U | (<4)        | U  | (<10)       | U  | (<50)       | U | (<10)       | U | (<20)       | U | --          |    | (<1.9)      | U | (<0.38)                                                  | U           | 5 (s)  |
| methyl ethyl keytone            | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          |   | --          |   | --          |    | (<5.35)     | U | 1.07                                                     | J           | 50 (g) |
| Methylcyclohexane               | µg/L          | --          |   | --          |   | --          |    | --          |    | --          |   | --          | U | (<2.5)      | U | --          |    | --          |   | ---                                                      |             | ---    |
| Methyl tert-butyl ether         | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<0.9)      | U | (<0.36)     | U  | (<1.18)     | U | (<0.24)                                                  | U           | 5 (s)  |
| Naphthalene                     | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |    | (<1.76)     | U | (<0.35)                                                  | U           | 10 (g) |
| N-Butylbenzene                  | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<10)       | U | (<0.6)      | U  | (<2.06)     | U | (<0.41)                                                  | U           | 5 (s)  |
| N-propylbenzene                 | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.1)      | U | (<0.52)     | U  | (<1.72)     | U | (<0.34)                                                  | U           | 5 (s)  |
| O-xylene                        | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<10)       | U | --          |    | (<1.42)     | U | (<0.28)                                                  | U           | 5 (s)  |
| Sec-butylbenzene                | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.1)      | U | (<0.52)     | U  | (<1.63)     | U | (<0.33)                                                  | U           | ---    |
| Styrene                         | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<10)       | U |             | U  | (<2.02)     | U | (<0.4)                                                   | U           | 5 (s)  |
| Tert-butylbenzene               | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.1)      | U | (<0.44)     | U  | (<1.58)     | U | (<0.32)                                                  | U           | 10 (g) |
| Tetrachloroethene               | µg/L          | 89          |   | 160         |   | 430         |    | 2,300       |    | 510         |   | 340         | D | 320         |   | 3,300       | D  | 232         |   | 4.23                                                     |             | 5(s)   |
| Toluene                         | µg/L          | (<1)        | U | (<2)        | U | (<2)        | U  | (<5)        | U  | (<25)       | U | (<5)        | U | (<10)       | U | --          |    | (<1.5)      | U | (<0.3)                                                   | U           | 5(s)   |
| trans-1,2-dichloroethene        | µg/L          | 2.3         |   | (<2)        | U | 3.5         |    | (<5)        | U  | (<25)       | U | (<5)        | U | (<1.5)      | U | (<0.6)      | U  | 3.3         | J | (<0.38)                                                  | U           | 5(s)   |
| Trichloroethene                 | µg/L          | 180         |   | 27          |   | 240         |    | 220         |    | 250         |   | 220         | D | 180         |   | 41          | D  | 118         |   | 12.4                                                     |             | 5 (s)  |
| Vinyl chloride                  | µg/L          | 48          |   | (<4.0)      | U | 7.3         |    | (<10)       | U  | (<50)       | U | (<10)       | U | (<1.3)      | U | 10          | D  | 7.2         |   | 21.5                                                     |             | 2 (s)  |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA<br>Method 8260C | Location ID   | MW-09S       |   |             |   |             |   |             |    |             |   |             |   |              |   |             |    |             |   | NYSDEC Ambient<br>Water Quality<br>Standard Class<br>GA(a) (µg/L) |   |
|------------------------------------|---------------|--------------|---|-------------|---|-------------|---|-------------|----|-------------|---|-------------|---|--------------|---|-------------|----|-------------|---|-------------------------------------------------------------------|---|
|                                    | Laboratory ID | 12K0749-10   |   | 13E0755-03  |   | 13K0947-07  |   | 14F0194-08  |    | 14K0664-08  |   | 15E0606-08  |   | 15K0954-07   |   | 16E0858-07  |    | SC34122-07  |   | SC44621-03                                                        |   |
|                                    | Sample Type   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater  |   | Groundwater |    | Groundwater |   | Groundwater                                                       |   |
|                                    | Sample Date   | 11/19/2012   |   | 5/20/2013   |   | 11/21/2013  |   | 6/4/2014    |    | 11/11/2014  |   | 5/12/2015   |   | 11/19/2015   |   | 5/17/2016   |    | 4/27/2017   |   | 3/8/2018                                                          |   |
|                                    | Tidal Phase   | Ebb          |   | Low/Flood   |   | High/Ebb    |   | Flood/High  |    | Ebb         |   | Low         |   | High         |   | Low         |    | Low         |   | High                                                              |   |
| 1,1-dichloroethene                 | µg/L          | 1.8          |   | (<1)        | U | (<1)        | U | (< 4.0)     | U  | (<1)        | U | (<1)        | U | 4.5          |   | (<0.32)     | U  | (<0.32)     | U | (<0.69)                                                           | U |
| 1,2,4-trimethylbenzene             | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4.0)     | U  | (<1)        | U | (<1)        | U | (<0.18)      | U | (<0.36)     | U  | (<0.36)     | U | (<0.36)                                                           | U |
| Acetone                            | µg/L          | <b>1,700</b> |   | (<50)       | U | <b>58</b>   | J | (< 200)     | U  | (<50)       | U | <b>150</b>  |   | (<4.9)       | U | (<9.7)      | U  | (<0.80)     | U | 9.09                                                              | J |
| Benzene                            | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (<4)        | U  | (<1)        | U | (<1)        | U | (<1)         | U | --          |    | (<0.28)     | U | (<0.28)                                                           | U |
| Butyl alcohol, tert-               | µg/L          | (<20)        | R | (<20)       | R | (< 20)      | R | (< 80)      | R  | (<20)       | U | (< 20)      | U | (<2.2)       | U | (<4.3)      | UJ | (<5.9)      | U | (<5.9)                                                            | U |
| Carbon disulfide                   | µg/L          | (<4)         | U | (<4)        | U | (<4)        | U | (<16)       | U  | (<4)        | U | (<4)        | U | (<4)         | U |             |    |             |   | 0.77                                                              | J |
| Chloroform                         | µg/L          | (<2)         | U | (<2)        | U | (<2)        | U | (<8)        | U  | (<2)        | U | (<2)        | U | (<2)         | U | --          |    |             |   | (<0.33)                                                           | U |
| Chloromethane                      | µg/L          | (<2)         | U | (<2)        | U | (<2)        | U | (20)        | U  | (<2)        | U | (<2)        | U | (<2)         | U | --          |    | (<0.37)     | U | (<0.37)                                                           | U |
| cis-1,2-dichloroethene             | µg/L          | <b>1,300</b> |   | (<1)        | U | <b>220</b>  | J | <b>86</b>   |    | (<1)        | U | (<1)        | U | <b>1,600</b> |   | (<0.29)     | U  | 0.53        | J | (<0.33)                                                           | U |
| Dichlorodifluoromethane            | µg/L          | (<2.0)       | U | (<2.0)      | U | (<1)        | U | (<8)        | UJ | (<2.0)      | U | (<2.0)      | U | (<0.18)      | U | (<0.36)     | U  | (<0.58)     | U | (<0.58)                                                           | U |
| Diisopropyl ether                  | µg/L          | (<0.5)       | U | (<0.5)      | U | (< 0.5)     | U | (<2)        | U  | (< 0.5)     | U | (< 0.5)     | U | (<0.5)       | U | (<0.36)     | U  | (<0.29)     | U | (<0.29)                                                           | U |
| Ethanol                            | µg/L          | --           |   | --          |   | --          |   | --          |    | --          |   | --          |   | --           |   | --          |    | (<30.9)     | U | 847                                                               |   |
| Isopropylbenzene                   | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.12)      | U | (<0.24)     | U  | (<0.36)     | U | (<0.36)                                                           | U |
| M,P-xylene                         | µg/L          | (<2)         | U | (<2)        | U | (<2)        | U | (<8)        | U  | (<2)        | U | (<2)        | U | (<2)         | U | --          |    | (<0.38)     | U | (<0.38)                                                           | U |
| methyl ethyl keytone               | µg/L          | --           |   | --          |   | --          |   | --          |    | --          |   | --          |   | --           |   | --          |    | (<1.07)     | U | 1.47                                                              | J |
| Methylcyclohexane                  | µg/L          | --           |   | --          |   | --          |   | --          |    | --          |   | --          |   | --           |   | (<1.3)      | U  | --          |   | ---                                                               |   |
| Methyl tert-butyl ether            | µg/L          | 1.1          |   | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.09)      | U | (<0.18)     | U  | (<0.24)     | U | (<0.24)                                                           | U |
| Naphthalene                        | µg/L          | (<2)         | U | (<2)        | U | (<2)        | U | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)         | U | --          |    | (<0.35)     | U | (<0.35)                                                           | U |
| N-Butylbenzene                     | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<1)         | U | (<0.3)      | U  | (<0.41)     | U | (<0.41)                                                           | U |
| N-propylbenzene                    | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.11)      | U | (<0.26)     | U  | (<0.34)     | U | (<0.34)                                                           | U |
| O-xylene                           | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<1)         | U | --          |    | (<0.33)     | U | (<0.28)                                                           | U |
| Sec-butylbenzene                   | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.11)      | U | (<0.26)     | U  | (<0.33)     | U | (<0.33)                                                           | U |
| Styrene                            | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U |              | U |             | U  | 1.46        |   | 0.53                                                              | J |
| Tert-butylbenzene                  | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.11)      | U | (<0.22)     | U  | (<0.34)     | U | (<0.32)                                                           | U |
| Tetrachloroethene                  | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.17)      | U | (<0.34)     | U  | (<0.57)     | U | (<0.57)                                                           | U |
| Toluene                            | µg/L          | (<1)         | U | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | --           |   | --          |    | (<0.3)      | U | (<0.3)                                                            | U |
| trans-1,2-dichloroethene           | µg/L          | 4.7          |   | (<1)        | U | 1.3         |   | (< 4)       | U  | (<1)        | U | (<1)        | U | <b>8.6</b>   |   | (<0.3)      | U  | (<0.38)     | U | (<0.38)                                                           | U |
| Trichloroethene                    | µg/L          | <b>5.2</b>   |   | (<1)        | U | (<1)        | U | (< 4)       | U  | (<1)        | U | (<1)        | U | (<0.2)       | U | (<0.4)      | U  | (<0.5)      | U | (<0.5)                                                            | U |
| Vinyl chloride                     | µg/L          | <b>290</b>   |   | (< 2.0)     | U | <b>100</b>  | J | <b>94</b>   |    | (< 2.0)     | U | (< 2.0)     | U | <b>250</b>   | J | (<0.27)     | U  | 1.35        |   | (<0.47)                                                           | U |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-10D      |   |             |    |             |    |             |    |             |    |             |   |             |   |             |    |             |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |             |        |
|---------------------------------|---------------|-------------|---|-------------|----|-------------|----|-------------|----|-------------|----|-------------|---|-------------|---|-------------|----|-------------|---|----------------------------------------------------------|-------------|--------|
|                                 | Laboratory ID | 12K0749-03  |   | 13E0755-04  |    | 13K0947-06  |    | 14F0194-05  |    | 14K0664-02  |    | 15E0606-05  |   | 15K0954-04  |   | 16E0858-04  |    | SC34122-05  |   |                                                          | SC44537-06  |        |
|                                 | Sample Type   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |   |                                                          | Groundwater |        |
|                                 | Sample Date   | 11/19/2012  |   | 5/20/2013   |    | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |    | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |    | 4/27/2017   |   |                                                          | 3/6/2018    |        |
|                                 | Tidal Phase   | Ebb         |   | Low/Flood   |    | High/Ebb    |    | Flood/High  |    | Ebb         |    | Low         |   | High        |   | Low         |    | Low         |   |                                                          | High        |        |
| 1,1-dichloroethene              | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.21)     | U | (<0.16)     | U  | (<0.32)     | U | (<0.69)                                                  | U           | 5 (s)  |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.18)     | U | (<0.18)     | U  | (<0.36)     | U | (<0.36)                                                  | U           | 5 (s)  |
| Acetone                         | µg/L          | (<50)       | U | (<50)       | U  | (<50)       | UJ | (<50)       | U  | (<50)       | U  | (<50)       | U | (<4.9)      | U | (<4.9)      | U  | (<0.80)     | U | (<0.8)                                                   | U           | 50 (g) |
| Benzene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | <1          |   |             |    | (<0.28)     | U | (<0.28)                                                  | U           | 1 (s)  |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R | (<20)       | R  | (<20)       | R  | (<20)       | R  | (<20)       | U  | (<20)       | U | (<2.2)      | U | (<2.2)      | UJ | (<5.9)      | U | (<5.9)                                                   | U           | ---    |
| Carbon disulfide                | µg/L          | (<4)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U |             |    |             |   | (<0.41)                                                  | U           | ---    |
| Chloroform                      | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    |             |   | (<0.33)                                                  | U           | 7 (s)  |
| Chloromethane                   | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<5)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | (<0.37)     | U | (<0.37)                                                  | U           | ---    |
| cis-1,2-dichloroethene          | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.15)     | U | (<0.15)     | U  | (<0.33)     | U | (<0.33)                                                  | U           | 5 (s)  |
| Dichlorodifluoromethane         | µg/L          | (<2)        | U | (<2)        | UJ | (<2)        | U  | (<2)        | UJ | (<2)        | UJ | (<2)        | U | (<0.18)     | U | (<0.18)     | UJ | (<0.58)     | U | (<0.58)                                                  | U           | ---    |
| Diisopropyl ether               | µg/L          | (<0.5)      | U | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U | (<0.5)      | U | (<0.18)     | U  | (<0.29)     | U | (<0.29)                                                  | U           | 5 (s)  |
| Ethanol                         | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | --          |    | (<30.9)     | U | (<30.9)                                                  | U           | ---    |
| Isopropylbenzene                | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.12)     | U | (<0.12)     | U  | (<0.36)     | U | (<0.36)                                                  | U           | 5 (s)  |
| M,P-xylene                      | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | (<0.38)     | U | (<0.38)                                                  | U           | 5 (s)  |
| methyl ethyl keytone            | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | --          |    | (<1.07)     | U | (<1.07)                                                  | U           | 50 (g) |
| Methylcyclohexane               | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |    | --          |   | --          |   | (<0.63)     | U  | --          |   | ---                                                      |             | ---    |
| Methyl tert-butyl ether         | µg/L          | 1.1         |   | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.09)     | U | (<0.09)     | U  | (<0.24)     | U | (<0.24)                                                  | U           | 5 (s)  |
| Naphthalene                     | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | --          |    | (<0.35)     | U | (<0.35)                                                  | U           | 10 (g) |
| N-Butylbenzene                  | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.15)     | U  | (<0.41)     | U | (<0.41)                                                  | U           | 5 (s)  |
| N-propylbenzene                 | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.11)     | U | (<0.13)     | U  | (<0.34)     | U | (<0.34)                                                  | U           | 5 (s)  |
| O-xylene                        | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | --          |    | (<0.28)     | U | (<0.28)                                                  | U           | 5 (s)  |
| Sec-butylbenzene                | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.11)     | U | (<0.13)     | U  | (<0.33)     | U | (<0.33)                                                  | U           | ---    |
| Styrene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U |             | U  | (<0.4)      | U | (<0.4)                                                   | U           | 5 (s)  |
| Tert-butylbenzene               | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.11)     | U | (<0.11)     | U  | (<0.32)     | U | (<0.32)                                                  | U           | 10 (g) |
| Tetrachloroethene               | µg/L          | (<1)        | U | (<1)        | U  | 15          |    | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.17)     | U | (<0.17)     | U  | 1.89        |   | (<0.57)                                                  | U           | 5(s)   |
| Toluene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | --          |    | (<0.3)      | U | (<0.3)                                                   | U           | 5(s)   |
| trans-1,2-dichloroethene        | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.15)     | U | (<0.15)     | U  | (<0.38)     | U | (<0.38)                                                  | U           | 5(s)   |
| Trichloroethene                 | µg/L          | (<1)        | U | (<1)        | U  | 3.3         |    | (<1)        | U  | (<1)        | U  | (<1)        | U | (<0.2)      | U | (<0.2)      | U  | (<0.5)      | U | (<0.5)                                                   | U           | 5 (s)  |
| Vinyl chloride                  | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<0.13)     | U | (<0.13)     | U  | (<0.47)     | U | (<0.47)                                                  | U           | 2 (s)  |



Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-10M      |    |             |   |             |    |             |    |             |   |             |    |             |   |             |    |             |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |   |        |
|---------------------------------|---------------|-------------|----|-------------|---|-------------|----|-------------|----|-------------|---|-------------|----|-------------|---|-------------|----|-------------|---|----------------------------------------------------------|---|--------|
|                                 | Laboratory ID | 12K0749-04  |    | 13E0755-06  |   | 13K0947-05  |    | 14F0194-06  |    | 14K0664-05  |   | 15E0606-06  |    | 15K0954-05  |   | 16E0858-05  |    | SC34122-04  |   | SC44537-04                                               |   |        |
|                                 | Sample Type   | Groundwater |    | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater |    | Groundwater |   | Groundwater                                              |   |        |
|                                 | Sample Date   | 11/20/2012  |    | 5/20/2013   |   | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |   | 5/12/2015   |    | 11/19/2015  |   | 5/17/2016   |    | 4/27/2017   |   | 3/6/2018                                                 |   |        |
|                                 | Tidal Phase   | Flood       |    | Low/Flood   |   | High/Ebb    |    | Flood/High  |    | Ebb         |   | Low         |    | High        |   | Low         |    | Low         |   | High                                                     |   |        |
| 1,1-dichloroethene              | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.21)     | U | (<0.16)     | U  | (<0.32)     | U | (<0.69)                                                  | U | 5 (s)  |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.18)     | U | (<0.18)     | U  | (<0.36)     | U | (<0.36)                                                  | U | 5 (s)  |
| Acetone                         | µg/L          | (<50)       | U  | (<50)       | U | (<50)       | UJ | (<50)       | U  | (<50)       | U | (<50)       | U  | (<4.9)      | U | (<4.9)      | U  | (<0.8)      | U | (<0.8)                                                   | U | 50 (g) |
| Benzene                         | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U | --          |    | (<0.28)     | U | (<0.28)                                                  | U | 1 (s)  |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R  | 32          | J | (<20)       | R  | (<20)       | R  | (<20)       | U | (<20)       | U  | (<2.2)      | U | (<2.2)      | UJ | (<5.9)      | U | (<5.9)                                                   | U | ---    |
| Carbon disulfide                | µg/L          | (<4)        | U  | (<4)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U  | (<4)        | U |             |    |             |   | (<0.41)                                                  | U | ---    |
| Chloroform                      | µg/L          | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U | --          |    |             |   | (<0.33)                                                  | U | 7 (s)  |
| Chloromethane                   | µg/L          | (<2)        | U  | (<2)        | U | (<2)        | U  | (<5)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U | --          |    | (<0.37)     | U | (<0.37)                                                  | U | ---    |
| cis-1,2-dichloroethene          | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | 1.2         |   | (<1.0)      | U  | (<0.15)     | U | (<0.15)     | U  | 0.43        | J | (<0.33)                                                  | U | 5 (s)  |
| Dichlorodifluoromethane         | µg/L          | (<2)        | UJ | (<2)        | U | (<2)        | UJ | (<2)        | UJ | (<2)        | U | (<2)        | U  | (<0.18)     | U | (<0.18)     | U  | (<0.58)     | U | (<0.58)                                                  | U | ---    |
| Diisopropyl ether               | µg/L          | (<0.5)      | U  | (<0.5)      | U | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U | (<0.5)      | U  | (<0.5)      | U | (<0.18)     | U  | (<0.29)     | U | (<0.29)                                                  | U | 5 (s)  |
| Ethanol                         | µg/L          | --          |    | --          |   | --          |    | --          |    | --          |   | --          |    | --          |   | --          |    | (<30.9)     | U | (<30.9)                                                  | U | ---    |
| Isopropylbenzene                | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.12)     | U | (<0.12)     | U  | (<0.36)     | U | (<0.36)                                                  | U | 5 (s)  |
| M,P-xylene                      | µg/L          | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U | --          |    | (<0.38)     | U | (<0.38)                                                  | U | 5 (s)  |
| methyl ethyl ketone             | µg/L          | --          |    | --          |   | --          |    | --          |    | --          |   | --          |    | --          |   | --          |    | (<1.07)     | U | (<1.07)                                                  | U | 50 (g) |
| Methylcyclohexane               | µg/L          | --          |    | --          |   | --          |    | --          |    | --          |   | --          |    | --          | U | (<0.63)     | U  | --          |   | ---                                                      |   | ---    |
| Methyl tert-butyl ether         | µg/L          | 2.9         |    | 3           |   | (<1)        | U  | 1.1         |    | (<1.0)      | U | 1           |    | (<0.09)     | U | (<0.09)     | U  | 0.67        | J | (<0.24)                                                  | U | 5 (s)  |
| Naphthalene                     | µg/L          | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U  | (<2)        | U | --          |    | (<0.35)     | U | (<0.35)                                                  | U | 10 (g) |
| N-Butylbenzene                  | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U | (<0.15)     | U  | (<0.41)     | U | (<0.41)                                                  | U | 5 (s)  |
| N-propylbenzene                 | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.11)     | U | (<0.13)     | U  | (<0.34)     | U | (<0.34)                                                  | U | 5 (s)  |
| O-xylene                        | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U | --          |    | (<0.28)     | U | (<0.28)                                                  | U | 5 (s)  |
| Sec-butylbenzene                | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.11)     | U | (<0.13)     | U  | (<0.33)     | U | (<0.33)                                                  | U | ---    |
| Styrene                         | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U |             | U  | (<0.4)      | U | (<0.4)                                                   | U | 5 (s)  |
| Tert-butylbenzene               | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.11)     | U | (<0.11)     | U  | (<0.32)     | U | (<0.32)                                                  | U | 10 (g) |
| Tetrachloroethene               | µg/L          | 2.5         |    | (<1)        | U | 5.8         |    | 9.2         |    | 7.2         | J | 7.9         |    | 4.7         |   | 5.2         |    | 0.7         | J | 0.97                                                     | J | 5(s)   |
| Toluene                         | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U | --          |    | (<0.3)      | U | (<0.3)                                                   | U | 5(s)   |
| trans-1,2-dichloroethene        | µg/L          | (<1)        | U  | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U  | (<0.15)     | U | (<0.15)     | U  | (<0.38)     | U | (<0.38)                                                  | U | 5(s)   |
| Trichloroethene                 | µg/L          | (<1)        | U  | (<1)        | U | 1.6         |    | (<1)        |    | (<1)        | U | (<1)        | U  | (<0.2)      | U | (<0.2)      | U  | (<0.5)      | U | (<0.5)                                                   | U | 5 (s)  |
| Vinyl chloride                  | µg/L          | (<2.0)      | U  | (<2.0)      | U | (<2.0)      | UJ | (<2.0)      | U  | (<2.0)      | U | (<2.0)      | UJ | (<0.13)     | U | (<0.13)     | U  | (<0.47)     | U | (<0.47)                                                  | U | 2 (s)  |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA Method 8260C | Location ID   | MW-10S      |   |             |    |             |    |             |    |             |   |             |   |             |   |             |   |             |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |   |        |
|---------------------------------|---------------|-------------|---|-------------|----|-------------|----|-------------|----|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|----------------------------------------------------------|---|--------|
|                                 | Laboratory ID | 12K0749-05  |   | 13E0755-05  |    | 13K0947-04  |    | 14F0194-03  |    | 14K0664-03  |   | 15E0606-03  |   | 15K0954-06  |   | 16E0858-03  |   | SC34122-03  |   | SC44537-03                                               |   |        |
|                                 | Sample Type   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater                                              |   |        |
|                                 | Sample Date   | 11/20/2012  |   | 5/20/2013   |    | 11/21/2013  |    | 6/3/2014    |    | 11/11/2014  |   | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |   | 4/26/2017   |   | 3/6/2018                                                 |   |        |
|                                 | Tidal Phase   | Flood       |   | Low/Flood   |    | High/Ebb    |    | Flood/High  |    | Ebb         |   | Low         |   | High        |   | Low         |   | Low         |   | High                                                     |   |        |
| 1,1-dichloroethene              | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.21)     | U | (<0.16)     | U | (<0.32)     | U | (<0.69)                                                  | U | 5 (s)  |
| 1,2,4-trimethylbenzene          | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.18)     | U | (<0.18)     | U | (<0.36)     | U | (<0.36)                                                  | U | 5 (s)  |
| Acetone                         | µg/L          | 190         |   | (<50)       | U  | (<50)       | UJ | (<50)       | U  | (<50)       | U | (<50)       | U | (<4.9)      | U | (<4.9)      | U | (<0.80)     | U | 1.24                                                     |   | 50 (g) |
| Benzene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |   | (<0.28)     | U | (<0.28)                                                  | U | 1 (s)  |
| Butyl alcohol, tert-            | µg/L          | (<20)       | R | (<20)       | R  | (<20)       | R  | (<20)       | R  | (<20)       | U | (<20)       | U | (<2.2)      | U | 29          | J | (<5.9)      | U | (<5.9)                                                   | U | ---    |
| Carbon disulfide                | µg/L          | (<4)        | U | (<4)        | U  | (<4)        | U  | (<4)        | U  | (<4)        | U | (<4)        | U | (<4)        | U |             |   |             |   | (<0.41)                                                  | U | ---    |
| Chloroform                      | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |   |             |   | (<0.33)                                                  | U | 7 (s)  |
| Chloromethane                   | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<5)        | U  | (<5)        | U | (<2)        | U | (<2)        | U | --          |   | (<0.37)     | U | (<0.37)                                                  | U | ---    |
| cis-1,2-dichloroethene          | µg/L          | 1.4         |   | (<1)        | U  | (<1)        | U  | 4.7         |    | (<1)        | U | (<1)        | U | (<0.15)     | U | (<0.15)     | U | (<0.33)     | U | (<0.33)                                                  | U | 5 (s)  |
| Dichlorodifluoromethane         | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | UJ | (<2)        | U | (<2)        | U | (<0.18)     | U | (<0.18)     | U | (<0.58)     | U | (<0.58)                                                  | U | ---    |
| Diisopropyl ether               | µg/L          | (<0.5)      | U | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U  | (<0.5)      | U | (<0.5)      | U | (<0.5)      | U | (<0.18)     | U | (<0.29)     | U | (<0.29)                                                  | U | 5 (s)  |
| Ethanol                         | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |   | --          |   | --          |   | --          |   | (<30.9)     | U | (<30.9)                                                  | U | ---    |
| Isopropylbenzene                | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.12)     | U | (<0.12)     | U | (<0.36)     | U | (<0.36)                                                  | U | 5 (s)  |
| M,P-xylene                      | µg/L          | (<2)        | U | (<2)        | UJ | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |   | (<0.38)     | U | (<0.38)                                                  | U | 5 (s)  |
| methyl ethyl ketone             | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |   | --          |   | --          |   | --          |   | (<1.07)     | U | (<1.07)                                                  | U | 50 (g) |
| Methylcyclohexane               | µg/L          | --          |   | --          |    | --          |    | --          |    | --          |   | --          |   | --          |   | (<0.63)     | U | --          |   | ---                                                      |   | ---    |
| Methyl tert-butyl ether         | µg/L          | (<1)        | U | (<1)        | U  | 2.5         |    | 3.8         |    | (<1)        | U | 2.3         |   | 1           |   | 11          |   | 1.26        |   | 1.37                                                     |   | 5 (s)  |
| Naphthalene                     | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | (<2)        | U  | (<2)        | U | (<2)        | U | (<2)        | U | --          |   | (<0.35)     | U | (<0.35)                                                  | U | 10 (g) |
| N-Butylbenzene                  | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | (<0.15)     | U | (<0.41)     | U | (<0.41)                                                  | U | 5 (s)  |
| N-propylbenzene                 | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.13)     | U | (<0.34)     | U | (<0.34)                                                  | U | 5 (s)  |
| O-xylene                        | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |   | (<0.28)     | U | (<0.28)                                                  | U | 5 (s)  |
| Sec-butylbenzene                | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.13)     | U | (<0.33)     | U | (<0.33)                                                  | U | ---    |
| Styrene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |   | (<0.4)      | U | (<0.4)                                                   | U | 5 (s)  |
| Tert-butylbenzene               | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.11)     | U | (<0.11)     | U | (<0.32)     | U | (<0.32)                                                  | U | 10 (g) |
| Tetrachloroethene               | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.17)     | U | (<0.17)     | U | (<0.57)     | U | 0.97                                                     | J | 5(s)   |
| Toluene                         | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<1)        | U | --          |   | (<0.3)      | U | (<0.3)                                                   | U | 5(s)   |
| trans-1,2-dichloroethene        | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.15)     | U | (<0.15)     | U | (<0.38)     | U | (<0.38)                                                  | U | 5(s)   |
| Trichloroethene                 | µg/L          | (<1)        | U | (<1)        | U  | (<1)        | U  | (<1)        | U  | (<1)        | U | (<1)        | U | (<0.2)      | U | (<0.2)      | U | (<0.5)      | U | (<0.5)                                                   | U | 5 (s)  |
| Vinyl chloride                  | µg/L          | (<2)        | U | (<2)        | U  | (<2)        | U  | 2.1         |    | (<2)        | U | (<2)        | U | (<0.13)     | U | (<0.13)     | U | (<0.47)     | U | (<0.47)                                                  | U | 2 (s)  |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA<br>Method 8260C | Location ID   | MW-11D      |   |             |   |             |   |             |    |             |    |             |   |             |   | NYSDEC Ambient<br>Water Quality<br>Standard Class<br>GA(a) (µg/L) |
|------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|----|-------------|----|-------------|---|-------------|---|-------------------------------------------------------------------|
|                                    | Laboratory ID | 14F0194-13  |   | 14K0664-12  |   | 15E0606-09  |   | 15K1033-04  |    | 16E0858-12  |    | SC34122-09  |   | SC44624-07  |   |                                                                   |
|                                    | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |    | Groundwater |    | Groundwater |   | Groundwater |   |                                                                   |
|                                    | Sample Date   | 6/4/2014    |   | 11/11/2014  |   | 5/13/2015   |   | 11/20/2015  |    | 5/17/2016   |    | 4/28/2017   |   | 3/7/2018    |   |                                                                   |
|                                    | Tidal Phase   | Flood/High  |   | Ebb         |   | Ebb         |   | High        |    | Low         |    | Low         |   | High        |   |                                                                   |
| 1,1-dichloroethene                 | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.21)     | U  | (<0.16)     | U  | (<0.32)     | U | (<0.69)     | U | 5 (s)                                                             |
| 1,2,4-trimethylbenzene             | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.18)     | U  | (<0.18)     | U  | (<0.36)     | U | (<0.36)     | U | 5 (s)                                                             |
| Acetone                            | µg/L          | (<50)       | U | (<50)       | U | (<50)       | U | (<4.9)      | UJ | (<4.9)      | U  | (<0.80)     | U | (<0.8)      | U | 50 (g)                                                            |
| Benzene                            | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<1)        | U  | --          |    | (<0.28)     |   | (<0.28)     | U | 1 (s)                                                             |
| Butyl alcohol, tert-               | µg/L          | (<20)       | R | (<20)       | U | (<20)       | U | (<2.2)      | U  | (<2.2)      | UJ | (<5.9)      | U | (<5.9)      | U | ---                                                               |
| Carbon disulfide                   | µg/L          | (<4)        | U | (<4)        | U | (<4)        | U | (<4)        | U  |             |    |             |   | (<0.41)     | U | ---                                                               |
| Chloroform                         | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U | (<2)        | U  |             |    |             |   | 0.34        | J | 7 (s)                                                             |
| Chloromethane                      | µg/L          | --          |   | --          |   | --          |   | --          |    | (<2)        | U  | (<0.37)     | U | (<0.37)     | U | ---                                                               |
| cis-1,2-dichloroethene             | µg/L          | 1.6         |   | 2           |   | 1.2         |   | (<0.15)     | U  | 1.6         |    | 0.98        | J | 1.65        |   | 5 (s)                                                             |
| Dichlorodifluoromethane            | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U | (<0.18)     | U  | (<0.18)     | U  | (<0.58)     | U | (<0.58)     | U | ---                                                               |
| Diisopropyl ether                  | µg/L          | (<0.5)      | U | (<0.5)      | U | (<0.5)      | U | (<0.5)      | U  | (<0.18)     | U  | (<0.29)     | U | (<0.29)     | U | 5 (s)                                                             |
| Ethanol                            | µg/L          | --          |   | --          |   | --          |   | --          |    | --          |    | (<30.9)     | U | (<30.9)     | U | ---                                                               |
| Isopropylbenzene                   | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.12)     | U  | (<0.12)     | U  | (<0.36)     | U | (<0.36)     | U | 5 (s)                                                             |
| M,P-xylene                         | µg/L          | --          |   | --          |   | --          |   | --          |    | (<2)        | U  | (<0.338)    | U | (<0.38)     | U | 5 (s)                                                             |
| methyl ethyl ketone                | µg/L          | --          |   | --          |   | --          |   | --          |    | --          |    | (<1.07)     | U | (<1.07)     | U | 50 (g)                                                            |
| Methylcyclohexane                  | µg/L          | --          |   | --          |   | --          |   | --          |    | (<0.63)     | U  | --          |   | ---         |   | ---                                                               |
| Methyl tert-butyl ether            | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.09)     | U  | (<0.09)     | U  | (<0.24)     | U | 1.37        |   | 5 (s)                                                             |
| Naphthalene                        | µg/L          | --          |   | --          |   | --          |   | --          |    | --          |    | (<0.35)     | U | (<0.35)     | U | 10 (g)                                                            |
| N-Butylbenzene                     | µg/L          | --          |   | --          |   | --          |   | (<1)        | U  | (<0.15)     | U  | (<0.41)     | U | (<0.41)     | U | 5 (s)                                                             |
| N-propylbenzene                    | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.11)     | U  | (<0.13)     | U  | (<0.34)     | U | (<0.34)     | U | 5 (s)                                                             |
| O-xylene                           | µg/L          | --          |   | --          |   | --          |   | (<1)        | U  | --          |    | (<0.28)     | U | (<0.28)     | U | 5 (s)                                                             |
| Sec-butylbenzene                   | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.11)     | U  | (<0.13)     | U  | (<0.33)     | U | (<0.33)     | U | ---                                                               |
| Styrene                            | µg/L          |             | U |             | U |             | U | (<1)        | U  |             | U  | (<0.4)      | U | (<0.4)      | U | 5 (s)                                                             |
| Tert-butylbenzene                  | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.11)     | U  | (<0.11)     | U  | (<0.32)     | U | (<0.32)     | U | 10 (g)                                                            |
| Tetrachloroethene                  | µg/L          | 22          |   | 9.6         |   | 4.3         |   | 1.5         |    | 2.8         |    | 1.32        |   | 1.38        |   | 5(s)                                                              |
| Toluene                            | µg/L          | --          |   | --          |   | --          |   | (<1)        | U  | --          |    | (<0.3)      | U | (<0.3)      | U | 5(s)                                                              |
| trans-1,2-dichloroethene           | µg/L          | (<1)        | U | (<1)        | U | (<1)        | U | (<0.15)     | U  | (<0.15)     | U  | (<0.38)     | U | (<0.38)     | U | 5(s)                                                              |
| Trichloroethene                    | µg/L          | 1.3         |   | 1.9         |   | 1.1         |   | (<0.2)      | U  | 1.3         |    | 0.8         | J | 1.17        |   | 5 (s)                                                             |
| Vinyl chloride                     | µg/L          | (<2)        | U | (<2)        | U | (<2)        | U | (<0.13)     | U  | (<0.13)     | U  | (<0.47)     | U | (<0.47)     | U | 2 (s)                                                             |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| Parameter List EPA<br>Method 8260C | Location ID   | MW-11S             |    |                    |   |                    |   |                     |    |                     |    |                     |   |                     |   | NYSDEC Ambient<br>Water Quality<br>Standard Class<br>GA(a) (µg/L) |
|------------------------------------|---------------|--------------------|----|--------------------|---|--------------------|---|---------------------|----|---------------------|----|---------------------|---|---------------------|---|-------------------------------------------------------------------|
|                                    | Laboratory ID | 14F0194-12         |    | 14K0664-13         |   | 15E0606-10         |   | 15K1033-03          |    | 16E0858-11          |    | SC34122-10          |   | SC44624-08          |   |                                                                   |
|                                    | Sample Type   | Groundwater        |    | Groundwater        |   | Groundwater        |   | Groundwater         |    | Groundwater         |    | Groundwater         |   | Groundwater         |   |                                                                   |
|                                    | Sample Date   | 6/4/2014           |    | 11/11/2014         |   | 5/13/2015          |   | 11/20/2015          |    | 5/17/2016           |    | 4/28/2017           |   | 3/7/2018            |   |                                                                   |
|                                    | Tidal Phase   | Flood/High         |    | Ebb                |   | Ebb                |   | High                |    | Low                 |    | Low                 |   | High                |   |                                                                   |
| 1,1-dichloroethene                 | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.21</b> ) | U  | ( <b>&lt;0.16</b> ) | U  | ( <b>&lt;0.32</b> ) | U | ( <b>&lt;0.69</b> ) | U |                                                                   |
| 1,2,4-trimethylbenzene             | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.18</b> ) | U  | ( <b>&lt;0.18</b> ) | U  | ( <b>&lt;0.36</b> ) | U | ( <b>&lt;0.36</b> ) | U |                                                                   |
| Acetone                            | µg/L          | ( <b>&lt;50</b> )  | U  | ( <b>&lt;50</b> )  | U | ( <b>&lt;50</b> )  | U | ( <b>&lt;4.9</b> )  | UJ | ( <b>&lt;4.9</b> )  | U  | ( <b>&lt;0.80</b> ) | U | ( <b>&lt;0.8</b> )  | U |                                                                   |
| Benzene                            | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )    | U  | --                  |    | ( <b>&lt;0.28</b> ) | U | ( <b>&lt;0.28</b> ) | U |                                                                   |
| Butyl alcohol, tert-               | µg/L          | ( <b>&lt;20</b> )  | R  | ( <b>&lt;20</b> )  | U | ( <b>&lt;20</b> )  | U | ( <b>&lt;2.2</b> )  | U  | ( <b>&lt;2.2</b> )  | UJ | ( <b>&lt;5.9</b> )  | U | ( <b>&lt;5.9</b> )  | U |                                                                   |
| Carbon disulfide                   | µg/L          | ( <b>&lt;4</b> )   | U  | ( <b>&lt;4</b> )   | U | ( <b>&lt;4</b> )   | U | ( <b>&lt;4</b> )    | U  |                     |    |                     |   | ( <b>&lt;0.41</b> ) | U |                                                                   |
| Chloroform                         | µg/L          | ( <b>&lt;2</b> )   | U  | ( <b>&lt;2</b> )   | U | ( <b>&lt;2</b> )   | U | ( <b>&lt;2</b> )    | U  |                     |    |                     |   | ( <b>&lt;0.33</b> ) | U |                                                                   |
| Chloromethane                      | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | ( <b>&lt;2</b> )    | U  | ( <b>&lt;0.37</b> ) | U | ( <b>&lt;0.37</b> ) | U |                                                                   |
| cis-1,2-dichloroethene             | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.15</b> ) | U  | ( <b>&lt;0.15</b> ) | U  | ( <b>&lt;0.33</b> ) | U | ( <b>&lt;0.33</b> ) | U |                                                                   |
| Dichlorodifluoromethane            | µg/L          | ( <b>&lt;2</b> )   | UJ | ( <b>&lt;2</b> )   | U | ( <b>&lt;2</b> )   | U | ( <b>&lt;0.18</b> ) | U  | ( <b>&lt;0.18</b> ) | U  | ( <b>&lt;0.58</b> ) | U | ( <b>&lt;0.58</b> ) | U |                                                                   |
| Diisopropyl ether                  | µg/L          | ( <b>&lt;0.5</b> ) | U  | ( <b>&lt;0.5</b> ) | U | ( <b>&lt;0.5</b> ) | U | ( <b>&lt;0.5</b> )  | U  | ( <b>&lt;0.18</b> ) | U  | ( <b>&lt;0.29</b> ) | U | ( <b>&lt;0.29</b> ) | U |                                                                   |
| Ethanol                            | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | --                  |    | ( <b>&lt;30.9</b> ) | U | ( <b>&lt;30.9</b> ) | U |                                                                   |
| Isopropylbenzene                   | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | 1.1                |   | ( <b>&lt;0.12</b> ) | U  | 1                   |    | 0.8                 | J | ( <b>&lt;0.36</b> ) | U |                                                                   |
| M,P-xylene                         | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | ( <b>&lt;2</b> )    | U  | ( <b>&lt;0.38</b> ) | U | ( <b>&lt;0.38</b> ) | U |                                                                   |
| methyl ethyl ketone                | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | --                  |    | ( <b>&lt;1.07</b> ) | U | ( <b>&lt;1.07</b> ) | U |                                                                   |
| Methylcyclohexane                  | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | 2.1                 |    | --                  |   | ---                 |   |                                                                   |
| Methyl tert-butyl ether            | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.09</b> ) | U  | ( <b>&lt;0.09</b> ) | U  | --                  |   | ( <b>&lt;0.24</b> ) | U |                                                                   |
| Naphthalene                        | µg/L          | --                 |    | --                 |   | --                 |   | --                  |    | --                  |    | ( <b>&lt;0.35</b> ) | U | ( <b>&lt;0.35</b> ) | U |                                                                   |
| N-Butylbenzene                     | µg/L          | --                 |    | --                 |   | --                 |   | ( <b>&lt;1</b> )    | U  | 1.7                 |    | 1.08                |   | ( <b>&lt;0.41</b> ) | U |                                                                   |
| N-propylbenzene                    | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.11</b> ) | U  | ( <b>&lt;0.13</b> ) | U  | ( <b>&lt;0.34</b> ) | U | ( <b>&lt;0.34</b> ) | U |                                                                   |
| O-xylene                           | µg/L          | --                 |    | --                 |   | --                 |   | ( <b>&lt;1</b> )    | U  | --                  |    | ( <b>&lt;0.28</b> ) | U | ( <b>&lt;0.28</b> ) | U |                                                                   |
| Sec-butylbenzene                   | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | 1.2                |   | ( <b>&lt;0.11</b> ) | U  | 2                   |    | 1.04                |   | ( <b>&lt;0.33</b> ) | U |                                                                   |
| Styrene                            | µg/L          |                    | U  |                    | U |                    | U | ( <b>&lt;1</b> )    | U  |                     | U  | ( <b>&lt;0.4</b> )  | U | ( <b>&lt;0.4</b> )  | U |                                                                   |
| Tert-butylbenzene                  | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.11</b> ) | U  | ( <b>&lt;0.11</b> ) | U  | 0.54                | J | 0.36                | J |                                                                   |
| Tetrachloroethene                  | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.17</b> ) | U  | ( <b>&lt;0.17</b> ) | U  | ( <b>&lt;0.57</b> ) | U | ( <b>&lt;0.57</b> ) | U |                                                                   |
| Toluene                            | µg/L          | --                 |    | --                 |   | --                 |   | ( <b>&lt;1</b> )    | U  | --                  |    | ( <b>&lt;0.3</b> )  | U | ( <b>&lt;0.3</b> )  | U |                                                                   |
| trans-1,2-dichloroethene           | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.15</b> ) | U  | ( <b>&lt;0.15</b> ) | U  | ( <b>&lt;0.38</b> ) | U | ( <b>&lt;0.38</b> ) | U |                                                                   |
| Trichloroethene                    | µg/L          | ( <b>&lt;1</b> )   | U  | ( <b>&lt;1</b> )   | U | ( <b>&lt;1</b> )   | U | ( <b>&lt;0.2</b> )  | U  | ( <b>&lt;0.2</b> )  | U  | ( <b>&lt;0.5</b> )  | U | ( <b>&lt;0.5</b> )  | U |                                                                   |
| Vinyl chloride                     | µg/L          | ( <b>&lt;2</b> )   | U  | ( <b>&lt;2</b> )   | U | ( <b>&lt;2</b> )   | U | ( <b>&lt;0.13</b> ) | U  | ( <b>&lt;0.13</b> ) | U  | ( <b>&lt;0.47</b> ) | U | ( <b>&lt;0.47</b> ) | U |                                                                   |

Table 1 Summary of Detected Volatile Organic Compounds in Groundwater

| DUPLICATE SAMPLES               |                  |                   |   |                   |   |                   |    |                   |    |                   |   |             |   |               |   |             |   |             |   |                 |   |                                                          |
|---------------------------------|------------------|-------------------|---|-------------------|---|-------------------|----|-------------------|----|-------------------|---|-------------|---|---------------|---|-------------|---|-------------|---|-----------------|---|----------------------------------------------------------|
| Parameter List EPA Method 8260C | Laboratory ID    | 12K0749-09        |   | 13E0755-08        |   | 13K0947-11        |    | 14F0194-04        |    | 14K0664-06        |   | 15E0606-04  |   | 15K0954-10    |   | 16E0858-14  |   | SC34122-02  |   | SC44624-09      |   | NYSDEC Ambient Water Quality Standard Class GA(a) (µg/L) |
|                                 | Sample Name      | 130110-DUP-1112   |   | 0110-MW-DUP01-05  |   | 130110-DUP-1113   |    | 130110-DUP-0614   |    | 130110-DUP-1114   |   | DUP-051215  |   | 130110-DUP    |   | DUP-0516    |   | DUP-1-0517  |   | 130110-DUP-0318 |   |                                                          |
|                                 | Parent Sample ID | 30110-MW-09D-1111 |   | 30110-MW-09S-0513 |   | 30110-MW-09S-1113 |    | 30110-MW-10S-0614 |    | 30110-MW-10M-1111 |   | MW-04-0515  |   | 130110-MW-09S |   | MW-10S-0516 |   | MW-04-0517  |   | MW-11S          |   |                                                          |
|                                 | Sample Type      | Groundwater       |   | Groundwater       |   | Groundwater       |    | Groundwater       |    | Groundwater       |   | Groundwater |   | Groundwater   |   | Groundwater |   | Groundwater |   | Groundwater     |   |                                                          |
|                                 | Sample Date      | 11/19/2012        |   | 5/20/2013         |   | 11/21/2013        |    | 6/3/2014          |    | 11/11/2014        |   | 5/12/2015   |   | 11/19/2015    |   | 5/17/2016   |   | 4/27/2017   |   | 3/7/2018        |   |                                                          |
|                                 | Tidal Phase      | Ebb               |   | Low/Flood         |   | High/Ebb          |    | Flood/High        |    | Ebb               |   | Low         |   | High          |   | Low         |   | Low         |   | High            |   |                                                          |
| 1,1-dichloroethene              | µg/L             | 2                 |   | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <2.1          | U | <0.16       | U | <0.32       | U | <0.69           | U | 5 (s)                                                    |
| 1,2,4-trimethylbenzene          | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.8          | U | <0.18       | U | <0.36       | U | <0.36           | U | 5 (s)                                                    |
| Acetone                         | µg/L             | 310               |   | <50               | U | <50               | UJ | <50               | U  | <50               | U | <50         | U | <49           | U | <4.9        | U | <0.80       | U | <0.8            | U | 50 (g)                                                   |
| Benzene                         | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.28       | U | <0.28           | U | 1 (s)                                                    |
| Butyl alcohol, tert-            | µg/L             | <20               | R | <20               | R | <20               | R  | <20               | R  | <20               | U | <20         | U | <22           | U | 30          | J | <5.9        | U | <5.9            | U | ---                                                      |
| Carbon disulfide                | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | --          |   | <0.41           | U | ---                                                      |
| Chloroform                      | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | --          |   | <0.33           | U | 7 (s)                                                    |
| Chloromethane                   | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.37       | U | <0.37           | U | ---                                                      |
| cis-1,2-dichloroethene          | µg/L             | 470               |   | <1                | U | 36                | J  | 5.8               |    | <1                | U | <1          | U | 1,300         |   | <0.15       | U | 0.7         | J | <0.33           | U | 5 (s)                                                    |
| Dichlorodifluoromethane         | µg/L             | <2                | U | <2                | U | <2                | U  | <2                | UJ | <2                | U | <2          | U | <1.8          | U | <0.18       | U | <0.58       | U | <0.58           | U | ---                                                      |
| Diisopropyl ether               | µg/L             | <0.5              | U | < 0.5             | U | < 0.5             | U  | <0.5              | U  | <0.5              | U | <0.5        | U | <5            | U | <0.18       | U | <0.29       | U | <0.29           | U | 5 (s)                                                    |
| Ethanol                         | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <30.9       | U | <30.9           | U | ---                                                      |
| Isopropylbenzene                | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.2          | U | <0.12       | U | <0.36       | U | <0.36           | U | 5 (s)                                                    |
| M,P-xylene                      | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.38       | U | <0.38           | U | 5 (s)                                                    |
| methyl ethyl ketone             | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <1.07       | U | <1.07           | U | 50 (g)                                                   |
| Methylcyclohexane               | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | <0.63       | U | --          |   | ---             |   | ---                                                      |
| Methyl tert-butyl ether         | µg/L             | <1                | U | <1                | U | <1                | U  | 4.9               | U  | <1                | U | 2.1         | U | <0.9          | U | 12          |   | <0.24       | U | <0.24           | U | 5 (s)                                                    |
| Naphthalene                     | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.35       | U | <0.35           | U | 10 (g)                                                   |
| N-Butylbenzene                  | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U |             | U | <10           | U | <0.15       | U | <0.41       | U | <0.41           | U | 5 (s)                                                    |
| N-propylbenzene                 | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.1          | U | <0.13       | U | <0.34       | U | <0.34           | U | 5 (s)                                                    |
| O-xylene                        | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.28       | U | <0.28           | U | 5 (s)                                                    |
| Sec-butylbenzene                | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.1          | U | <0.13       | U | <0.33       | U | <0.33           | U | ---                                                      |
| Styrene                         | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U |               | U |             | U | <0.4        | U | <0.4            | U | 5 (s)                                                    |
| Tert-butylbenzene               | µg/L             | <1                | U | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.1          | U | <0.11       | U | <0.32       | U | 0.37            | J | 10 (g)                                                   |
| Tetrachloroethene               | µg/L             | 79                |   | <1                | U | <1                | U  | <1                | U  | 2.4               | J | <1          | U | <1.7          | U | <0.17       | U | 1.02        |   | <0.57           | U | 5(s)                                                     |
| Toluene                         | µg/L             | --                |   | --                |   | --                |    | --                |    | --                |   | --          |   | --            |   | --          |   | <0.3        | U | <0.3            | U | 5(s)                                                     |
| trans-1,2-dichloroethene        | µg/L             | 2.3               |   | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <1.5          | U | <0.15       | U | <0.38       | U | <0.38           | U | 5(s)                                                     |
| Trichloroethene                 | µg/L             | 170               |   | <1                | U | <1                | U  | <1                | U  | <1                | U | <1          | U | <2            | U | <0.2        | U | <0.5        | U | <0.5            | U | 5 (s)                                                    |
| Vinyl chloride                  | µg/L             | 49                |   | < 2.0             | U | 16                | J  | 2.7               |    | <2.0              | U | <2.0        | U | 180           | J | <0.13       | U | (0.47)      | U | <0.47           | U | 2 (s)                                                    |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Location ID   | MW-04         |   |             |   |             |   |             |   |             |   |             |   |             |   |             |   |             |     | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|-----|----------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Laboratory ID | 12K0749-02    |   | 13E0755-07  |   | 13K0947-02  |   | 14F0194-07  |   | 14K0664-04  |   | 15E0606-07  |   | 15K0954-03  |   | 16E0858-06  |   | SC34122-01  |     | SC44537-05                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sample Type   | Groundwater   |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |     | Groundwater                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sample Date   | 11/19/2012    |   | 5/20/2013   |   | 11/21/2013  |   | 6/3/2014    |   | 11/11/2014  |   | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |   | 4/27/2017   |     | 3/6/2018                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Tidal Phase   | Ebb           |   | Low/Flood   |   | High/Ebb    |   | Flood/High  |   | Ebb         |   | Low         |   | High        |   | Low         |   | Low         |     | High                                                                 |
| Aluminum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | 0.1           |   | 0.78        |   | 0.35        |   | 0.95        |   | 2.5         |   | 0.86        |   | 0.23        |   | 0.091       |   | 0.509       |     | 0.271                                                                |
| Antimony                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | NA            |   | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (<0.045)    | U | (<0.045)    | U | 0.0022      | J   | (<0.0016)                                                            |
| Arsenic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | mg/L          | (< 0.01)      | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0023      | J   | (<0.00138)                                                           |
| Barium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | 0.27          |   | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (<0.0063)   | U | (<0.0063)   | U | 0.0047      | J   | 0.005                                                                |
| Beryllium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | mg/L          | (< 0.004)     | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)   | U   | (<0.0003)                                                            |
| Cadmium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | mg/L          | <b>0.0051</b> |   | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)   | U   | (<0.0004)                                                            |
| Calcium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | mg/L          | NA            |   | 69          |   | 27          |   | 18          |   | 12          |   | 14          |   | 13          |   | 19          |   | 22.6        |     | 19.7                                                                 |
| Chromium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | (< 0.01)      | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | 0.03        |   | 0.011       |   | (<0.0008)   | U | (<0.0008)   | U | 0.0095      |     | 0.0039                                                               |
| Cobalt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | --            |   | --          |   | --          |   | --          |   | --          |   | --          |   | --          |   | --          |   | 0.0023      | J   | (<0.0008)                                                            |
| Copper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | <b>0.29</b>   |   | 0.047       |   | 0.015       |   | 0.012       |   | 0.039       |   | 0.019       |   | (<0.0047)   | U | (<0.0047)   | U | 0.0064      |     | 0.0128                                                               |
| Iron                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | mg/L          | NA            |   | <b>13</b>   |   | <b>1.6</b>  |   | <b>1.5</b>  |   | <b>7.8</b>  |   | <b>1.9</b>  |   | <b>0.43</b> |   | 0.23        |   | <b>1.21</b> | R06 | <b>0.788</b>                                                         |
| Lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | mg/L          | (< 0.01)      | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | 0.015       |   | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)   | U   | (<0.0062)                                                            |
| Magnesium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | mg/L          | NA            |   | 22          |   | 6.6         |   | 3.9         |   | 2.7         |   | 2.6         | B | 2.1         |   | 3.4         |   | 4.36        |     | 2.36                                                                 |
| Manganese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | mg/L          | <b>3.5</b>    |   | <b>0.44</b> |   | 0.18        |   | 0.13        |   | 0.27        |   | 0.14        |   | 0.076       |   | 0.068       |   | 0.295       |     | <b>0.354</b>                                                         |
| Nickel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | <b>0.17</b>   |   | (<0.011)    |   | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.0052      |     | 0.0032                                                               |
| Potassium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | mg/L          | NA            |   | 11          |   | 8           |   | 4.9         |   | 4.3         |   | 4           |   | 4.5         |   | 3.8         |   | 4.35        |     | 3.17                                                                 |
| Selenium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | --            |   | --          |   | --          |   | --          |   | --          |   | --          |   | --          |   | --          |   | (<0.0042)   | U   | (<0.0042)                                                            |
| Silver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | (< 0.005)     | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | 0.0014      | J   | (<0.0006)                                                            |
| Sodium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | mg/L          | NA            |   | <b>320</b>  |   | <b>150</b>  |   | <b>140</b>  |   | <b>97</b>   |   | <b>77</b>   |   | <b>57</b>   |   | <b>59</b>   |   | <b>48.5</b> |     | <b>44.9</b>                                                          |
| Thallium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | (< 0.05)      | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)   | U   | (<0.0021)                                                            |
| Vanadium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | mg/L          | (< 0.01)      | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0038)   | U | (<0.0038)   | U | (<0.0011)   | U   | (<0.0011)                                                            |
| Zinc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | mg/L          | 0.24          |   | 0.059       |   | (< 0.02)    | U | (< 0.02)    | U | 0.049       |   | (< 0.02)    | U | (<0.0094)   | U | (<0.0094)   | U | 0.0092      |     | 0.014                                                                |
| (a) 6 NYCRR Part 703.5 Class GA Groundwater Quality Regulations, as presented in the Division of Water Technical and Operational Guidance Series 1.1.1, 1998, as amended.<br>NOTES:<br><div>EPA = U.S. Environmental Protection Agency.<br/>ID = Identification<br/>-- = Not analyzed<br/>NYSDEC = New York State Department of Environmental Conservation.<br/>mg/L = Milligram(s) per liter<br/>ppm = Parts per million<br/>U = Non-detect, detection below the method detection limit. Analyte included in the analysis, but not detected at or above the MDL.<br/>R06 = MRL raised to correlate to batch QC reporting limits.<br/>GS1 = Sample dilution required for high concentration of target analytes to be within the instrument calibration range.<br/>D = Data reported from a dilution.<br/>J = Detected above the Method Detection Limit but below the Reporting limit; therefore, result is an estimated concentration (CLP J-Flag).<br/>B = Analyte is found in the associated blank as well as in the sample<br/>NA = Analyte not analyzed for during this sampling event.</div><br>Data provided by Con-Test Analytical Laboratory from 2012-2016. Only analytes that were detected in at least one sample are shown.<br>2017 data is provided by Eurofins Spectrum Analytical.<br>Concentration values in <b>BOLD</b> indicate that analyte was detected above the NYSDEC Ambient Water Quality Standards (s) or Guidance Values (g). |               |               |   |             |   |             |   |             |   |             |   |             |   |             |   |             |   |             |     |                                                                      |



Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-05R      |   |             |   |             |   |              |   |             |   |             |   |              |     |             |   |  | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|-----------------------------------------|---------------|-------------|---|-------------|---|-------------|---|--------------|---|-------------|---|-------------|---|--------------|-----|-------------|---|--|----------------------------------------------------------------------|
|                                         | Laboratory ID | 13K0947-03  |   | 14F0194-02  |   | 14K0664-01  |   | 15E0606-01   |   | 15K0954-02  |   | 16E0858-01  |   | SC34122-11   |     | SC44537-02  |   |  |                                                                      |
|                                         | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater  |     | Groundwater |   |  |                                                                      |
|                                         | Sample Date   | 11/21/2013  |   | 6/3/2014    |   | 11/11/2014  |   | 5/12/2015    |   | 11/19/2015  |   | 5/18/2016   |   | 4/28/2017    |     | 3/6/2018    |   |  |                                                                      |
|                                         | Tidal Phase   | High/Ebb    |   | Flood/High  |   | Ebb         |   | Low          |   | High        |   | Low         |   | Low          |     | High        |   |  |                                                                      |
| Aluminum                                | mg/L          | (< 0.05)    | U | 0.098       |   | (< 0.05)    | U | 0.11         |   | (<0.043)    | U | 0.093       |   | 0.135        |     | 0.0447      |   |  |                                                                      |
| Antimony                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | <b>0.059</b> |   | (<0.045)    | U | (<0.045)    | U | 0.0022       | J   | (<0.0016)   | U |  |                                                                      |
| Arsenic                                 | mg/L          | 0.012       |   | (< 0.01)    | U | 0.035       |   | (< 0.01)     | U | (<0.0078)   | U | (<0.0078)   | U | 0.0038       | J   | (<0.00138)  | U |  |                                                                      |
| Barium                                  | mg/L          | 0.3         |   | 0.15        |   | 0.19        |   | 0.19         |   | 0.19        |   | 0.26        |   | 0.252        |     | 0.302       |   |  |                                                                      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)   | U |  |                                                                      |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (<0.0007)   | U | (<0.0007)   | U | 0.0018       | J   | 0.0011      | J |  |                                                                      |
| Calcium                                 | mg/L          | 130         |   | 87          |   | 94          |   | 93           |   | 73          |   | 100         |   | 117          |     | 110         |   |  |                                                                      |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (<0.0008)   | U | (<0.0008)   | U | 0.0047       | J   | 0.0011      | J |  |                                                                      |
| Cobalt                                  | mg/L          | --          |   | --          |   | --          |   | --           |   | --          |   | --          |   | 0.0036       | J   | (<0.0008)   | U |  |                                                                      |
| Copper                                  | mg/L          | (< 0.01)    | U | 0.019       |   | 0.015       |   | 0.017        |   | 0.018       |   | (<0.0047)   | U | 0.0218       |     | 0.0145      |   |  |                                                                      |
| Iron                                    | mg/L          | <b>6.7</b>  |   | <b>5.8</b>  |   | <b>8.6</b>  |   | <b>13</b>    |   | <b>10</b>   |   | <b>17</b>   |   | <b>20.6</b>  | R06 | <b>20.9</b> |   |  |                                                                      |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)    | U   | (<0.0062)   | U |  |                                                                      |
| Magnesium                               | mg/L          | <b>36</b>   |   | 22          |   | 20          |   | 19           | B | 17          |   | 23          |   | 24.9         |     | 24.8        |   |  |                                                                      |
| Manganese                               | mg/L          | <b>0.51</b> |   | 0.3         |   | <b>0.49</b> |   | <b>0.61</b>  |   | <b>0.45</b> |   | <b>0.82</b> |   | <b>0.929</b> |     | <b>0.87</b> |   |  |                                                                      |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | 0.012       |   | (<0.0036)   | U | 0.0058       |     | (<0.0009)   | U |  |                                                                      |
| Potassium                               | mg/L          | 38          |   | 23          |   | 20          |   | 18           |   | 26          |   | 17          |   | 18           |     | 16.6        |   |  |                                                                      |
| Selenium                                | mg/L          | --          |   | --          |   | --          |   | --           |   | --          |   | --          |   | 0.005        | J   | (<0.0042)   | U |  |                                                                      |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)    | U | (<0.0029)   | U | (<0.0029)   | U | 0.0006       | J   | (<0.0006)   | U |  |                                                                      |
| Sodium                                  | mg/L          | <b>300</b>  |   | <b>280</b>  |   | <b>260</b>  |   | <b>230</b>   |   | <b>200</b>  |   | <b>240</b>  |   | <b>221</b>   |     | <b>212</b>  | B |  |                                                                      |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)   | U |  |                                                                      |
| Vanadium                                | mg/L          | 0.017       |   | 0.012       |   | (< 0.01)    | U | (< 0.01)     | U | 0.018       |   | (<0.0038)   | U | 0.0035       | J   | 0.0036      | J |  |                                                                      |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)    | U | (< 0.02)    | U | (< 0.02)     | U | 0.053       |   | 0.061       |   | 0.0191       |     | 0.0074      |   |  |                                                                      |



Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-06       |   |             |   |             |   |             |   |              |   |             |   |             |   |             |   |              |     |             |         | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|-----------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|--------------|---|-------------|---|-------------|---|-------------|---|--------------|-----|-------------|---------|----------------------------------------------------------------------|
|                                         | Laboratory ID | 12K0749-01  |   | 13E0755-01  |   | 13K0947-01  |   | 14F0194-01  |   | 14K0664-07   |   | 15E0606-02  |   | 15K0954-01  |   | 16E0858-02  |   | SC34122-06   |     | SC44624-01  |         |                                                                      |
|                                         | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |     | Groundwater |         |                                                                      |
|                                         | Sample Date   | 11/19/2012  |   | 5/20/2013   |   | 11/21/2013  |   | 6/3/2014    |   | 11/11/2014   |   | 5/12/2015   |   | 11/19/2015  |   | 5/18/2016   |   | 4/26/2017    |     | 3/6/2018    |         |                                                                      |
|                                         | Tidal Phase   | Ebb         |   | Low/Flood   |   | High/Ebb    |   | Flood/High  |   | Ebb          |   | Low         |   | High        |   | Low         |   | Low          |     | High        |         |                                                                      |
| Aluminum                                | mg/L          | 0.06        |   | 1.5         |   | (< 0.05)    | U | 0.31        |   | (< 0.05)     | U | 0.11        |   | 0.057       |   | 0.13        |   | 0.113        |     | 0.02        | J       | ---                                                                  |
| Antimony                                | mg/L          | NA          |   | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.045)    | U | (<0.045)    | U | (<0.0016)    | U   | (<0.0016)   | U       | 0.003 (s)                                                            |
| Arsenic                                 | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | <b>0.037</b> |   | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | (<0.0014)    | U   | (<0.00138)  | U       | 0.005 (s)                                                            |
| Barium                                  | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.0063)   | U | (<0.0063)   | U | 0.0082       |     | 0.0178      |         | 1 (s)                                                                |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)   | U       | 0.003 (s)                                                            |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)    | U   | (<0.0004)   | U       | 0.005 (s)                                                            |
| Calcium                                 | mg/L          | NA          |   | 86          |   | 110         |   | 110         |   | 80           |   | 70          |   | 71          |   | 70          |   | 130          |     | 142         |         | ---                                                                  |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0008)   | U | (<0.0008)   | U | 0.0013       | J   | 0.001       | J       | 0.05 (s)                                                             |
| Cobalt                                  | mg/L          | --          |   | --          |   | --          |   | --          |   | --           |   | --          |   | --          |   | --          |   | (<0.0008)    | U   | (<0.0008)   | U       | 0.005 (s)                                                            |
| Copper                                  | mg/L          | (< 0.01)    | U | 0.032       |   | (< 0.01)    | U | 0.017       |   | 0.017        |   | 0.039       |   | (<0.0047)   | U | (<0.0047)   | U | 0.0035       | J   | (<0.0023)   | U       | 0.2 (s)                                                              |
| Iron                                    | mg/L          | NA          |   | <b>20</b>   |   | <b>6.8</b>  |   | <b>9.5</b>  |   | <b>5</b>     |   | <b>5.7</b>  |   | <b>4.3</b>  |   | <b>4.5</b>  |   | <b>6.16</b>  | R06 | <b>7.15</b> |         | 0.3 (s)                                                              |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)    | U   | (<0.0062)   | U       | 0.025 (s)                                                            |
| Magnesium                               | mg/L          | NA          |   | 20          |   | <b>38</b>   |   | 30          |   | 23           |   | 20          | B | 20          |   | 20          |   | <b>36.6</b>  |     | <b>47.7</b> |         | 35 (s)                                                               |
| Manganese                               | mg/L          | 0.24        |   | 0.21        |   | <b>0.41</b> |   | <b>0.38</b> |   | 0.29         |   | 0.24        |   | 0.24        |   | 0.25        |   | <b>0.335</b> |     | <b>0.37</b> |         | 0.3 (s)                                                              |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.0014       | J   | 0.0012      | J       | 0.1 (s)                                                              |
| Potassium                               | mg/L          | NA          |   | 11          |   | 29          |   | 16          |   | 20           |   | 11          |   | 20          |   | 11          |   | 15.7         |     | 15          |         | ---                                                                  |
| Selenium                                | mg/L          | --          |   | --          |   | --          |   | --          |   | --           |   | --          |   | --          |   | --          |   | (<0.0042)    | U   | (<0.0042)   | U       | 0.010 (s)                                                            |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)   | U       | 0.0006 (s)                                                           |
| Sodium                                  | mg/L          | NA          |   | <b>250</b>  |   | <b>310</b>  |   | <b>310</b>  |   | <b>220</b>   |   | <b>210</b>  |   | <b>220</b>  |   | <b>200</b>  |   | <b>233</b>   |     | <b>319</b>  | GS1,D,E | 20 (s)                                                               |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)   | U       | 0.001 (s)                                                            |
| Vanadium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | 0.012       |   | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | 0.017       |   | (<0.0038)   | U | 0.002        | J   | (<0.0011)   | U       | ---                                                                  |
| Zinc                                    | mg/L          | (< 0.02)    | U | 0.042       |   | (< 0.02)    | U | 0.022       |   | 0.023        |   | 0.022       |   | (<0.0094)   | U | 0.05        |   | 0.0042       | J   | 0.0046      | J       | 2 (s)                                                                |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-08D      |   | MW-08DR     |   |            |             |             |             |             |             |             |             |             |             |              |             |              |   | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |  |
|-----------------------------------------|---------------|-------------|---|-------------|---|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------|---|----------------------------------------------------------------------|-------------|--|
|                                         | Laboratory ID | 12K0749-06  |   | 13K0947-10  |   |            | 14F0194-11  |             | 14K0664-11  |             | 15E0606-13  |             | 15K1033-02  |             | 16E0858-10  |              | SC34122-13  |              |   |                                                                      | SC44621-02  |  |
|                                         | Sample Type   | Groundwater |   | Groundwater |   |            | Groundwater |             | Groundwater |             | Groundwater |             | Groundwater |             | Groundwater |              | Groundwater |              |   |                                                                      | Groundwater |  |
|                                         | Sample Date   | 11/20/2012  |   | 11/21/2013  |   |            | 6/4/2014    |             | 11/11/2014  |             | 5/13/2015   |             | 11/20/2015  |             | 5/18/2016   |              | 4/28/2017   |              |   |                                                                      | 3/8/2018    |  |
|                                         | Tidal Phase   | Flood       |   | High/Ebb    |   |            | Flood/High  |             | Ebb         |             | Ebb         |             | High        |             | Low         |              | Low         |              |   |                                                                      | High        |  |
| Aluminum                                | mg/L          | 0.32        |   | (< 0.05)    | U | 0.073      |             | (< 0.05)    | U           | 0.13        |             | (<0.043)    | U           | 0.12        |             | 0.0355       |             | 0.0364       |   |                                                                      |             |  |
| Antimony                                | mg/L          | NA          |   | (< 0.05)    | U | (< 0.05)   | U           | (< 0.05)    | U           | (< 0.05)    | U           | (<0.045)    | U           | (<0.045)    | U           | (<0.0016)    | U           | (<0.0016)    | U |                                                                      |             |  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | 0.011       |   | (< 0.01)   | U           | 0.024       |             | (< 0.01)    | U           | (<0.0078)   | U           | (<0.0078)   | U           | 0.0018       | J           | 0.00175      | J |                                                                      |             |  |
| Barium                                  | mg/L          | 0.1         |   | (< 0.05)    | U | (< 0.05)   | U           | (< 0.05)    | U           | (< 0.05)    | U           | (<0.0063)   | U           | (<0.0063)   | U           | 0.0173       |             | 0.0158       |   |                                                                      |             |  |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)  | U           | (< 0.004)   | U           | (< 0.004)   | U           | (<0.001)    | U           | (<0.001)    | U           | (<0.0003)    | U           | (<0.0003)    | U |                                                                      |             |  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)  | U           | (< 0.004)   | U           | (< 0.004)   | U           | (<0.0007)   | U           | (<0.0007)   | U           | (<0.0004)    | U           | 0.0011       | J |                                                                      |             |  |
| Calcium                                 | mg/L          | NA          |   | 98          |   | 95         |             | 49          |             | 50          |             | 43          |             | 70          |             | 52.4         |             | 46.1         |   |                                                                      |             |  |
| Chromium                                | mg/L          | 0.041       |   | (< 0.01)    | U | (< 0.01)   | U           | (< 0.01)    | U           | (< 0.01)    | U           | (<0.0008)   | U           | (<0.0008)   | U           | 0.0019       | J           | 0.0014       | J |                                                                      |             |  |
| Cobalt                                  | mg/L          | --          |   | --          |   | --         |             | --          |             | --          |             | --          |             | --          |             | 0.0021       | J           | 0.001        | J |                                                                      |             |  |
| Copper                                  | mg/L          | 0.015       |   | (< 0.01)    | U | 0.014      |             | 0.017       |             | 0.019       |             | (<0.0047)   | U           | (<0.0047)   | U           | 0.0113       |             | 0.0098       |   |                                                                      |             |  |
| Iron                                    | mg/L          | NA          |   | <b>9.5</b>  |   | <b>12</b>  |             | <b>6</b>    |             | <b>12</b>   |             | <b>5.1</b>  |             | <b>11</b>   |             | <b>5.36</b>  | R06         | <b>2.81</b>  |   |                                                                      |             |  |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)   | U           | (< 0.01)    | U           | (< 0.01)    | U           | (<0.0025)   | U           | (<0.0025)   | U           | (<0.0062)    | U           | (<0.0062)    | U |                                                                      |             |  |
| Magnesium                               | mg/L          | NA          |   | 26          |   | 35         |             | 18          |             | 12          | B           | 14          |             | 18          |             | 12.2         |             | 11.9         |   |                                                                      |             |  |
| Manganese                               | mg/L          | <b>2.1</b>  |   | <b>1.1</b>  |   | <b>1.4</b> |             | <b>0.79</b> |             | <b>0.74</b> |             | <b>0.73</b> |             | <b>0.93</b> |             | <b>0.447</b> |             | <b>0.329</b> |   |                                                                      |             |  |
| Nickel                                  | mg/L          | 0.022       |   | (< 0.01)    | U | 0.011      |             | (< 0.01)    | U           | (< 0.01)    | U           | (<0.0036)   | U           | (<0.0036)   | U           | 0.01         |             | 0.0046       | J |                                                                      |             |  |
| Potassium                               | mg/L          | NA          |   | 12          |   | 12         |             | 8.8         |             | 6.5         |             | 6           |             | 9.4         |             | 7.75         |             | 6.95         |   |                                                                      |             |  |
| Selenium                                | mg/L          | --          |   | --          |   | --         |             | --          |             | --          |             | --          |             | --          |             | (<0.0042)    | U           | (<0.0042)    | U |                                                                      |             |  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)  | U           | (< 0.005)   | U           | (< 0.005)   | U           | (<0.0029)   | U           | (<0.0029)   | U           | (<0.0006)    | U           | (<0.0006)    | U |                                                                      |             |  |
| Sodium                                  | mg/L          | NA          |   | <b>220</b>  |   | <b>390</b> |             | <b>170</b>  |             | <b>140</b>  |             | <b>140</b>  |             | <b>220</b>  |             | <b>141</b>   |             | <b>161</b>   |   |                                                                      |             |  |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)   | U           | (< 0.05)    | U           | (< 0.05)    | U           | (<0.022)    | U           | (<0.022)    | U           | (<0.0021)    | U           | (<0.0021)    | U |                                                                      |             |  |
| Vanadium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)   | U           | (< 0.01)    | U           | (< 0.01)    | U           | (<0.0038)   | U           | (<0.0038)   | U           | (<0.0011)    | U           | (<0.0011)    | U |                                                                      |             |  |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)    | U | (< 0.02)   | U           | 0.028       |             | (< 0.02)    | U           | (<0.0094)   | U           | (<0.0094)   | U           | 0.0024       | J           | 0.0034       | J |                                                                      |             |  |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-08S      |   | MW-08SR      |   |              |   |              |   |              |   |             |   |             |   |             |       |             |   |            | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|-----------------------------------------|---------------|-------------|---|--------------|---|--------------|---|--------------|---|--------------|---|-------------|---|-------------|---|-------------|-------|-------------|---|------------|----------------------------------------------------------------------|
|                                         | Laboratory ID | 12K0749-07  |   | 13K0947-09   |   | 14F0194-10   |   | 14K0664-10   |   | 15E0606-12   |   | 15K1033-01  |   | 16E0858-09  |   | SC34122-12  |       | SC44621-01  |   |            |                                                                      |
|                                         | Sample Type   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |       | Groundwater |   |            |                                                                      |
|                                         | Sample Date   | 11/20/2012  |   | 11/21/2013   |   | 6/4/2014     |   | 11/11/2014   |   | 5/13/2015    |   | 11/19/2015  |   | 5/18/2016   |   | 4/28/2017   |       | 3/8/2018    |   |            |                                                                      |
|                                         | Tidal Phase   | Flood       |   | High/Ebb     |   | Flood/High   |   | Ebb          |   | Ebb          |   | High        |   | Low         |   | Low         |       | High        |   |            |                                                                      |
| Aluminum                                | mg/L          | 2.2         |   | 0.11         |   | 1.1          |   | 0.24         |   | 0.83         |   | (<0.043)    | U | 0.079       |   | 0.0174      | J     | 0.0203      | J | ---        |                                                                      |
| Antimony                                | mg/L          | NA          |   | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)     | U | <b>0.059</b> |   | (<0.045)    | U | (<0.045)    | U | (<0.0016)   | U     | 0.0028      | J | 0.003 (s)  |                                                                      |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.023</b> |   | <b>0.023</b> |   | <b>0.037</b> |   | (< 0.01)     | U | (<0.0078)   | U | (<0.0078)   | U | 0.0024      | J     | 0.0027      | J | 0.005 (s)  |                                                                      |
| Barium                                  | mg/L          | 0.2         |   | 0.14         |   | 0.23         |   | 0.14         |   | 0.19         |   | 0.11        |   | 0.17        |   | 0.127       |       | 0.128       |   | 1 (s)      |                                                                      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)    | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)   | U     | (<0.0003)   | U | 0.003 (s)  |                                                                      |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)    | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)   | U     | 0.0004      | J | 0.005 (s)  |                                                                      |
| Calcium                                 | mg/L          | NA          |   | 110          |   | 92           |   | 60           |   | 94           |   | 48          |   | 70          |   | 56.2        |       | 61.6        |   | ---        |                                                                      |
| Chromium                                | mg/L          | <b>0.21</b> |   | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0008)   | U | (<0.0008)   | U | (<0.0009)   | U     | 0.0016      | J | 0.05 (s)   |                                                                      |
| Cobalt                                  | mg/L          | --          |   | --           |   | --           |   | --           |   | --           |   | --          |   | --          |   | (<0.0008)   | U     | (<0.0008)   | U | 0.005 (s)  |                                                                      |
| Copper                                  | mg/L          | 0.064       |   | < 0.01       | U | 0.053        |   | 0.042        |   | 0.069        |   | 0.014       |   | (<0.0047)   | U | 0.026       |       | 0.0134      |   | 0.2 (s)    |                                                                      |
| Iron                                    | mg/L          | NA          |   | <b>4.1</b>   |   | <b>6.9</b>   |   | <b>1.9</b>   |   | <b>3.5</b>   |   | 0.19        |   | 0.19        |   | 0.0698      | R06,J | 0.0716      |   | 0.3 (s)    |                                                                      |
| Lead                                    | mg/L          | 0.01        |   | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)   | U     | (<0.0062)   | U | 0.025 (s)  |                                                                      |
| Magnesium                               | mg/L          | NA          |   | 23           |   | 18           |   | 11           |   | 16           | B | 8.1         |   | 12          |   | 8.57        |       | 10.5        |   | 35 (s)     |                                                                      |
| Manganese                               | mg/L          | <b>0.73</b> |   | <b>0.62</b>  |   | <b>1.2</b>   |   | 0.24         |   | <b>1.6</b>   |   | 0.22        |   | 0.05        |   | 0.0112      |       | 0.122       |   | 0.3 (s)    |                                                                      |
| Nickel                                  | mg/L          | 0.032       |   | 0.073        |   | 0.08         |   | 0.023        |   | 0.069        |   | (<0.0036)   | U | (<0.0036)   | U | 0.0051      |       | 0.0106      |   | 0.1 (s)    |                                                                      |
| Potassium                               | mg/L          | NA          |   | 18           |   | 11           |   | 9.6          |   | 7.6          |   | 6           |   | 6.5         |   | 5.82        |       | 5.16        |   | ---        |                                                                      |
| Selenium                                | mg/L          | --          |   | --           |   | --           |   | --           |   | --           |   | --          |   | --          |   | (<0.0042)   | U     | (<0.0042)   | U | 0.010 (s)  |                                                                      |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (< 0.005)    | U | (< 0.005)    | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)   | U     | (<0.0006)   | U | 0.0006 (s) |                                                                      |
| Sodium                                  | mg/L          | NA          |   | <b>160</b>   |   | <b>130</b>   |   | <b>89</b>    |   | <b>79</b>    |   | <b>70</b>   |   | <b>81</b>   |   | <b>65.8</b> |       | <b>65.1</b> |   | 20 (s)     |                                                                      |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)     | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)   | U     | (<0.0021)   | U | 0.001 (s)  |                                                                      |
| Vanadium                                | mg/L          | 0.032       |   | (< 0.01)     | U | 0.02         |   | 0.012        |   | 0.014        |   | (<0.0038)   | U | (<0.0038)   | U | 0.006       |       | 0.0044      | J | ---        |                                                                      |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)     | U | (< 0.02)     | U | (< 0.02)     | U | (< 0.02)     | U | (<0.0094)   | U | (<0.0094)   | U | 0.0032      | J     | 0.0038      | J | 2 (s)      |                                                                      |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-09D      |   |              |   |              |   |             |   |               |   |             |   |             |   |             |   |              |     | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |            |
|-----------------------------------------|---------------|-------------|---|--------------|---|--------------|---|-------------|---|---------------|---|-------------|---|-------------|---|-------------|---|--------------|-----|----------------------------------------------------------------------|-------------|------------|
|                                         | Laboratory ID | 12K0749-08  |   | 13E0755-02   |   | 13K0947-08   |   | 14F0194-09  |   | 14K0664-09    |   | 15E0606-11  |   | 15K0954-08  |   | 16E0858-08  |   | SC34122-08   |     |                                                                      | SC44621-04  |            |
|                                         | Sample Type   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater   |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |     |                                                                      | Groundwater |            |
|                                         | Sample Date   | 11/20/2012  |   | 5/20/2013    |   | 11/21/2013   |   | 6/4/2014    |   | 11/11/2014    |   | 5/13/2015   |   | 11/19/2015  |   | 5/17/2016   |   | 4/27/2017    |     |                                                                      | 3/6/2018    |            |
|                                         | Tidal Phase   | Flood       |   | Low/Flood    |   | High/Ebb     |   | Flood/High  |   | Ebb           |   | Ebb         |   | High        |   | Low         |   | Low          |     |                                                                      | High        |            |
| Aluminum                                | mg/L          | 0.74        |   | 0.64         |   | (< 0.05)     | U | 0.34        |   | 1.5           |   | 0.33        |   | 0.17        |   | 0.17        |   | 0.286        |     | 1.77                                                                 |             | ---        |
| Antimony                                | mg/L          | NA          |   | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)      | U | (< 0.05)    | U | (<0.045)    | U | (<0.045)    | U | (<0.0016)    | U   | 0.0016                                                               | J           | 0.003 (s)  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.031</b> |   | <b>0.014</b> |   | (< 0.01)    | U | (< 0.01)      | U | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0044       |     | <b>0.016</b>                                                         |             | 0.005 (s)  |
| Barium                                  | mg/L          | 0.086       |   | (< 0.05)     | U | 0.18         |   | 0.066       |   | 0.11          |   | (< 0.05)    | U | 0.082       |   | (<0.0063)   | U | 0.295        |     | 0.458                                                                |             | 1 (s)      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)     | U | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | 0.0003                                                               | J           | 0.003 (s)  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)     | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)    | U   | 0.0009                                                               | J           | 0.005 (s)  |
| Calcium                                 | mg/L          | NA          |   | 28           |   | 140          |   | 96          |   | 81            |   | 43          |   | 33          |   | 75          |   | 42.3         |     | 10.9                                                                 |             | ---        |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | 0.018         |   | (< 0.01)    | U | (<0.0008)   | U | (<0.0008)   | U | 0.0022       | J   | 0.0177                                                               |             | 0.05 (s)   |
| Cobalt                                  | mg/L          | --          |   | --           |   | --           |   | --          |   | --            |   | --          |   | --          |   | --          |   | 0.0025       | J   | 0.0038                                                               | J           | 0.005 (s)  |
| Copper                                  | mg/L          | (< 0.01)    | U | 0.19         |   | <b>0.25</b>  |   | 0.17        |   | <b>0.65</b>   |   | 0.18        |   | 0.16        |   | 0.019       |   | <b>0.379</b> |     | <b>1.35</b>                                                          |             | 0.2 (s)    |
| Iron                                    | mg/L          | NA          |   | <b>26</b>    |   | <b>78</b>    |   | <b>31</b>   |   | <b>45</b>     |   | <b>22</b>   |   | <b>14</b>   |   | <b>15</b>   |   | <b>11.4</b>  | R06 | <b>6</b>                                                             |             | 0.3 (s)    |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)     | U | <b>0.042</b> |   | (< 0.01)    | U | 0.016         |   | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)    | U   | 0.0134                                                               |             | 0.025 (s)  |
| Magnesium                               | mg/L          | NA          |   | 8.5          |   | <b>66</b>    |   | <b>42</b>   |   | <b>46</b>     |   | 16          | B | 14          |   | 26          |   | 17.6         |     | 3.55                                                                 |             | 35 (s)     |
| Manganese                               | mg/L          | <b>1.3</b>  |   | <b>0.98</b>  |   | <b>5.9</b>   |   | <b>2.7</b>  |   | <b>3.6</b>    |   | <b>1.4</b>  |   | <b>1.2</b>  |   | <b>0.93</b> |   | <b>0.986</b> |     | 0.113                                                                |             | 0.3 (s)    |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)     | U | 0.032        |   | 0.011       |   | 0.017         |   | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.004        | J   | 0.0081                                                               |             | 0.1 (s)    |
| Potassium                               | mg/L          | NA          |   | 4.7          |   | 14           |   | 8.3         |   | 9.8           |   | 4.7         |   | 4.9         |   | 7.4         |   | 5.39         |     | 3.59                                                                 |             | ---        |
| Selenium                                | mg/L          | --          |   | --           |   | --           |   | --          |   | --            |   | --          |   | --          |   | --          |   | (<0.0042)    | U   | (<0.0042)                                                            | U           | 0.010 (s)  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (< 0.005)   | U | <b>0.0051</b> |   | < 0.005     | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)                                                            | U           | 0.0006 (s) |
| Sodium                                  | mg/L          | NA          |   | <b>110</b>   |   | <b>300</b>   |   | <b>440</b>  |   | <b>300</b>    |   | <b>190</b>  |   | <b>140</b>  |   | <b>240</b>  |   | <b>160</b>   |     | <b>24.8</b>                                                          |             | 20 (s)     |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)      | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)                                                            | U           | 0.001 (s)  |
| Vanadium                                | mg/L          | (< 0.01)    | U | 0.015        |   | 0.017        |   | (< 0.01)    | U | 0.023         |   | (< 0.01)    | U | 0.012       |   | (<0.0038)   | U | 0.0014       | J   | 0.0067                                                               |             | ---        |
| Zinc                                    | mg/L          | (< 0.02)    | U | 0.22         |   | 0.69         |   | 0.066       |   | 0.26          |   | 0.059       |   | 0.18        |   | (<0.0094)   | U | 0.686        |     | 0.64                                                                 |             | 2 (s)      |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-09S      |   |              |   |              |   |             |   |              |   |             |   |             |   |             |   |              |     | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |            |
|-----------------------------------------|---------------|-------------|---|--------------|---|--------------|---|-------------|---|--------------|---|-------------|---|-------------|---|-------------|---|--------------|-----|----------------------------------------------------------------------|-------------|------------|
|                                         | Laboratory ID | 12K0749-10  |   | 13E0755-03   |   | 13K0947-07   |   | 14F0194-08  |   | 14K0664-08   |   | 15E0606-08  |   | 15K0954-07  |   | 16E0858-07  |   | SC34122-07   |     |                                                                      | SC44621-03  |            |
|                                         | Sample Type   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |     |                                                                      | Groundwater |            |
|                                         | Sample Date   | 11/19/2012  |   | 5/20/2013    |   | 11/21/2013   |   | 6/4/2014    |   | 11/11/2014   |   | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |   | 4/27/2017    |     |                                                                      | 3/8/2018    |            |
|                                         | Tidal Phase   | Ebb         |   | Low/Flood    |   | High/Ebb     |   | Flood/High  |   | Ebb          |   | Low         |   | High        |   | Low         |   | Low          |     |                                                                      | High        |            |
| Aluminum                                | mg/L          | 0.55        |   | 0.86         |   | 1.5          |   | 0.069       |   | 0.27         |   | 0.48        |   | 0.16        |   | 0.29        |   | 1.11         |     | 1.16                                                                 |             | ---        |
| Antimony                                | mg/L          | NA          |   | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.045)    | U | (<0.045)    | U | (<0.0016)    | U   | <b>0.0056</b>                                                        | J           | 0.003 (s)  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.013</b> |   | <b>0.022</b> |   | (< 0.01)    | U | <b>0.021</b> |   | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0032       | J   | <b>0.0144</b>                                                        |             | 0.005 (s)  |
| Barium                                  | mg/L          | 0.38        |   | 0.14         |   | 0.061        |   | 0.24        |   | 0.21         |   | 0.25        |   | 0.5         |   | 0.26        |   | 0.861        |     | 0.822                                                                |             | 1 (s)      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)                                                            | U           | 0.003 (s)  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | 0.0006       | J   | 0.0006                                                               | J           | 0.005 (s)  |
| Calcium                                 | mg/L          | NA          |   | 33           |   | 44           |   | 56          |   | 33           |   | 43          |   | 70          |   | 44          |   | 34.2         |     | 3.22                                                                 |             | ---        |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)     | U | 0.025        |   | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0008)   | U | (<0.0008)   | U | 0.0104       |     | 0.0114                                                               |             | 0.05 (s)   |
| Cobalt                                  | mg/L          | --          |   | --           |   | --           |   | --          |   | --           |   | --          |   | --          |   | --          |   | 0.0022       | J   | 0.0018                                                               | J           | 0.005 (s)  |
| Copper                                  | mg/L          | (< 0.01)    | U | (< 0.01)     | U | <b>0.28</b>  |   | 0.016       |   | 0.085        |   | <b>0.45</b> |   | 0.12        |   | <b>0.26</b> |   | <b>1.32</b>  |     | <b>1.0</b>                                                           |             | 0.2 (s)    |
| Iron                                    | mg/L          | NA          |   | <b>6.8</b>   |   | <b>11</b>    |   | <b>7.2</b>  |   | <b>4</b>     |   | <b>5.3</b>  |   | <b>13</b>   |   | <b>2.4</b>  |   | <b>3.67</b>  | R06 | <b>1.79</b>                                                          |             | 0.3 (s)    |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | 0.012        |     | 0.0104                                                               |             | 0.025 (s)  |
| Magnesium                               | mg/L          | NA          |   | 8.3          |   | 10           |   | 16          |   | 5.7          |   | 7.7         | B | 13          |   | 7.6         |   | 6.34         |     | 2.17                                                                 |             | 35 (s)     |
| Manganese                               | mg/L          | <b>2.2</b>  |   | <b>0.31</b>  |   | <b>0.46</b>  |   | <b>0.62</b> |   | 0.3          |   | <b>0.49</b> |   | <b>0.74</b> |   | <b>0.44</b> |   | <b>0.388</b> |     | 0.026                                                                |             | 0.3 (s)    |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.0037       | J   | 0.0038                                                               | J           | 0.1 (s)    |
| Potassium                               | mg/L          | NA          |   | 9.4          |   | 15           |   | 13          |   | 9.4          |   | 6.5         |   | 16          |   | 7.2         |   | 5.32         |     | 3.86                                                                 |             | ---        |
| Selenium                                | mg/L          | --          |   | --           |   | --           |   | --          |   | --           |   | --          |   | --          |   | --          |   | (<0.0042)    | U   | (<0.0042)                                                            | U           | 0.010 (s)  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)                                                            | U           | 0.0006 (s) |
| Sodium                                  | mg/L          | NA          |   | <b>250</b>   |   | <b>150</b>   |   | <b>190</b>  |   | <b>91</b>    |   | <b>88</b>   |   | <b>130</b>  |   | <b>90</b>   |   | <b>60</b>    |     | 17                                                                   |             | 20 (s)     |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)                                                            | U           | 0.001 (s)  |
| Vanadium                                | mg/L          | (< 0.01)    | U | (< 0.01)     | U | 0.013        |   | 0.012       |   | (< 0.01)     | U | (< 0.01)    | U | 0.012       |   | (<0.0038)   | U | 0.0046       | J   | 0.0114                                                               |             | ---        |
| Zinc                                    | mg/L          | (< 0.02)    | U | 0.059        |   | 0.43         |   | 0.022       |   | 0.12         |   | 0.31        |   | 0.18        |   | 0.24        |   | 0.618        |     | 0.626                                                                |             | 2 (s)      |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-10D      |   |             |   |             |   |             |   |              |   |              |   |             |   |             |   |             |       | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |            |
|-----------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|--------------|---|--------------|---|-------------|---|-------------|---|-------------|-------|----------------------------------------------------------------------|-------------|------------|
|                                         | Laboratory ID | 12K0749-03  |   | 13E0755-04  |   | 13K0947-06  |   | 14F0194-05  |   | 14K0664-02   |   | 15E0606-05   |   | 15K0954-04  |   | 16E0858-04  |   | SC34122-05  |       |                                                                      | SC44537-06  |            |
|                                         | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |       |                                                                      | Groundwater |            |
|                                         | Sample Date   | 11/19/2012  |   | 5/20/2013   |   | 11/21/2013  |   | 6/3/2014    |   | 11/11/2014   |   | 5/12/2015    |   | 11/19/2015  |   | 5/17/2016   |   | 4/27/2017   |       |                                                                      | 3/6/2018    |            |
|                                         | Tidal Phase   | Ebb         |   | Low/Flood   |   | High/Ebb    |   | Flood/High  |   | Ebb          |   | Low          |   | High        |   | Low         |   | Low         |       |                                                                      | High        |            |
| Aluminum                                | mg/L          | 0.64        |   | 0.13        |   | (< 0.05)    | U | 0.21        |   | 0.18         |   | 0.76         |   | (<0.043)    | U | 0.15        |   | 0.0262      |       | 0.0112                                                               | J           | ---        |
| Antimony                                | mg/L          | NA          |   | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (<0.045)    | U | (<0.045)    | U | (<0.0016)   | U     | 0.0016                                                               | J           | 0.003 (s)  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | <b>0.012</b> |   | <b>0.024</b> |   | (<0.0078)   | U | (<0.0078)   | U | 0.0024      | J     | (<0.00138)                                                           | U           | 0.005 (s)  |
| Barium                                  | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (<0.0063)   | U | (<0.0063)   | U | 0.0158      |       | 0.006                                                                |             | 1 (s)      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)   | U     | (<0.0003)                                                            | U           | 0.003 (s)  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)   | U     | (<0.0004)                                                            | U           | 0.005 (s)  |
| Calcium                                 | mg/L          | NA          |   | 9.8         |   | 24          |   | 12          |   | 11           |   | 27           |   | 11          |   | 34          |   | 60.6        |       | 19.7                                                                 |             | ---        |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | 0.035        |   | (<0.0008)   | U | (<0.0008)   | U | (<0.0009)   | U     | (<0.0009)                                                            | U           | 0.05 (s)   |
| Cobalt                                  | mg/L          | --          |   | --          |   | --          |   | --          |   | --           |   | --           |   | --          |   | --          |   | 0.0016      | J     | (<0.0008)                                                            | U           | 0.005 (s)  |
| Copper                                  | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | 0.073        |   | (<0.0047)   | U | (<0.0047)   | U | 0.003       | J     | 0.0036                                                               | J           | 0.2 (s)    |
| Iron                                    | mg/L          | NA          |   | <b>6.7</b>  |   | <b>8.7</b>  |   | <b>4.7</b>  |   | <b>8.5</b>   |   | <b>44</b>    |   | <b>6</b>    |   | <b>9.5</b>  |   | <b>14.3</b> | R06   | <b>8.08</b>                                                          |             | 0.3 (s)    |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | < 0.01       | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)   | U     | (<0.0062)                                                            | U           | 0.025 (s)  |
| Magnesium                               | mg/L          | NA          |   | 4.6         |   | 13          |   | 5.7         |   | 4.6          |   | 10           | B | 4.9         |   | 20          |   | 34.7        |       | 8.23                                                                 |             | 35 (s)     |
| Manganese                               | mg/L          | <b>0.31</b> |   | <b>0.47</b> |   | <b>0.7</b>  |   | <b>0.34</b> |   | <b>0.33</b>  |   | <b>1.4</b>   |   | <b>0.34</b> |   | <b>0.75</b> |   | <b>1.7</b>  |       | <b>0.652</b>                                                         |             | 0.3 (s)    |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | 0.019        |   | (<0.0036)   | U | (<0.0036)   | U | 0.0048      | J     | 0.0016                                                               | J           | 0.1 (s)    |
| Potassium                               | mg/L          | NA          |   | 2.5         |   | 5.3         |   | 3.1         |   | 2.6          |   | 5.2          |   | 3.1         |   | 6.2         |   | 11.4        |       | 3.3                                                                  |             | ---        |
| Selenium                                | mg/L          | --          |   | --          |   | --          |   | --          |   | --           |   | --           |   | --          |   | --          |   | (<0.0042)   | U     | (<0.0042)                                                            | U           | 0.010 (s)  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)   | U     | (<0.0006)                                                            | U           | 0.0006 (s) |
| Sodium                                  | mg/L          | NA          |   | <b>44</b>   |   | <b>96</b>   |   | <b>71</b>   |   | <b>62</b>    |   | <b>130</b>   |   | <b>52</b>   |   | <b>130</b>  |   | <b>302</b>  | GS1,D | <b>65.3</b>                                                          | B           | 20 (s)     |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)   | U     | (<0.0021)                                                            | U           | 0.001 (s)  |
| Vanadium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0038)   | U | (<0.0038)   | U | (<0.0011)   | U     |                                                                      | U           | ---        |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)    | U | (< 0.02)    | U | (< 0.02)    | U | 0.023        |   | 0.078        |   | 0.033       |   | 0.094       |   | 0.007       |       | 0.0212                                                               |             | 2 (s)      |



Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-10M      |   |              |   |             |   |             |   |              |   |             |   |             |   |             |   |              |     | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |            |
|-----------------------------------------|---------------|-------------|---|--------------|---|-------------|---|-------------|---|--------------|---|-------------|---|-------------|---|-------------|---|--------------|-----|----------------------------------------------------------------------|-------------|------------|
|                                         | Laboratory ID | 12K0749-04  |   | 13E0755-06   |   | 13K0947-05  |   | 14F0194-06  |   | 14K0664-05   |   | 15E0606-06  |   | 15K0954-05  |   | 16E0858-05  |   | SC34122-04   |     |                                                                      | SC44537-04  |            |
|                                         | Sample Type   | Groundwater |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |     |                                                                      | Groundwater |            |
|                                         | Sample Date   | 11/20/2012  |   | 5/20/2013    |   | 11/21/2013  |   | 6/3/2014    |   | 11/11/2014   |   | 5/12/2015   |   | 11/19/2015  |   | 5/17/2016   |   | 4/27/2017    |     |                                                                      | 3/6/2018    |            |
|                                         | Tidal Phase   | Flood       |   | Low/Flood    |   | High/Ebb    |   | Flood/High  |   | Ebb          |   | Low         |   | High        |   | Low         |   | Low          |     |                                                                      | High        |            |
| Aluminum                                | mg/L          | 0.82        |   | 0.23         |   | 0.72        |   | 0.18        |   | 0.7          |   | 0.69        |   | 0.76        |   | 0.21        |   | 0.589        |     | 0.199                                                                |             | ---        |
| Antimony                                | mg/L          | NA          |   | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | <b>0.06</b> |   | (<0.045)    | U | (<0.045)    | U | (<0.0016)    | U   | 0.0018                                                               | J           | 0.003 (s)  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.035</b> |   | <b>0.01</b> |   | (< 0.01)    | U | <b>0.041</b> |   | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0017       | J   | 0.0037                                                               | J           | 0.005 (s)  |
| Barium                                  | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.0063)   | U | (<0.0063)   | U | 0.0092       |     | 0.0162                                                               |             | 1 (s)      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)                                                            | U           | 0.003 (s)  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)    | U   | (<0.0004)                                                            | U           | 0.005 (s)  |
| Calcium                                 | mg/L          | NA          |   | 75           |   | 72          |   | 110         |   | 93           |   | 59          |   | 57          |   | 59          |   | 46.2         |     | 55.2                                                                 |             | ---        |
| Chromium                                | mg/L          | 0.01        |   | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | 0.01        |   | (<0.0008)   | U | 0.0058       |     | 0.0046                                                               | J           | 0.05 (s)   |
| Cobalt                                  | mg/L          | --          |   | --           |   | --          |   | --          |   | --           |   | --          |   | --          |   | --          |   | (<0.0008)    | U   | (<0.0008)                                                            | U           | 0.005 (s)  |
| Copper                                  | mg/L          | (< 0.01)    | U | 0.01         |   | (< 0.01)    | U | 0.016       |   | 0.077        |   | 0.027       |   | 0.013       |   | (<0.0047)   | U | 0.0136       |     | 0.0646                                                               |             | 0.2 (s)    |
| Iron                                    | mg/L          | NA          |   | <b>53</b>    |   | <b>3.5</b>  |   | <b>2</b>    |   | <b>6.6</b>   |   | <b>3</b>    |   | <b>3</b>    |   | <b>0.93</b> |   | <b>2.96</b>  | R06 | <b>1.89</b>                                                          |             | 0.3 (s)    |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)    | U   | (<0.0062)                                                            | U           | 0.025 (s)  |
| Magnesium                               | mg/L          | NA          |   | 14           |   | 18          |   | 27          |   | 23           |   | 18          | B | 19          |   | 20          |   | 14.8         |     | 19.6                                                                 |             | 35 (s)     |
| Manganese                               | mg/L          | <b>0.34</b> |   | 0.24         |   | <b>0.8</b>  |   | <b>0.43</b> |   | <b>0.34</b>  |   | 0.22        |   | 0.22        |   | 0.28        |   | <b>0.321</b> |     | <b>0.426</b>                                                         |             | 0.3 (s)    |
| Nickel                                  | mg/L          | (< 0.01)    | U | 0.012        |   | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.004        | J   | 0.0028                                                               | J           | 0.1 (s)    |
| Potassium                               | mg/L          | NA          |   | 12           |   | 10          |   | 14          |   | 12           |   | 9.9         |   | 9.6         |   | 10          |   | 9.08         |     | 9.12                                                                 |             | ---        |
| Selenium                                | mg/L          | --          |   | --           |   | --          |   | --          |   | --           |   | --          |   | --          |   | --          |   | (<0.0042)    | U   | (<0.0042)                                                            | U           | 0.010 (s)  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)                                                            | U           | 0.0006 (s) |
| Sodium                                  | mg/L          | NA          |   | <b>210</b>   |   | <b>170</b>  |   | <b>390</b>  |   | <b>320</b>   |   | <b>240</b>  |   | <b>230</b>  |   | <b>240</b>  |   | <b>168</b>   |     | <b>216</b>                                                           | B           | 20 (s)     |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)                                                            | U           | 0.001 (s)  |
| Vanadium                                | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)    | U | 0.015       |   | (<0.0038)   | U | 0.0024       | J   | 0.0011                                                               | J           | ---        |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)     | U | (< 0.02)    | U | (< 0.02)    | U | 0.052        |   | (< 0.02)    | U | 0.024       |   | (<0.0094)   | U | 0.0036       | J   | 0.0339                                                               |             | 2 (s)      |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-10S      |   |              |   |              |   |             |   |              |   |              |   |             |   |             |   |               |     | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |             |            |
|-----------------------------------------|---------------|-------------|---|--------------|---|--------------|---|-------------|---|--------------|---|--------------|---|-------------|---|-------------|---|---------------|-----|----------------------------------------------------------------------|-------------|------------|
|                                         | Laboratory ID | 12K0749-05  |   | 13E0755-05   |   | 13K0947-04   |   | 14F0194-03  |   | 14K0664-03   |   | 15E0606-03   |   | 15K0954-06  |   | 16E0858-03  |   | SC34122-03    |     |                                                                      | SC44537-03  |            |
|                                         | Sample Type   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater  |   | Groundwater  |   | Groundwater |   | Groundwater |   | Groundwater   |     |                                                                      | Groundwater |            |
|                                         | Sample Date   | 11/20/2012  |   | 5/20/2013    |   | 11/21/2013   |   | 6/3/2014    |   | 11/11/2014   |   | 5/12/2015    |   | 11/19/2015  |   | 5/17/2016   |   | 4/26/2017     |     |                                                                      | 3/6/2018    |            |
|                                         | Tidal Phase   | Flood       |   | Low/Flood    |   | High/Ebb     |   | Flood/High  |   | Ebb          |   | Low          |   | High        |   | Low         |   | Low           |     |                                                                      | High        |            |
| Aluminum                                | mg/L          | 1           |   | 0.078        |   | (< 0.05)     | U | 0.35        |   | 0.085        |   | 0.22         |   | 0.12        |   | 0.13        |   | 0.148         |     | (<0.0103)                                                            | U           | ---        |
| Antimony                                | mg/L          | NA          |   | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)     | U | <b>0.056</b> |   | (<0.045)    | U | (<0.045)    | U | (<0.0016)     | U   | (<0.0016)                                                            | U           | 0.003 (s)  |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.014</b> |   | <b>0.019</b> |   | (< 0.01)    | U | <b>0.037</b> |   | (< 0.01)     | U | (<0.0078)   | U | (<0.0078)   | U | <b>0.0054</b> |     | (<0.00138)                                                           | U           | 0.005 (s)  |
| Barium                                  | mg/L          | 0.35        |   | 0.13         |   | 0.24         |   | 0.25        |   | 0.24         |   | 0.71         |   | 0.46        |   | 0.58        |   | 0.292         |     | 0.385                                                                |             | 1 (s)      |
| Beryllium                               | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)     | U   | (<0.0003)                                                            | U           | 0.003 (s)  |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (< 0.004)   | U | (< 0.004)    | U | (< 0.004)    | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)     | U   | (<0.0004)                                                            | U           | 0.005 (s)  |
| Calcium                                 | mg/L          | NA          |   | 39           |   | 100          |   | 80          |   | 53           |   | 110          |   | 72          |   | 120         |   | 72.2          |     | 115                                                                  |             | ---        |
| Chromium                                | mg/L          | 0.014       |   | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0008)   | U | (<0.0008)   | U | 0.0016        | J   | 0.002                                                                | J           | 0.05 (s)   |
| Cobalt                                  | mg/L          | --          |   | --           |   | --           |   | --          |   | --           |   | --           |   | --          |   | --          |   | (<0.0008)     | U   | (<0.0008)                                                            | U           | 0.005 (s)  |
| Copper                                  | mg/L          | 0.02        |   | (< 0.01)     | U | (< 0.01)     | U | 0.011       |   | 0.061        |   | 0.027        |   | 0.011       |   | (<0.0047)   | U | 0.0076        |     | 0.0066                                                               |             | 0.2 (s)    |
| Iron                                    | mg/L          | NA          |   | <b>1.6</b>   |   | <b>5.7</b>   |   | <b>5.9</b>  |   | <b>5.2</b>   |   | <b>11</b>    |   | <b>2.4</b>  |   | <b>3.2</b>  |   | <b>5.17</b>   | R06 | <b>4.51</b>                                                          |             | 0.3 (s)    |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)     | U   | (<0.0062)                                                            | U           | 0.025 (s)  |
| Magnesium                               | mg/L          | NA          |   | 6            |   | 16           |   | 12          |   | 7.5          |   | 15           | B | 9.6         |   | 19          |   | 11.3          |     | 16.4                                                                 |             | 35 (s)     |
| Manganese                               | mg/L          | <b>1.1</b>  |   | 0.14         |   | <b>0.46</b>  |   | <b>0.59</b> |   | <b>0.33</b>  |   | <b>1.1</b>   |   | <b>0.35</b> |   | <b>0.62</b> |   | <b>0.396</b>  |     | <b>0.569</b>                                                         |             | 0.3 (s)    |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (< 0.01)    | U | (< 0.01)     | U | (< 0.01)     | U | (<0.0036)   | U | 0.044       |   | 0.001         | J   | (<0.0009)                                                            | U           | 0.1 (s)    |
| Potassium                               | mg/L          | NA          |   | 7.9          |   | 23           |   | 12          |   | 8.7          |   | 12           |   | 15          |   | 14          |   | 11.5          |     | 10.6                                                                 |             | ---        |
| Selenium                                | mg/L          | --          |   | --           |   | --           |   | --          |   | --           |   | --           |   | --          |   | --          |   | (<0.0042)     | U   | (<0.0042)                                                            | U           | 0.010 (s)  |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (< 0.005)   | U | (< 0.005)    | U | (< 0.005)    | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)     | U   | (<0.0006)                                                            | U           | 0.0006 (s) |
| Sodium                                  | mg/L          | NA          |   | <b>220</b>   |   | <b>210</b>   |   | <b>190</b>  |   | <b>160</b>   |   | <b>220</b>   |   | <b>180</b>  |   | <b>150</b>  |   | <b>120</b>    |     | <b>89.4</b>                                                          | B           | 20 (s)     |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (< 0.05)    | U | (< 0.05)     | U | (< 0.05)     | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)     | U   | (<0.0021)                                                            | U           | 0.001 (s)  |
| Vanadium                                | mg/L          | 0.013       |   | (< 0.01)     | U | (< 0.01)     | U | 0.011       |   | (< 0.01)     | U | (< 0.01)     | U | 0.012       |   | (<0.0038)   | U | 0.0032        | J   | 0.0011                                                               | J           | ---        |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)     | U | (< 0.02)     | U | (< 0.02)    | U | 0.064        |   | 0.046        |   | 0.037       |   | (<0.0094)   | U | 0.0185        |     | 0.0115                                                               |             | 2 (s)      |



Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-11D      |   |             |   |             |   |             |   |             |   |             |       |             |       | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|-----------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|-------|-------------|-------|----------------------------------------------------------------------|
|                                         | Laboratory ID | 14F0194-13  |   | 14K0664-12  |   | 15E0606-09  |   | 15K1033-04  |   | 16E0858-12  |   | SC34122-09  |       | SC44624-07  |       |                                                                      |
|                                         | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |       | Groundwater |       |                                                                      |
|                                         | Sample Date   | 6/4/2014    |   | 11/11/2014  |   | 5/13/2015   |   | 11/20/2015  |   | 5/17/2016   |   | 4/28/2017   |       | 3/7/2018    |       |                                                                      |
|                                         | Tidal Phase   | Flood/High  |   | Ebb         |   | Ebb         |   | High        |   | Low         |   | Low         |       | High        |       |                                                                      |
| Aluminum                                | mg/L          | 0.6         |   | (< 0.05)    | U | 0.18        |   | (<0.043)    | U | 0.082       |   | 1.1         |       | 0.0159      | J     |                                                                      |
| Antimony                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | 0.056       |   | (<0.045)    | U | (<0.045)    | U | (<0.0016)   | U     | (<0.0016)   | U     |                                                                      |
| Arsenic                                 | mg/L          | (< 0.01)    | U | 0.04        |   | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0039      | J     | 0.00175     | J     |                                                                      |
| Barium                                  | mg/L          | (< 0.05)    | U | 0.058       |   | 0.053       |   | 0.061       |   | 0.058       |   | 0.0411      |       | 0.0124      |       |                                                                      |
| Beryllium                               | mg/L          | (< 0.004)   | U | 0.0044      |   | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)   | U     | (<0.0003)   | U     |                                                                      |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)   | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)   | U     | 0.0012      | J     |                                                                      |
| Calcium                                 | mg/L          | 110         |   | 110         |   | 130         |   | 110         |   | 150         |   | 78          |       | 32.2        |       |                                                                      |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0008)   | U | (<0.0008)   | U | 0.0123      |       | (<0.0009)   | U     |                                                                      |
| Cobalt                                  | mg/L          | --          |   | --          |   | --          |   | --          |   | --          |   | 0.0024      | J     | (<0.0008)   | U     |                                                                      |
| Copper                                  | mg/L          | 0.017       |   | 0.021       |   | 0.027       |   | (<0.0047)   | U | (<0.0047)   | U | 0.0154      |       | 0.0033      | J     |                                                                      |
| Iron                                    | mg/L          | 7.8         |   | 13          |   | 2.8         |   | 0.55        |   | 0.4         |   | 8.98        | R06   | 0.353       |       |                                                                      |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)   | U     | (<0.0062)   | U     |                                                                      |
| Magnesium                               | mg/L          | 40          |   | 35          |   | 33          | B | 29          |   | 36          |   | 17.9        |       | 27.3        |       |                                                                      |
| Manganese                               | mg/L          | 4.1         |   | 3.6         |   | 3.2         |   | 1.8         |   | 2.5         |   | 2.28        |       | 0.748       |       |                                                                      |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)    | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.0031      | J     | (<0.0009)   | U     |                                                                      |
| Potassium                               | mg/L          | 15          |   | 21          |   | 12          |   | 10          |   | 14          |   | 10.8        |       | 12.4        |       |                                                                      |
| Selenium                                | mg/L          | --          |   | --          |   | --          |   | --          |   | --          |   | (<0.0042)   | U     | (<0.0042)   | U     |                                                                      |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)   | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)   | U     | (<0.0006)   | U     |                                                                      |
| Sodium                                  | mg/L          | 430         |   | 290         |   | 340         |   | 300         |   | 440         |   | 387         | GS1,D | 290         | GS1,D |                                                                      |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)   | U     | (<0.0021)   | U     |                                                                      |
| Vanadium                                | mg/L          | (< 0.01)    | U | 0.011       |   | (< 0.01)    | U | (<0.0038)   | U | (<0.0038)   | U | 0.0034      | J     | (<0.0011)   | U     |                                                                      |
| Zinc                                    | mg/L          | (< 0.02)    | U | 0.038       |   | (< 0.02)    | U | (<0.0094)   | U | 0.024       |   | 0.0136      |       | 0.0218      |       |                                                                      |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | ---                                                                  |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.003 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.005 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 1 (s)                                                                |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.003 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.005 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | ---                                                                  |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.05 (s)                                                             |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.005 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.2 (s)                                                              |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.3 (s)                                                              |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.025 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 35 (s)                                                               |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.3 (s)                                                              |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.1 (s)                                                              |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | ---                                                                  |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.010 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.0006 (s)                                                           |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 20 (s)                                                               |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 0.001 (s)                                                            |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | ---                                                                  |
|                                         |               |             |   |             |   |             |   |             |   |             |   |             |       |             |       | 2 (s)                                                                |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | Location ID   | MW-11S      |   |               |   |             |   |             |   |             |   |              |     |              |   | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |
|-----------------------------------------|---------------|-------------|---|---------------|---|-------------|---|-------------|---|-------------|---|--------------|-----|--------------|---|----------------------------------------------------------------------|
|                                         | Laboratory ID | 14F0194-12  |   | 14K0664-13    |   | 15E0606-10  |   | 15K1033-03  |   | 16E0858-11  |   | SC34122-10   |     | SC44624-08   |   |                                                                      |
|                                         | Sample Type   | Groundwater |   | Groundwater   |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater  |     | Groundwater  |   |                                                                      |
|                                         | Sample Date   | 6/4/2014    |   | 11/11/2014    |   | 5/13/2015   |   | 11/20/2015  |   | 5/17/2016   |   | 4/28/2017    |     | 3/7/2018     |   |                                                                      |
|                                         | Tidal Phase   | Flood/High  |   | Ebb           |   | Ebb         |   | High        |   | Low         |   | Low          |     | High         |   |                                                                      |
| Aluminum                                | mg/L          | 1.3         |   | 1.1           |   | 0.74        |   | 0.77        |   | 0.23        |   | 0.0579       |     | 0.029        |   |                                                                      |
| Antimony                                | mg/L          | (< 0.05)    | U | (< 0.05)      | U | (< 0.05)    | U | (<0.045)    | U | (<0.045)    | U | (<0.0016)    | U   | (<0.0016)    | U |                                                                      |
| Arsenic                                 | mg/L          | (< 0.01)    | U | <b>0.049</b>  |   | (< 0.01)    | U | (<0.0078)   | U | (<0.0078)   | U | 0.0026       | J   | 0.0025       | J |                                                                      |
| Barium                                  | mg/L          | 0.097       |   | 0.11          |   | 0.061       |   | 0.083       |   | (<0.0063)   | U | 0.0253       |     | 0.0196       |   |                                                                      |
| Beryllium                               | mg/L          | (< 0.004)   | U | <b>0.0054</b> |   | (< 0.004)   | U | (<0.001)    | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)    | U |                                                                      |
| Cadmium                                 | mg/L          | (< 0.004)   | U | (< 0.004)     | U | (< 0.004)   | U | (<0.0007)   | U | (<0.0007)   | U | (<0.0004)    | U   | 0.0022       | J |                                                                      |
| Calcium                                 | mg/L          | 95          |   | 94            |   | 59          |   | 85          |   | 57          |   | 50           |     | 41.3         |   |                                                                      |
| Chromium                                | mg/L          | (< 0.01)    | U | (< 0.01)      | U | (< 0.01)    | U | (<0.0008)   | U | (<0.0008)   | U | (<0.0009)    | U   | (<0.0009)    | U |                                                                      |
| Cobalt                                  | mg/L          | --          |   | --            |   | --          |   | --          |   | --          |   | 0.0018       | J   | 0.001        | J |                                                                      |
| Copper                                  | mg/L          | (< 0.01)    | U | 0.014         |   | 0.018       |   | (<0.0047)   | U | (<0.0047)   | U | (<0.0023)    | U   | (<0.0023)    | U |                                                                      |
| Iron                                    | mg/L          | <b>50</b>   |   | <b>30</b>     |   | <b>34</b>   |   | <b>31</b>   |   | <b>38</b>   |   | <b>31</b>    | R06 | <b>25.6</b>  |   |                                                                      |
| Lead                                    | mg/L          | (< 0.01)    | U | (< 0.01)      | U | (< 0.01)    | U | (<0.0025)   | U | (<0.0025)   | U | (<0.0062)    | U   | (<0.0062)    | U |                                                                      |
| Magnesium                               | mg/L          | 23          |   | <b>36</b>     |   | 20          | B | <b>36</b>   |   | 13          |   | 15.1         |     | 18.4         |   |                                                                      |
| Manganese                               | mg/L          | <b>1.6</b>  |   | <b>1</b>      |   | <b>0.8</b>  |   | <b>0.86</b> |   | <b>0.85</b> |   | <b>0.755</b> |     | <b>0.549</b> |   |                                                                      |
| Nickel                                  | mg/L          | (< 0.01)    | U | (< 0.01)      | U | (< 0.01)    | U | (<0.0036)   | U | (<0.0036)   | U | 0.0022       | J   | (<0.0009)    | U |                                                                      |
| Potassium                               | mg/L          | 8.9         |   | 23            |   | 8           |   | 15          |   | 6.4         |   | 7.5          |     | 6.44         |   |                                                                      |
| Selenium                                | mg/L          | --          |   | --            |   | --          |   | --          |   | --          |   | (<0.0042)    | U   | (<0.0042)    | U |                                                                      |
| Silver                                  | mg/L          | (< 0.005)   | U | (< 0.005)     | U | (< 0.005)   | U | (<0.0029)   | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)    | U |                                                                      |
| Sodium                                  | mg/L          | <b>280</b>  |   | <b>480</b>    | D | <b>200</b>  |   | <b>350</b>  |   | <b>140</b>  |   | <b>141</b>   |     | <b>121</b>   |   |                                                                      |
| Thallium                                | mg/L          | (< 0.05)    | U | (< 0.05)      | U | (< 0.05)    | U | (<0.022)    | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)    | U |                                                                      |
| Vanadium                                | mg/L          | (< 0.01)    | U | 0.013         |   | (< 0.01)    | U | (<0.0038)   | U | (<0.0038)   | U | (<0.0011)    | U   | (<0.0011)    | U |                                                                      |
| Zinc                                    | mg/L          | (< 0.02)    | U | (< 0.02)      | U | (< 0.02)    | U | (<0.0094)   | U | (<0.0094)   | U | (<0.0016)    | U   | 0.0028       | J |                                                                      |

Table 2 Summary of Detected Inorganic Compounds in Groundwater

| Parameter List<br>USEPA Method<br>6010C | DUPLICATE SAMPLES |                   |   |                    |   |                    |   |                    |   |                   |   |            |   |               |   |             |   |              |     |                 | NYSDEC<br>Ambient Water<br>Quality Standard<br>Class GA(a)<br>(mg/L) |            |
|-----------------------------------------|-------------------|-------------------|---|--------------------|---|--------------------|---|--------------------|---|-------------------|---|------------|---|---------------|---|-------------|---|--------------|-----|-----------------|----------------------------------------------------------------------|------------|
|                                         | Laboratory ID     | 12K0749-09        |   | 13E0755-08         |   | 13K0947-11         |   | 14F0194-04         |   | 14K0664-06        |   | 15E0606-04 |   | 15K0954-10    |   | 16E0858-14  |   | SC34122-02   |     | SC44624-09      |                                                                      |            |
|                                         | Sample ID         | 130110-DUP-1112   |   | 0110-MW-DUP01-05   |   | 130110-DUP-1113    |   | 130110-DUP-0614    |   | 130110-DUP-1114   |   | DUP-051215 |   | 130110-DUP    |   | DUP-0516    |   | DUP-1-0517   |     | 130110-DUP-0318 |                                                                      |            |
|                                         | Parent Sample     | 30110-MW-09D-1111 |   | 130110-MW-09S-0513 |   | 130110-MW-09S-1113 |   | 130110-MW-10S-0614 |   | 30110-MW-10M-1111 |   | MW-04      |   | 130110-MW-09S |   | MW-10S-0516 |   | MW-04-0517   |     | MW-11S          |                                                                      |            |
|                                         | Sample Date       | 11/19/2012        |   | 5/20/2013          |   | 11/21/2013         |   | 6/3/2014           |   | 11/11/2014        |   | 5/12/2015  |   | 11/19/2015    |   | 5/17/2016   |   | 4/27/2017    |     | 3/7/2018        |                                                                      |            |
|                                         | Tidal Phase       | Flood/High        |   | Ebb                |   | Flood/High         |   | Ebb                |   | Ebb               |   | Ebb        |   | High          |   | Low         |   | Low          |     | High            |                                                                      |            |
| Aluminum                                | mg/L              | 1.6               |   | 2.7                |   | 2                  |   | 0.29               |   | 0.55              |   | 0.22       |   | 0.1           |   | 0.14        |   | 0.516        |     | 0.0258          |                                                                      | ---        |
| Antimony                                | mg/L              | NA                |   | (< 0.05)           | U | (< 0.05)           | U | (< 0.05)           | U | (< 0.05)          | U | 0.055      |   | (<0.045)      | U | (<0.045)    | U | (<0.0016)    | U   | (<0.0016)       | U                                                                    | 0.003 (s)  |
| Arsenic                                 | mg/L              | (< 0.01)          | U | <b>0.015</b>       |   | <b>0.033</b>       |   | (< 0.01)           | U | <b>0.041</b>      |   | (< 0.01)   | U | (<0.0078)     | U | (<0.0078)   | U | 0.0014       | J   | 0.0032          | J                                                                    | 0.005 (s)  |
| Barium                                  | mg/L              | 0.096             |   | 0.17               |   | 0.1                |   | 0.25               |   | (< 0.05)          | U | 0.72       |   | 0.49          |   | 0.58        |   | 0.0045       | J   | 0.02            |                                                                      | 1 (s)      |
| Beryllium                               | mg/L              | (< 0.004)         | U | (< 0.004)          | U | (< 0.004)          | U | (< 0.004)          | U | (< 0.004)         | U | (< 0.004)  | U | (<0.001)      | U | (<0.001)    | U | (<0.0003)    | U   | (<0.0003)       | U                                                                    | 0.003 (s)  |
| Cadmium                                 | mg/L              | (< 0.004)         | U | (< 0.004)          | U | (< 0.004)          | U | (< 0.004)          | U | (< 0.004)         | U | (< 0.004)  | U | (<0.0007)     | U | (<0.0007)   | U | (<0.0004)    | U   | 0.0024          | J                                                                    | 0.005 (s)  |
| Calcium                                 | mg/L              | NA                |   | 36                 |   | 40                 |   | 79                 |   | 92                |   | 110        |   | 70            |   | 120         |   | 21.7         |     | 41.9            |                                                                      | ---        |
| Chromium                                | mg/L              | 0.013             |   | 0.015              |   | <b>0.15</b>        |   | (< 0.01)           | U | (< 0.01)          | U | (< 0.01)   | U | (<0.0008)     | U | (<0.0008)   | U | 0.0083       |     | (<0.0009)       | U                                                                    | 0.05 (s)   |
| Cobalt                                  | mg/L              | --                |   | --                 |   | --                 |   | --                 |   | --                |   | --         |   | --            |   | --          |   | (<0.0008)    | U   | 0.0011          | J                                                                    | 0.005 (s)  |
| Copper                                  | mg/L              | 0.012             |   | 0.014              |   | <b>0.88</b>        |   | < 0.01             | U | 0.043             |   | 0.025      |   | 0.072         |   | (<0.0047)   | U | 0.0077       |     | (<0.0023)       | U                                                                    | 0.2 (s)    |
| Iron                                    | mg/L              | NA                |   | <b>12</b>          |   | <b>19</b>          |   | <b>5.9</b>         |   | <b>4.3</b>        |   | <b>11</b>  |   | <b>13</b>     |   | <b>3.1</b>  |   | <b>1.24</b>  | R06 | <b>29.7</b>     |                                                                      | 0.3 (s)    |
| Lead                                    | mg/L              | (< 0.01)          | U | (< 0.01)           | U | 0.014              |   | (< 0.01)           | U | (< 0.01)          | U | (< 0.01)   | U | (<0.0025)     | U | (<0.0025)   | U | (<0.0062)    | U   | (<0.0062)       | U                                                                    | 0.025 (s)  |
| Magnesium                               | mg/L              | NA                |   | 9.6                |   | 9.4                |   | 11                 |   | 23                |   | 15         | B | 13            |   | 19          |   | 4.15         |     | 18.1            |                                                                      | 35 (s)     |
| Manganese                               | mg/L              | <b>1.4</b>        |   | <b>0.35</b>        |   | <b>0.42</b>        |   | <b>0.59</b>        |   | <b>0.33</b>       |   | <b>1.1</b> |   | <b>0.74</b>   |   | <b>0.63</b> |   | <b>0.306</b> |     | <b>0.577</b>    |                                                                      | 0.3 (s)    |
| Nickel                                  | mg/L              | (< 0.01)          | U | (< 0.01)           | U | 0.098              |   | (< 0.01)           | U | (< 0.01)          | U | (< 0.01)   | U | (<0.0036)     | U | (<0.0036)   | U | 0.0035       | J   | (<0.0009)       | U                                                                    | 0.1 (s)    |
| Potassium                               | mg/L              | NA                |   | 10                 |   | 15                 |   | 11                 |   | 13                |   | 12         |   | 17            |   | 14          |   | 4.16         |     | 6.26            |                                                                      | ---        |
| Selenium                                | mg/L              | --                |   | --                 |   | --                 |   | --                 |   | --                |   | --         |   | --            |   | --          |   | (<0.0042)    | U   | (<0.0042)       | U                                                                    | 0.010 (s)  |
| Silver                                  | mg/L              | (< 0.005)         | U | (< 0.005)          | U | (< 0.005)          | U | (< 0.005)          | U | (< 0.005)         | U | (< 0.005)  | U | (<0.0029)     | U | (<0.0029)   | U | (<0.0006)    | U   | (<0.0006)       | U                                                                    | 0.0006 (s) |
| Sodium                                  | mg/L              | NA                |   | <b>260</b>         |   | <b>130</b>         |   | <b>180</b>         |   | <b>320</b>        |   | <b>220</b> |   | <b>130</b>    |   | <b>150</b>  |   | <b>47.5</b>  |     | <b>117</b>      |                                                                      | 20 (s)     |
| Thallium                                | mg/L              | (< 0.05)          | U | (< 0.05)           | U | (< 0.05)           | U | (< 0.05)           | U | (< 0.05)          | U | (< 0.05)   | U | (<0.022)      | U | (<0.022)    | U | (<0.0021)    | U   | (<0.0021)       | U                                                                    | 0.001 (s)  |
| Vanadium                                | mg/L              | (< 0.01)          | U | 0.011              |   | 0.016              |   | 0.011              |   | (< 0.01)          | U | (< 0.01)   | U | 0.014         |   | (<0.0038)   | U | 0.0011       | J   | (< 0.0011)      | U                                                                    | ---        |
| Zinc                                    | mg/L              | < 0.02            | U | 0.088              |   | 0.87               |   | < 0.02             | U | 0.026             |   | 0.034      |   | 0.12          |   | (<0.0094)   | U | 0.0087       |     | 0.0042          | J                                                                    | 2 (s)      |

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**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Well ID       | MW-04       |   |             |   |             |   |             |  |             |     |             |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-----|-------------|-----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Laboratory ID | 12K0749-02  |   | 13K0947-02  |   | 14K0664-04  |   | 15K0954-03  |  | SC34122-01  |     | SC44537-05  |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |     | Groundwater |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sample Date   | 11/19/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |  | 4/27/2017   |     | 3/6/2018    |     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Tidal Phase   | Ebb         |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |     | High        |     |
| ORP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | mV            | 23          |   | 45          |   | -88         |   | -27         |  | 23          |     | -51         |     |
| Dissolved Oxygen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | mg/L          | 1.01        |   | 2.34        |   | 0           |   | 1.99        |  | 6.2         |     | 1.26        |     |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |             |   |             |   |             |   |             |  |             |     |             |     |
| Chloride                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | mg/L          | 3400        |   | 170         |   | 58          |   | 8.81        |  | 13.3        |     | 15.7        |     |
| Nitrate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mg/L          | 0.54        |   | (< 0.05)    | U | 0.13        |   | 0.06        |  | 0.435       | O09 | 0.285       | O09 |
| Sulfate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mg/L          | 330         |   | 39          |   | 11          |   | 13.1        |  | 17.9        |     | 15.8        |     |
| Sulfide by USEPA SM4500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |             |   |             |   |             |   |             |  |             |     |             |     |
| Sulfide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U   | (<0.05)     | U   |
| Total Organic Carbon by USEPA Method SM5310B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |             |   |             |   |             |   |             |  |             |     |             |     |
| Total organic carbon                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | mg/L          | 5.2         |   | 3.2         |   | 3.2         |   | 2           |  | 2.66        |     | 2.14        |     |
| Ethane, Ethene, and Methane by USEPA Method EC3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |             |   |             |   |             |   |             |  |             |     |             |     |
| Ethane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | µg/L          | --          |   | --          |   | --          |   | --          |  | (<3.48)     | U   | (<3.48)     | U   |
| Ethene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | µg/L          | --          |   | --          |   | --          |   | --          |  | (<4.58)     | U   | (<4.58)     | U   |
| Methane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | µg/L          | --          |   | --          |   | --          |   | --          |  | 3           |     | (<2.16)     | U   |
| <p>NOTES:</p> <p>USEPA = United States Environmental Protection Agency</p> <p>ID = Identification</p> <p>NYSDEC = New York State Department of Environmental Conservation.</p> <p>ORP = Oxidation-Reduction Potential</p> <p>mg/L = Milligram(s) per Liter = parts per million (ppm)</p> <p>µg/L = Microgram(s) per liter = parts per billion (ppb)</p> <p>mV = Millivolts</p> <p>-- = Not analyzed</p> <p>GS1 = Sample dilution required for high concentration of target analytes to be within the instrument calibration range.</p> <p>R01 = The Reporting Limit has been raised to account for matrix interference.</p> <p>O09 = Sample was analyzed outside the EPA recommended holding time as per client request.</p> <p>J = Detected above the method detection limit but below the reporting limit; therefore, result is an estimated concentration (CLP J-flag).</p> <p>U = Non-detect, detection below the method detection limit.</p> <p>D = Data reported from a dilution.</p> <p>Data provided by Con-Test Analytical Laboratory from 2012-2016. Only analytes that were detected in at least one sample are shown.</p> <p>2017-2018 data is provided by Eurofins Spectrum Analytical.</p> <p>Concentration values in <b>BOLD</b> identify parameters indicative of probable MNA conditions.</p> |               |             |   |             |   |             |   |             |  |             |     |             |     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-05R      |   |             |   |             |   |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 13K0947-03  |   | 14K0664-01  |   | 15K0954-02  |   | SC34122-11  |       | SC44537-02  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |   | 4/28/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | High/Ebb    |   | Ebb         |   | High        |   | Low         |       | High        |       |
| ORP                                               | mV            | -112        |   | -120        |   | -145        |   | -139        |       | -181        |       |
| Dissolved Oxygen                                  | mg/L          | 2.01        |   | 0           |   | 0.63        |   | 0           |       | 1.78        |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |       |             |       |
| Chloride                                          | mg/L          | 510         |   | 380         |   | 260         |   | 312         | GS1,D | 377         | GS1,D |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | 0.15        |   | (<0.009)    | O09,U | (<0.007)    | O09,U |
| Sulfate                                           | mg/L          | (< 2)       | U | (< 2)       | U | (<3.0)      | U | 0.615       | J     | 2.46        |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | --          |   | (<0.066)    | U     | 0.45        |       |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |       |             |       |
| Total organic carbon                              | mg/L          | 12          |   | 12          |   | 11          |   | 21.9        |       | 17          | R01,D |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | 35          |       | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | 31          |       | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | 469         |       | (<2.16)     | U     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-06       |   |             |   |             |   |             |  |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 12K0749-01  |   | 13K0947-01  |   | 14K0664-07  |   | 15K0954-01  |  | SC34122-06  |       | SC44624-01  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/19/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |  | 4/26/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | Ebb         |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |       | High        |       |
| ORP                                               | mV            | -66         |   | -133        |   | -119        |   | -125        |  | -107        |       | -103        |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0.94        |   | 0           |   | 3.17        |  | 0           |       | 0           |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Chloride                                          | mg/L          | 810         |   | 320         |   | 340         |   | 248         |  | 348         | GS1,D | 745         | GS1,D |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | 0.057       |  | 0.029       | O09,J | 0.008       | O09,J |
| Sulfate                                           | mg/L          | 75          |   | 44          |   | (< 2)       | U | 66          |  | 5.5         |       | 64.5        | GS1,D |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U     | 0.11        |       |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Total organic carbon                              | mg/L          | 22          |   | 11          |   | 13          |   | 12          |  | 13.6        |       | 13.6        | R01,D |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | 28          |       | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | 27          |       | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |  | 252         |       | 56          |       |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-08D      |   | MW-08DR     |   |             |   |             |  |             |       |             |   |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-------|-------------|---|
|                                                   | Laboratory ID | 12K0749-06  |   | 13K0947-10  |   | 14K0664-11  |   | 15K1033-02  |  | SC34122-13  |       | SC44621-02  |   |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |   |
|                                                   | Sample Date   | 11/20/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/20/2015  |  | 4/28/2017   |       | 3/8/2018    |   |
|                                                   | Tidal Phase   | Flood       |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |       | High        |   |
| ORP                                               | mV            | -69         |   | -9          |   | 70          |   | -52         |  | -45         |       | -46         |   |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0           |   | 0           |   | 3.38        |  | 0           |       | 0           |   |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |  |             |       |             |   |
| Chloride                                          | mg/L          | 1200        |   | 350         |   | 310         |   | 251         |  | 217         | GS1,D | 249         |   |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | 0.1         |  | 0.109       | O09   | 1.02        |   |
| Sulfate                                           | mg/L          | 180         |   | 63          |   | 34          |   | 41.7        |  | 43.8        |       | 54.8        |   |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |  |             |       |             |   |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U     | (<0.05)     | U |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |  |             |       |             |   |
| Total organic carbon                              | mg/L          | 8.1         |   | 2.1         |   | 2.6         |   | 2           |  | 4.78        |       | 4.21        |   |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |  |             |       |             |   |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | 22          |       | (<3.48)     | U |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | 31          |       | (<4.58)     | U |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |  | 3           |       | (<2.16)     | U |



**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-08S      |   | MW-08SR     |   |             |   |             |   |             |     |             |    |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|-----|-------------|----|
|                                                   | Laboratory ID | 12K0749-07  |   | 13K0947-09  |   | 14K0664-10  |   | 15K1033-01  |   | SC34122-12  |     | SC44621-01  |    |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |     | Groundwater |    |
|                                                   | Sample Date   | 11/20/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |   | 4/28/2017   |     | 3/8/2018    |    |
|                                                   | Tidal Phase   | Flood       |   | High/Ebb    |   | Ebb         |   | High        |   | Low         |     | High        |    |
| ORP                                               | mV            | -136        |   | -57         |   | -52         |   | -18         |   | 90          |     | 55          |    |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0           |   | 0           |   | 3.06        |   | 0           |     | 0           |    |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |   |             |     |             |    |
| Chloride                                          | mg/L          | 2100        |   | 240         |   | 55          |   | 32.5        |   | 41.1        |     | 130         |    |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | 0.18        |   | (<0.049)    | U | 0.204       | O09 | 0.01        | J1 |
| Sulfate                                           | mg/L          | 220         |   | 92          |   | 46          |   | 28.3        |   | 10.7        |     | 22.5        |    |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |   |             |     |             |    |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |   | (<0.066)    | U   | (<0.05)     | U  |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |   |             |     |             |    |
| Total organic carbon                              | mg/L          | 11          |   | 9.9         |   | 4.5         |   | 3.9         |   | 4.4         |     | 12.2        |    |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |   |             |     |             |    |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<3.48)     | U   | (<3.48)     | U  |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<4.58)     | U   | (<4.58)     | U  |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |   | (<2.16)     | U   | (<2.16)     | U  |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                           | Well ID       | MW-09S      |   |             |   |             |   |             |  |             |       |             |       |
|-------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-------|-------------|-------|
|                                                 | Laboratory ID | 12K0749-10  |   | 13K0947-07  |   | 14K0664-08  |   | 15K0954-07  |  | SC34122-07  |       | SC44621-03  |       |
|                                                 | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |       |
|                                                 | Sample Date   | 11/19/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |  | 4/27/2017   |       | 3/8/2018    |       |
|                                                 | Tidal Phase   | Ebb         |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |       | High        |       |
| ORP                                             | mV            | -286        |   | -111        |   | -108        |   | -103        |  | -41         |       | -61         |       |
| Dissolved Oxygen                                | mg/L          | 0           |   | 0.90        |   | 0           |   | 2.59        |  | 0           |       | 2.64        |       |
|                                                 |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Chloride                                        | mg/L          | 2000        |   | 160         |   | 51          |   | 109         |  | 42.1        |       | 23.6        |       |
| Nitrate                                         | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | 0.071       |  | (<0.009)    | O09,U | 0.34        |       |
| Sulfate                                         | mg/L          | 41          |   | 20          |   | (< 2)       | U | 4.89        |  | (<0.307)    | U     | 4.4         |       |
| Sulfide by USEPA SM4500                         |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Sulfide                                         | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U     | (<0.05)     | U     |
| Total Organic Carbon by USEPA Method SM5310B    |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Total organic carbon                            | mg/L          | 49          |   | 21          |   | 9           |   | 6.1         |  | 9.13        |       | 343         | GS1,D |
| Ethane, Ethene, and Methane by USEPA Method EC3 |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Ethane                                          | µg/L          | --          |   | --          |   | --          |   | --          |  | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                          | µg/L          | --          |   | --          |   | --          |   | --          |  | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                         | µg/L          | --          |   | --          |   | --          |   | --          |  | (<2.16)     | U     | (<2.16)     | U     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-09D      |   |             |   |             |   |             |  |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 12K0749-08  |   | 13K0947-08  |   | 14K0664-09  |   | 15K0954-08  |  | SC34122-08  |       | SC44621-04  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/20/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |  | 4/27/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | Flood       |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |       | High        |       |
| ORP                                               | mV            | -120        |   | -15         |   | -9          |   | -46         |  | -35         |       | -115        |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 3.34        |   | 0.18        |   | 1.6         |  | 0           |       | 5.93        |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Chloride                                          | mg/L          | 730         |   | 750         |   | 890         |   | 292         |  | 310         | GS1,D | 35.5        |       |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | 0.075       |  | (<0.009)    | O09,U | 0.22        |       |
| Sulfate                                           | mg/L          | 57          |   | 120         |   | 100         | D | 42.7        |  | 36.6        |       | 4.3         |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U     | 0.07        |       |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Total organic carbon                              | mg/L          | 13          |   | 13          |   | 0.78        |   | 0.69        |  | 4.33        |       | 230         | GS1,D |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |  | (<2.16)     | U     | (<2.16)     | U     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-10D      |   |             |   |             |   |             |   |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 12K0749-03  |   | 13K0947-06  |   | 14K0664-02  |   | 15K0954-04  |   | SC34122-05  |       | SC44537-06  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/19/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |   | 4/27/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | Ebb         |   | High/Ebb    |   | Ebb         |   | High        |   | Low         |       | High        |       |
| ORP                                               | mV            | 13          |   | -36         |   | 96          |   | -35         |   | 15          |       | -78         |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0.90        |   | 0           |   | 0.51        |   | 0           |       | 1.17        |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Chloride                                          | mg/L          | 180         |   | 230         |   | 110         |   | 93.6        |   | 610         | GS1,D | 128         | GS1,D |
| Nitrate                                           | mg/L          | 0.075       |   | (< 0.05)    | U | (< 0.05)    | U | 0.072       |   | 0.846       | O09   | 0.02        | O09,J |
| Sulfate                                           | mg/L          | 23          |   | 14          |   | 2           |   | 5.73        |   | 61.4        | GS1,D | 14.6        |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |   | (<0.066)    | U     | (<0.05)     | U     |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Total organic carbon                              | mg/L          | 1.7         |   | (< 0.5)     | U | (< 0.5)     | U | (<0.16)     | U | 1.09        |       | 0.671       | J     |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |   | (<2.16)     | U     | (<2.16)     | U     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-10M      |   |             |   |             |   |             |  |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|--|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 12K0749-04  |   | 13K0947-05  |   | 14K0664-05  |   | 15K0954-05  |  | SC34122-04  |       | SC44537-04  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/20/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |  | 4/27/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | Flood       |   | High/Ebb    |   | Ebb         |   | High        |  | Low         |       | High        |       |
| ORP                                               | mV            | 8           |   | 87          |   | 8           |   | 27          |  | -9          |       | -30         |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0           |   | 0           |   | 0.28        |  | 0           |       | 0           |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Chloride                                          | mg/L          | 380         |   | 330         |   | 630         |   | 378         |  | 170         | GS1,D | 265         | GS1,D |
| Nitrate                                           | mg/L          | 0.31        |   | (< 0.05)    | U | 0.55        |   | 0.43        |  | 0.252       | O09   | 0.62        | O09   |
| Sulfate                                           | mg/L          | 120         |   | 59          |   | 65          | D | 64.2        |  | 34.6        |       | 45.6        |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |  | (<0.066)    | U     | (<0.05)     | U     |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Total organic carbon                              | mg/L          | 4.6         |   | 1.2         |   | 3.1         |   | 2.1         |  | 3.42        |       | 4.44        |       |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |  |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |  | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |  | (<2.16)     | U     | (<2.16)     | U     |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-10S      |   |             |   |             |   |             |   |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 12K0749-05  |   | 13K0947-04  |   | 14K0664-03  |   | 15K0954-06  |   | SC34122-03  |       | SC44537-03  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/20/2012  |   | 11/21/2013  |   | 11/11/2014  |   | 11/19/2015  |   | 4/26/2017   |       | 3/6/2018    |       |
|                                                   | Tidal Phase   | Flood       |   | High/Ebb    |   | Ebb         |   | High        |   | Low         |       | High        |       |
| ORP                                               | mV            | -123        |   | -124        |   | -49         |   | -118        |   | -114        |       | -120        |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0.94        |   | 0           |   | 0.25        |   | 0           |       | 0           |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Chloride                                          | mg/L          | 1700        |   | 240         |   | 59          |   | 99.4        |   | 56.4        | GS1,D | 54.3        | GS1,D |
| Nitrate                                           | mg/L          | (< 0.05)    | U | (< 0.05)    | U | (< 0.05)    | U | (<0.049)    | U | 0.015       | O09,J | (<0.007)    | O09,U |
| Sulfate                                           | mg/L          | 180         |   | 140         |   | 26          |   | 24.2        |   | 25.2        |       | 25          |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | (< 2)       | U | (< 2)       | U | --          |   | (<0.066)    | U     | 0.09        |       |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Total organic carbon                              | mg/L          | 6.5         |   | 7.2         |   | 5.3         |   | 2.4         |   | 8.18        |       | 8.43        |       |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |   |             |   |             |   |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |   | --          |   | --          |   | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |   | --          |   | --          |   | 158         |       | 121         |       |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-11D      |             |             |             |         |         |   |  |
|---------------------------------------------------|---------------|-------------|-------------|-------------|-------------|---------|---------|---|--|
|                                                   | Laboratory ID | 14K0664-12  | 15K1033-04  | SC34122-09  | SC44624-07  |         |         |   |  |
|                                                   | Sample Type   | Groundwater | Groundwater | Groundwater | Groundwater |         |         |   |  |
|                                                   | Sample Date   | 11/11/2014  | 11/20/2015  | 4/28/2017   | 3/7/2018    |         |         |   |  |
|                                                   | Tidal Phase   | Ebb         | High        | Low         | High        |         |         |   |  |
| ORP                                               | mV            | 48          | 86          | 138         | -25         |         |         |   |  |
| Dissolved Oxygen                                  | mg/L          | 0           | 0.29        | 0           | 0.43        |         |         |   |  |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |             |             |             |         |         |   |  |
| Chloride                                          | mg/L          | 690         | 728         | 526         | GS1,D       | 458     | GS1,D   |   |  |
| Nitrate                                           | mg/L          | 1.4         | 3.4         | 4.55        | O09         | 1.18    | O09     |   |  |
| Sulfate                                           | mg/L          | 80          | 80.5        | 104         | GS1,D       | 80.5    | GS1,D   |   |  |
| Sulfide by USEPA SM4500                           |               |             |             |             |             |         |         |   |  |
| Sulfide                                           | mg/L          | (< 2)       | U           | --          | (<0.066)    | U       | (<0.05) | U |  |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |             |             |             |         |         |   |  |
| Total organic carbon                              | mg/L          | 2.3         | 1.1         | 4.23        |             | 2.11    |         |   |  |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |             |             |             |         |         |   |  |
| Ethane                                            | µg/L          | --          | --          | 14          |             | (<3.48) | U       |   |  |
| Ethene                                            | µg/L          | --          | --          | 29          |             | (<4.58) | U       |   |  |
| Methane                                           | µg/L          | --          | --          | (<2.16)     | U           | (<2.16) | U       |   |  |

**Table 3 Summary of Monitored Natural Attenuation Parameters In Groundwater**

| USEPA Parameters List                             | Well ID       | MW-11S      |   |             |  |             |       |             |       |
|---------------------------------------------------|---------------|-------------|---|-------------|--|-------------|-------|-------------|-------|
|                                                   | Laboratory ID | 14K0664-13  |   | 15K1033-03  |  | SC34122-10  |       | SC44624-08  |       |
|                                                   | Sample Type   | Groundwater |   | Groundwater |  | Groundwater |       | Groundwater |       |
|                                                   | Sample Date   | 11/11/2014  |   | 11/20/2015  |  | 4/28/2017   |       | 3/7/2018    |       |
|                                                   | Tidal Phase   | Ebb         |   | High        |  | Low         |       | High        |       |
| ORP                                               | mV            | -195        |   | -187        |  | -172        |       | -260        |       |
| Dissolved Oxygen                                  | mg/L          | 0           |   | 0.62        |  | 0           |       | 0.43        |       |
| Chloride, Nitrate, Sulfate by USEPA Method E300.0 |               |             |   |             |  |             |       |             |       |
| Chloride                                          | mg/L          | 870         |   | 670         |  | 217         | GS1,D | 187         | GS1,D |
| Nitrate                                           | mg/L          | (< 0.05)    | U | 0.082       |  | (<0.009)    | O09,U | (<0.007)    | O09,U |
| Sulfate                                           | mg/L          | 63          |   | 64.9        |  | 13.4        |       | 20.3        |       |
| Sulfide by USEPA SM4500                           |               |             |   |             |  |             |       |             |       |
| Sulfide                                           | mg/L          | (< 2)       | U | --          |  | (<0.066)    | U     | (<0.05)     | U     |
| Total Organic Carbon by USEPA Method SM5310B      |               |             |   |             |  |             |       |             |       |
| Total organic carbon                              | mg/L          | 4.1         |   | 3.5         |  | 4.98        |       | 4.1         |       |
| Ethane, Ethene, and Methane by USEPA Method EC3   |               |             |   |             |  |             |       |             |       |
| Ethane                                            | µg/L          | --          |   | --          |  | (<3.48)     | U     | (<3.48)     | U     |
| Ethene                                            | µg/L          | --          |   | --          |  | (<4.58)     | U     | (<4.58)     | U     |
| Methane                                           | µg/L          | --          |   | --          |  | (<2.16)     | U     | (<2.16)     | U     |



**Table 4 Summary of Detected Per/Poly Fluorinated Alkyl Substances Compounds in Groundwater**

| Parameter List E537                  | Location ID   | MW-04       |   | MW-05R      |   | MW-06       |   | MW-08DR     |   | MW-08SR     |   | MW-09D      |   | Guidance Values |
|--------------------------------------|---------------|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-------------|---|-----------------|
|                                      | Laboratory ID | 18C0404-03  |   | 18C0404-02  |   | 18C0404-01  |   | 18C0404-10  |   | 18C0404-09  |   | 18C0404-08  |   |                 |
|                                      | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   |                 |
|                                      | Sample Date   | 3/6/2018    |   | 3/6/2018    |   | 3/6/2018    |   | 3/8/2018    |   | 3/8/2018    |   | 3/6/2018    |   |                 |
|                                      | Tidal Phase   | High        |   | High        |   | High        |   | High        |   | High        |   | High        |   |                 |
| Perfluorobutanesulfonic acid (PFBS)  | ng/L          | 88          |   | (<20)       | U | (<20)       | U | 86          |   | 76          |   | (<20)       | U | ---             |
| Perfluorodecanoic acid (PFDA)        | ng/L          | 38          |   | 25          |   | (<20)       | U | (<20)       | U | (<20)       | U | (<20)       | U | ---             |
| Perfluoroheptanoic acid (PFHpA)      | ng/L          | 34          |   | 26          |   | 83          |   | (<20)       | U | (<20)       | U | (<20)       | U | ---             |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L          | (<20)       | U | (<20)       | U | (<20)       | U | (<20)       | U | (<20)       | U | (<20)       | U | ---             |
| Perfluorohexanoic acid (PFHxA)       | ng/L          | (<20)       | U | 22          |   | 47          |   | (<20)       | U | (<20)       | U | (<20)       | U | ---             |
| Perfluorononanoic acid (PFNA)        | ng/L          | 63          |   | 23          |   | (<20)       | U | (<20)       | U | (<20)       | U | (<20)       | U | ---             |
| Perfluorooctanesulfonic acid (PFOS)  | ng/L          | (<20)       | U | (<20)       | U | (<20)       | U | 30          |   | 22          |   | (<20)       | U | 70 <sup>1</sup> |
| Perfluorooctanoic acid (PFOA)        | ng/L          | 64          |   | 74          |   | 290         | D | 26          |   | (<20)       | U | (<20)       | U | 70 <sup>1</sup> |
| Parameter List E537                  | Location ID   | MW-09S      |   | MW-10D      |   | MW-10M      |   | MW-10S      |   | MW-11D      |   | MW-11S      |   | Guidance Values |
|                                      | Laboratory ID | 18C0404-07  |   | 18C0404-06  |   | 18C0404-05  |   | 18C0404-04  |   | 18C0404-12  |   | 18C0404-11  |   |                 |
|                                      | Sample Type   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   | Groundwater |   |                 |
|                                      | Sample Date   | 3/8/2018    |   | 3/6/2018    |   | 3/6/2018    |   | 3/6/2018    |   | 3/7/2018    |   | 3/7/2018    |   |                 |
|                                      | Tidal Phase   | High        |   | High        |   | High        |   | High        |   | High        |   | High        |   |                 |
| Perfluorobutanesulfonic acid (PFBS)  | ng/L          | (<20) U     |   | (<20) U     |   | 33          |   | 23          |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluorodecanoic acid (PFDA)        | ng/L          | (<20) U     |   | (<20) U     |   | 21          |   | (<20) U     |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluoroheptanoic acid (PFHpA)      | ng/L          | (<20) U     |   | (<20) U     |   | 31          |   | 30          |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L          | (<20) U     |   | (<20) U     |   | (<20) U     |   | (<20) U     |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluorohexanoic acid (PFHxA)       | ng/L          | (<20) U     |   | (<20) U     |   | 21          |   | 24          |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluorononanoic acid (PFNA)        | ng/L          | (<20) U     |   | (<20) U     |   | 27          |   | (<20) U     |   | (<20) U     |   | (<20) U     |   | ---             |
| Perfluorooctanesulfonic acid (PFOS)  | ng/L          | (<20) U     |   | (<20) U     |   | (<20) U     |   | 24          |   | 34          |   | 45          |   | 70 <sup>1</sup> |
| Perfluorooctanoic acid (PFOA)        | ng/L          | (<20) U     |   | (<20) U     |   | 84          |   | 70          |   | (<20) U     |   | (<20) U     |   | 70 <sup>1</sup> |
| Parameter List 8270D / E537          | Location ID   | DUP-0318    |   |             |   |             |   |             |   |             |   |             |   | Guidance Values |
|                                      | Laboratory ID | 18C0404-13  |   |             |   |             |   |             |   |             |   |             |   |                 |
|                                      | Sample Type   | Groundwater |   |             |   |             |   |             |   |             |   |             |   |                 |
|                                      | Sample Date   | 3/7/2018    |   |             |   |             |   |             |   |             |   |             |   |                 |
|                                      | Tidal Phase   | High        |   |             |   |             |   |             |   |             |   |             |   |                 |
| Perfluorobutanesulfonic acid (PFBS)  | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluorodecanoic acid (PFDA)        | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluoroheptanoic acid (PFHpA)      | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluorohexanoic acid (PFHxA)       | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluorononanoic acid (PFNA)        | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | ---             |
| Perfluorooctanesulfonic acid (PFOS)  | ng/L          | 46          |   |             |   |             |   |             |   |             |   |             |   | 70 <sup>1</sup> |
| Perfluorooctanoic acid (PFOA)        | ng/L          | (<20) U     |   |             |   |             |   |             |   |             |   |             |   | 70 <sup>1</sup> |

<sup>1</sup> EPA health advisory level for drinking water - combined concentrations of PFOA and PFOS.

NOTES:

-- = Not analyzed.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

ng/L = Nanogram(s) per liter = parts per trillion (ppt)

Values shown in bold exceed the guidance value indicated.

Data provided by Con-Test Analytical.

## **Attachment A**

### **Groundwater Sampling Purge Forms**

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Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                          |                                        |
|--------------------------------------------------|------------------------------------------|----------------------------------------|
| <b>Well I.D.:</b><br>MW-4                        | <b>Personnel:</b><br>SS/MM               | <b>Client:</b><br>NYSDEC               |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Stripped Bolts | <b>Weather:</b><br>Sunny, S 5 mph, 45F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18           | <b>Measurement Ref:</b><br>TOC         |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1327               | <b>Well Diameter (in):</b><br>2"       |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1135 / 1040 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                |                                                  |                                             |
|--------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>12.99        | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>3.31     | <b>E. Well Volume (gal) C*D):</b><br>1.55        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>9.68 | <b>F. Three Well Volumes (gal) (E3):</b><br>4.65 | <b>Pump Designation:</b><br>11'             |

| Water Quality Parameters |               |            |            |               |          |            |               |           |                 |
|--------------------------|---------------|------------|------------|---------------|----------|------------|---------------|-----------|-----------------|
| Time (hrs)               | DTW (ft btoc) | Volume (L) | Rate (Lpm) | pH (pH units) | ORP (mV) | Temp. (°C) | Cond. (mS/cm) | DO (mg/L) | Turbidity (ntu) |
| 1140                     | ~3'           | ---        | 0.3        | 7.80          | -74      | 6.58       | 0.000         | 4.12      | 161             |
| 1143                     | ~3'           | 0.9        | 0.3        | 7.43          | -60      | 10.90      | 0.260         | 0.00      | 321             |
| 1146                     | ~3'           | 1.8        | 0.3        | 7.43          | -63      | 11.51      | 0.255         | 0.00      | 140             |
| 1149                     | ~3'           | 2.7        | 0.3        | 7.53          | -60      | 12.22      | 0.248         | 0.00      | 26.0            |
| 1152                     | ~3'           | 3.6        | 0.3        | 7.52          | -59      | 12.51      | 0.248         | 0.00      | 19.9            |
| 1155                     | ~3'           | 4.5        | 0.3        | 7.52          | -52      | 12.27      | 0.248         | 0.00      | 9.9             |
| 1158                     | ~3'           | 5.4        | 0.3        | 7.51          | -50      | 12.23      | 0.248         | 0.00      | 10.2            |
| 1201                     | ~3'           | 6.3        | 0.3        | 7.51          | -48      | 12.09      | 0.252         | 0.00      | 11.5            |
| 1204                     | ~3'           | 7.2        | 0.3        | 7.51          | -47      | 12.08      | 0.252         | 0.00      | 8.7             |
| 1207                     | ~3'           | 8.1        | 0.3        | 7.51          | -45      | 12.04      | 0.252         | 0.00      | 7.4             |
| 1210                     | ~3'           | 9.0        | 0.3        | 7.50          | -45      | 12.07      | 0.252         | 0.00      | 7.4             |
|                          |               |            |            |               |          |            |               |           |                 |
| 1043                     | ~3'           | ---        | 0.3        | 7.58          | -141     | 10.34      | 0.302         | 2.09      | 11.2            |
| 1046                     | ~3'           | 0.9        | 0.3        | 7.39          | -83      | 10.99      | 0.288         | 1.72      | 1.4             |
| 1049                     | ~3'           | 1.8        | 0.3        | 7.46          | -80      | 11.03      | 0.288         | 1.36      | 1.2             |
| 1052                     | ~3'           | 2.7        | 0.3        | 7.4           | -53      | 11.01      | 0.284         | 1.3       | 0.0             |
| 1055                     | ~3'           | 3.6        | 0.3        | 7.41          | -53      | 11.05      | 0.283         | 1.28      | 0.0             |
| 1058                     | ~3'           | 4.5        | 0.3        | 7.42          | -51      | 11.01      | 0.282         | 1.26      | 0.0             |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |

Total Quantity of Water Removed (L): 9.0 / 4.5  
Samplers: MM/SS  
Sampling Date: 03/06/2018

Sampling Time: 1210 / 1100  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning  
Repurge on 3/7 to collect TOC/Chloride/Nitrate/Sulfate



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                         |                                        |
|--------------------------------------------------|-----------------------------------------|----------------------------------------|
| <b>Well I.D.:</b><br>MW-5R                       | <b>Personnel:</b><br>SS/MM              | <b>Client:</b><br>NYSDEC               |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Missing Bolts | <b>Weather:</b><br>Sunny, S 5 mph, 45F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18          | <b>Measurement Ref:</b><br>TOC         |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1337              | <b>Well Diameter (in):</b><br>2"       |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1030 / 1010 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>13.28         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>0.42      | <b>E. Well Volume (gal) C*D):</b><br>2.06        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>12.86 | <b>F. Three Well Volumes (gal) (E3):</b><br>6.17 | <b>Pump Designation:</b><br>12'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1035                     | 0.50             | ---           | 0.3           | 7.14             | -225        | 7.91          | 1.60             | 8.16         | 19.6               |
| 1038                     | 0.50             | 0.9           | 0.3           | 6.94             | -166        | 8.06          | 1.70             | 0.15         | 8.6                |
| 1041                     | 0.50             | 1.8           | 0.3           | 6.93             | -163        | 8.11          | 1.70             | 0.01         | 7.5                |
| 1044                     | 0.50             | 2.7           | 0.3           | 6.98             | -160        | 8.07          | 1.72             | 0.00         | 6.2                |
| 1047                     | 0.50             | 3.6           | 0.3           | 6.96             | -158        | 8.08          | 1.73             | 0.00         | 4.9                |
| 1050                     | 0.50             | 4.5           | 0.3           | 6.93             | -159        | 8.05          | 1.77             | 0.00         | 3.1                |
| 1053                     | 0.50             | 5.4           | 0.3           | 6.96             | -158        | 8.00          | 1.80             | 0.00         | 2.8                |
| 1056                     | 0.50             | 6.3           | 0.3           | 6.96             | -158        | 8.03          | 1.81             | 0.00         | 2.6                |
| 1059                     | 0.50             | 7.2           | 0.3           | 6.96             | -158        | 8.01          | 1.81             | 0.00         | 2.4                |
|                          |                  |               |               |                  |             |               |                  |              |                    |
| 1010                     | 0.50             | ---           | 0.3           | 7.15             | -151        | 6.35          | 1.60             | 6.79         | 3.1                |
| 1013                     | 0.50             | 0.9           | 0.3           | 7.03             | -157        | 6.67          | 1.61             | 4.87         | 3.4                |
| 1016                     | 0.50             | 1.8           | 0.3           | 6.99             | -164        | 6.98          | 1.61             | 3.60         | 2.8                |
| 1019                     | 0.50             | 2.7           | 0.3           | 7.02             | -173        | 7.03          | 1.60             | 2.76         | 2.9                |
| 1022                     | 0.50             | 3.6           | 0.3           | 6.99             | -175        | 7.02          | 1.60             | 2.12         | 1.8                |
| 1025                     | 0.50             | 4.5           | 0.3           | 7.00             | -180        | 7.05          | 1.61             | 1.91         | 1.9                |
| 1028                     | 0.50             | 5.4           | 0.3           | 7.06             | -181        | 7.03          | 1.61             | 1.78         | 1.7                |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 7.2 / 5.4  
Samplers: MM/SS  
Sampling Date: 03/06/2018

Sampling Time: 1100 / 1030  
Split Sample With: N/A  
Sample Type: Grab



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                           |                                  |
|--------------------------------------------------|-------------------------------------------|----------------------------------|
| <b>Well I.D.:</b><br>MW-06                       | <b>Personnel:</b><br>SS/MM                | <b>Client:</b><br>NYSDEC         |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good / No bolts | <b>Weather:</b><br>Clear, 45F    |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18            | <b>Measurement Ref:</b><br>TOC   |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1340                | <b>Well Diameter (in):</b><br>2" |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1038 / 1004 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>13.51         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>1.84      | <b>E. Well Volume (gal) C*D):</b><br>1.87        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>11.67 | <b>F. Three Well Volumes (gal) (E3):</b><br>5.60 | <b>Pump Designation:</b><br>12'             |

| Water Quality Parameters |               |            |            |               |          |            |               |           |                 |
|--------------------------|---------------|------------|------------|---------------|----------|------------|---------------|-----------|-----------------|
| Time (hrs)               | DTW (ft btoc) | Volume (L) | Rate (Lpm) | pH (pH units) | ORP (mV) | Temp. (°C) | Cond. (mS/cm) | DO (mg/L) | Turbidity (ntu) |
| 1042                     | 2.05          | ---        | 0.3        | 6.98          | -105     | 8.93       | 2.760         | 6.81      | 0.0             |
| 1046                     | 2.02          | 1.2        | 0.3        | 6.59          | -115     | 9.92       | 2.540         | 5.39      | 0.0             |
| 1050                     | 2.02          | 2.4        | 0.3        | 6.53          | -125     | 10.32      | 2.300         | 4.00      | 0.0             |
| 1054                     | 2.01          | 3.6        | 0.3        | 6.49          | -134     | 10.49      | 2.060         | 2.65      | 0.0             |
| 1058                     | 2.01          | 4.8        | 0.3        | 6.49          | -137     | 10.58      | 2.020         | 2.22      | 0.0             |
| 1102                     | 2.01          | 6.0        | 0.3        | 6.50          | -140     | 10.67      | 2.000         | 1.81      | 0.0             |
| 1106                     | 2.01          | 7.2        | 0.3        | 6.50          | -142     | 10.69      | 1.990         | 1.44      | 0.0             |
| 1110                     | 2.01          | 8.4        | 0.3        | 6.53          | -146     | 10.77      | 2.000         | 1.23      | 0.0             |
| 1114                     | 2.01          | 9.6        | 0.3        | 6.55          | -149     | 10.82      | 2.010         | 1.04      | 0.0             |
| 1118                     | 2.01          | 10.8       | 0.3        | 6.55          | -150     | 10.87      | 2.020         | 0.96      | 0.0             |
| 1122                     | 2.01          | 12.0       | 0.3        | 6.56          | -151     | 10.89      | 2.030         | 0.87      | 0.0             |
|                          |               |            |            |               |          |            |               |           |                 |
| 1010                     | 2.00          | ---        | 0.3        | 7.05          | -56      | 9.80       | 4.400         | 0.00      | 18.2            |
| 1014                     |               | 1.2        | 0.3        | 7.01          | -75      | 9.80       | 4.130         | 0.00      | 16.9            |
| 1018                     |               | 2.4        | 0.3        | 7.16          | -88      | 9.82       | 3.860         | 0.00      | 15.8            |
| 1022                     |               | 3.6        | 0.3        | 7.18          | -96      | 9.92       | 3.580         | 0.00      | 14.7            |
| 1026                     |               | 4.8        | 0.3        | 7.18          | -103     | 10.06      | 3.360         | 0.00      | 12.5            |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |

Total Quantity of Water Removed (L): 12.0 / 4.8  
Samplers: MM/SS  
Sampling Date: 03/06/2018

Sampling Time: 1125 / 1030  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Fuel odor

Repurge on 3/7 to collect Dissolved Gases/Chloride/Nitrate/Sulfate



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                  |
|--------------------------------------------------|--------------------------------|----------------------------------|
| <b>Well I.D.:</b><br>MW-08SR                     | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC         |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, 40F    |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC   |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1315     | <b>Well Diameter (in):</b><br>2" |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/08/18           | <b>Purge Time:</b><br>1111        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>13.21         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>2.43      | <b>E. Well Volume (gal) C*D):</b><br>1.72        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>10.78 | <b>F. Three Well Volumes (gal) (E3):</b><br>5.17 | <b>Pump Designation:</b><br>12'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1115                     | 2.54             | ---           | 0.3           | 7.84             | 88          | 10.65         | 0.580            | 1.26         | 10.3               |
| 1119                     | 2.54             | 1.2           | 0.3           | 7.90             | 83          | 10.76         | 0.570            | 0.64         | 3.0                |
| 1123                     | 2.54             | 2.4           | 0.3           | 7.91             | 72          | 10.93         | 0.573            | 0.12         | 2.3                |
| 1127                     | 2.54             | 3.6           | 0.3           | 7.91             | 67          | 10.99         | 0.573            | 0.01         | 2.4                |
| 1131                     | 2.54             | 4.8           | 0.3           | 7.92             | 61          | 11.03         | 0.575            | 0.00         | 2.0                |
| 1135                     | 2.54             | 6.0           | 0.3           | 7.93             | 55          | 10.88         | 0.573            | 0.00         | 0.9                |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 6.0  
Samplers: MM/SS  
Sampling Date: 03/08/2018

Sampling Time: 1140  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                  |
|--------------------------------------------------|--------------------------------|----------------------------------|
| <b>Well I.D.:</b><br>MW-08DR                     | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC         |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, 40F    |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC   |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1317     | <b>Well Diameter (in):</b><br>2" |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/08/18           | <b>Purge Time:</b><br>1144        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                   |                                             |
|---------------------------------------------|---------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>31.10         | <b>D. Well Volume (ft):</b><br>0.16               | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>2.62      | <b>E. Well Volume (gal) C*D):</b><br>4.56         | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>28.48 | <b>F. Three Well Volumes (gal) (E3):</b><br>13.67 | <b>Pump Designation:</b><br>30'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1148                     | 2.80             | ---           | 0.3           | 7.09             | 59          | 14.90         | 0.663            | 0.00         | 159.0              |
| 1152                     | 2.81             | 1.2           | 0.3           | 7.23             | 45          | 15.02         | 0.827            | 0.57         | 21.1               |
| 1156                     | 2.80             | 2.4           | 0.3           | 6.83             | 20          | 15.71         | 0.888            | 0.00         | 14.5               |
| 1200                     | 2.79             | 3.6           | 0.3           | 6.79             | 2           | 15.75         | 0.921            | 0.00         | 11.9               |
| 1204                     | 2.78             | 4.8           | 0.3           | 6.79             | -12         | 15.82         | 0.926            | 0.00         | 8.8                |
| 1208                     | 2.76             | 6.0           | 0.3           | 6.79             | -29         | 15.81         | 0.929            | 0.00         | 6.2                |
| 1212                     | 2.76             | 7.2           | 0.3           | 6.98             | -47         | 15.85         | 0.917            | 2.10         | 14.7               |
| 1216                     | 2.76             | 8.4           | 0.3           | 6.84             | -46         | 16.01         | 0.902            | 0.00         | 4.7                |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 8.4  
Samplers: MM/SS  
Sampling Date: 03/08/2018

Sampling Time: 1220  
Split Sample With: MS/MSD  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Rusty Water

MS/MSD collected here





Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                        |
|--------------------------------------------------|--------------------------------|----------------------------------------|
| <b>Well I.D.:</b><br>MW-09S                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC               |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, S 5 mph, 40F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC         |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1330     | <b>Well Diameter (in):</b><br>2"       |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/08/18           | <b>Purge Time:</b><br>1100        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>14.16         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>1.60      | <b>E. Well Volume (gal) C*D):</b><br>2.01        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>12.56 | <b>F. Three Well Volumes (gal) (E3):</b><br>6.03 | <b>Pump Designation:</b><br>12'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1102                     | 1.60             | ---           | 0.3           | 7.22             | 68          | 9.00          | 0.201            | 14.41        | >1000              |
| 1105                     |                  | 0.9           | 0.3           | 7.45             | 37          | 6.44          | 0.193            | 7.87         | 826.0              |
| 1108                     |                  | 1.8           | 0.3           | 7.42             | 21          | 6.61          | 0.181            | 7.93         | 629.0              |
| 1111                     |                  | 2.7           | 0.3           | 7.41             | 17          | 6.61          | 0.148            | 8.07         | 428.0              |
| 1114                     |                  | 3.6           | 0.3           | 7.39             | 12          | 6.70          | 0.191            | 5.65         | 500.0              |
| 1117                     |                  | 4.5           | 0.3           | 7.43             | -1          | 6.87          | 0.181            | 4.97         | 318.0              |
| 1120                     |                  | 5.4           | 0.3           | 7.63             | -33         | 7.31          | 0.139            | 4.03         | 77.5               |
| 1123                     |                  | 6.3           | 0.3           | 7.60             | -32         | 7.39          | 0.132            | 3.84         | 61.7               |
| 1126                     |                  | 7.2           | 0.3           | 7.64             | -39         | 7.51          | 0.124            | 3.46         | 40.7               |
| 1129                     |                  | 8.1           | 0.3           | 7.66             | -53         | 7.75          | 0.121            | 3.08         | 31.4               |
| 1132                     |                  | 9.0           | 0.3           | 7.71             | -57         | 7.74          | 0.119            | 2.66         | 29.4               |
| 1135                     |                  | 9.9           | 0.3           | 7.70             | -61         | 7.81          | 0.119            | 2.64         | 28.7               |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 9.9  
Samplers: MM/SS  
Sampling Date: 03/08/2018

Sampling Time: 1137  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning  
Cloudy run-off from snow melt initially



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                      |
|--------------------------------------------------|--------------------------------|--------------------------------------|
| <b>Well I.D.:</b><br>MW-9D                       | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC             |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, 5 pmh, 40F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC       |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1332     | <b>Well Diameter (in):</b><br>2"     |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/08/18           | <b>Purge Time:</b><br>1145        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                   |                                             |
|---------------------------------------------|---------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>32.14         | <b>D. Well Volume (ft):</b><br>0.16               | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>1.58      | <b>E. Well Volume (gal) C*D):</b><br>4.89         | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>30.56 | <b>F. Three Well Volumes (gal) (E3):</b><br>14.67 | <b>Pump Designation:</b><br>30'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1146                     | 1.61             | ---           | 0.3           | 7.25             | -108        | 8.28          | 0.407            | 3.76         | >1000              |
| 1149                     |                  | 0.9           | 0.3           | 7.35             | -49         | 8.21          | 0.058            | 6.23         | 207.0              |
| 1152                     |                  | 1.8           | 0.3           | 7.31             | -46         | 8.66          | 0.057            | 5.47         | 157.0              |
| 1155                     |                  | 2.7           | 0.3           | 7.40             | -27         | 8.81          | 0.053            | 5.85         | 68.8               |
| 1158                     |                  | 3.6           | 0.3           | 7.41             | -22         | 8.93          | 0.054            | 5.80         | 123.0              |
| 1201                     |                  | 4.5           | 0.3           | 7.35             | -71         | 9.20          | 0.096            | 7.05         | 40.2               |
| 1204                     |                  | 5.4           | 0.3           | 7.35             | -74         | 9.13          | 0.100            | 7.07         | 34.1               |
| 1207                     |                  | 6.3           | 0.3           | 7.34             | -87         | 9.29          | 0.120            | 6.68         | 17.4               |
| 1210                     |                  | 7.2           | 0.3           | 7.33             | -90         | 9.38          | 0.125            | 6.57         | 15.3               |
| 1213                     |                  | 8.1           | 0.3           | 7.34             | -100        | 9.26          | 0.140            | 6.36         | 23.9               |
| 1216                     |                  | 9.0           | 0.3           | 7.32             | -110        | 9.56          | 0.170            | 6.09         | 14.2               |
| 1219                     |                  | 9.9           | 0.3           | 7.33             | -114        | 9.51          | 0.173            | 5.87         | 12.5               |
| 1222                     |                  | 10.8          | 0.3           | 7.33             | -115        | 9.52          | 0.174            | 5.93         | 12.1               |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 10.8  
Samplers: MM/SS  
Sampling Date: 03/06/2018

Sampling Time: 1224  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning

Turbid at first due to run-off from snow melt



|                                                  |                                |                                  |
|--------------------------------------------------|--------------------------------|----------------------------------|
| <b>Well I.D.:</b><br>MW-10S                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC         |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Clear, 45F    |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC   |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1320     | <b>Well Diameter (in):</b><br>2" |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1202 / 1044 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>15.88         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>2.41      | <b>E. Well Volume (gal) C*D):</b><br>2.16        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>13.47 | <b>F. Three Well Volumes (gal) (E3):</b><br>6.47 | <b>Pump Designation:</b><br>13'             |

[illegible]

|                                      |            |
|--------------------------------------|------------|
| Total Quantity of Water Removed (L): | 9.6 / 4.8  |
| Samplers:                            | MM/SS      |
| Sampling Date:                       | 03/06/2018 |

|                    |             |
|--------------------|-------------|
| Sampling Time:     | 1240 / 1106 |
| Split Sample With: | N/A         |
| Sample Type:       | Grab        |

**COMMENTS AND OBSERVATIONS:**

Repurge on 3/7 to collect TOC



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                  |
|--------------------------------------------------|--------------------------------|----------------------------------|
| <b>Well I.D.:</b><br>MW-10M                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC         |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, 40F    |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC   |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1322     | <b>Well Diameter (in):</b><br>2" |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1302 / 1342 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                   |                                             |
|---------------------------------------------|---------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>26.79         | <b>D. Well Volume (ft):</b><br>0.16               | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>2.74      | <b>E. Well Volume (gal) C*D):</b><br>3.85         | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>24.05 | <b>F. Three Well Volumes (gal) (E3):</b><br>11.54 | <b>Pump Designation:</b><br>25'             |

| Water Quality Parameters |               |            |            |               |          |            |               |           |                 |
|--------------------------|---------------|------------|------------|---------------|----------|------------|---------------|-----------|-----------------|
| Time (hrs)               | DTW (ft btoc) | Volume (L) | Rate (Lpm) | pH (pH units) | ORP (mV) | Temp. (°C) | Cond. (mS/cm) | DO (mg/L) | Turbidity (ntu) |
| 1306                     | 2.56          | ---        | 0.3        | 6.20          | 21       | 12.69      | 2.020         | 0.91      | 9.4             |
| 1310                     | 2.58          | 1.2        | 0.3        | 6.24          | 36       | 12.86      | 1.950         | 0.95      | 8.7             |
| 1314                     | 2.60          | 2.4        | 0.3        | 6.53          | 24       | 13.03      | 1.520         | 0.91      | 10.3            |
| 1318                     | 2.62          | 3.6        | 0.3        | 6.57          | 13       | 13.01      | 1.400         | 0.79      | 7.5             |
| 1322                     | 2.64          | 4.8        | 0.3        | 6.57          | -1       | 12.75      | 1.370         | 0.76      | 7.4             |
| 1326                     | 2.64          | 6.0        | 0.3        | 6.57          | -4       | 12.62      | 1.380         | 0.86      | 6.5             |
| 1330                     | 2.66          | 7.2        | 0.3        | 6.51          | -3       | 12.01      | 1.400         | 1.00      | 5.6             |
| 1334                     | 2.68          | 8.4        | 0.3        | 6.45          | 1        | 11.59      | 1.430         | 0.99      | 4.5             |
| 1338                     | 2.73          | 9.6        | 0.3        | 6.40          | 0        | 11.61      | 1.360         | 0.78      | 3.2             |
| 1342                     | 2.77          | 10.8       | 0.3        | 6.39          | 0        | 11.50      | 1.370         | 0.84      | 3.2             |
|                          |               |            |            |               |          |            |               |           |                 |
| 1344                     |               | ---        | 0.3        | 7.01          | -30      | 11.70      | 0.920         | 0.00      | 4.1             |
| 1348                     |               | 1.2        | 0.3        | 6.99          | -29      | 11.35      | 0.968         | 0.00      | 3.4             |
| 1352                     |               | 2.4        | 0.3        | 6.98          | -29      | 11.32      | 0.995         | 0.00      | 2.4             |
| 1356                     |               | 3.6        | 0.3        | 6.99          | -29      | 11.14      | 0.986         | 0.00      | 3.0             |
| 1400                     |               | 4.8        | 0.3        | 6.99          | -30      | 10.99      | 0.993         | 0.00      | 3.2             |
| 1404                     |               | 6.0        | 0.3        | 6.98          | -30      | 10.91      | 0.997         | 0.00      | 3.5             |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |

Total Quantity of Water Removed (L): 10.8 / 6.0  
Samplers: MM/SS  
Sampling Date: 03/06/2018

Sampling Time: 1350 / 1405  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Repurge on 3/7 to collect TOC



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                        |
|--------------------------------------------------|--------------------------------|----------------------------------------|
| <b>Well I.D.:</b><br>MW-10D                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC               |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sunny, S 5 mph, 45F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC         |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1324     | <b>Well Diameter (in):</b><br>2"       |

|                                               |                                   |
|-----------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/06/2018 / 03/07/2018 | <b>Purge Time:</b><br>1135 / 1040 |
| <b>Purge Method:</b><br>Peristaltic Pump      | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                   |                                             |
|---------------------------------------------|---------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>32.12         | <b>D. Well Volume (ft):</b><br>0.16               | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>2.65      | <b>E. Well Volume (gal) C*D):</b><br>4.72         | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>29.47 | <b>F. Three Well Volumes (gal) (E3):</b><br>14.15 | <b>Pump Designation:</b><br>31'             |

| Water Quality Parameters |               |            |            |               |          |            |               |           |                 |
|--------------------------|---------------|------------|------------|---------------|----------|------------|---------------|-----------|-----------------|
| Time (hrs)               | DTW (ft btoc) | Volume (L) | Rate (Lpm) | pH (pH units) | ORP (mV) | Temp. (°C) | Cond. (mS/cm) | DO (mg/L) | Turbidity (ntu) |
| 1247                     | ~2.5          | ---        | 0.3        | 6.81          | -101     | 13.87      | 0.499         | 0.00      | >1000           |
| 1250                     |               | 0.9        | 0.3        | 6.85          | -95      | 14.78      | 0.471         | 0.00      | >1000           |
| 1253                     |               | 1.8        | 0.3        | 6.78          | -87      | 14.91      | 0.466         | 0.00      | 377.0           |
| 1256                     |               | 2.7        | 0.3        | 6.63          | -73      | 15.12      | 0.459         | 0.00      | 235.0           |
| 1259                     |               | 3.6        | 0.3        | 6.61          | -70      | 15.21      | 0.459         | 0.00      | 176.0           |
| 1302                     |               | 4.5        | 0.3        | 6.57          | -67      | 15.20      | 0.457         | 0.00      | 194.0           |
| 1305                     |               | 5.4        | 0.3        | 6.54          | -66      | 15.27      | 0.455         | 0.00      | 161.0           |
| 1308                     |               | 6.3        | 0.3        | 6.54          | -64      | 15.30      | 0.452         | 0.00      | 178.0           |
| 1311                     |               | 7.2        | 0.3        | 6.51          | -62      | 15.41      | 0.449         | 0.00      | 134             |
| 1314                     |               | 8.1        | 0.3        | 6.51          | -62      | 15.17      | 0.449         | 0.00      | 228             |
| 1317                     |               | 9.0        | 0.3        | 6.50          | -62      | 14.57      | 0.455         | 0.00      | >1000           |
| 1320                     |               | 9.9        | 0.3        | 6.54          | -64      | 14.75      | 0.454         | 0.00      | 394.0           |
| 1323                     |               | 10.8       | 0.3        | 6.50          | -65      | 14.80      | 0.455         | 0.00      | >1000           |
| 1326                     |               | 11.7       | 0.3        | 6.50          | -55      | 14.87      | 0.455         | 0.00      | 185.0           |
| 1329                     |               | 12.6       | 0.3        | 6.50          | -56      | 15.30      | 0.444         | 0.00      | 27.7            |
| 1332                     |               | 13.5       | 0.3        | 6.51          | -57      | 15.34      | 0.447         | 0.00      | 16.5            |
| 1335                     |               | 14.4       | 0.3        | 6.51          | -58      | .          | 0.477         | 0.00      | 12.6            |
|                          |               |            |            |               |          |            |               |           |                 |
| 1343                     | ~2.5          | ---        | 0.3        | 7.02          | -110     | 8.94       | 0.383         | 2.41      | 619.0           |
| 1347                     |               | 1.2        | 0.3        | 6.72          | -93      | 9.81       | 0.486         | 0.97      | 187.0           |
| 1351                     |               | 2.4        | 0.3        | 6.75          | -86      | 9.87       | 0.464         | 0.82      | 30.0            |
| 1355                     |               | 3.6        | 0.3        | 6.74          | -81      | 10.43      | 0.427         | 1.25      | 15.9            |
| 1359                     |               | 4.8        | 0.3        | 6.73          | -79      | 10.51      | 0.423         | 1.25      | 9.3             |
| 1403                     |               | 6          | 0.3        | 6.72          | -78      | 10.63      | 0.427         | 1.14      | 6.4             |
| 1407                     |               | 7.2        | 0.3        | 6.72          | -78      | 10.86      | 0.421         | 1.19      | 5.4             |
| 1410                     |               | 8.4        | 0.3        | 6.72          | -78      | 10.86      | 0.420         | 1.17      | 5.2             |
|                          |               |            |            |               |          |            |               |           |                 |
|                          |               |            |            |               |          |            |               |           |                 |

Total Quantity of Water Removed (L): 14.4 / 8.4  
Samplers: MM/SS  
Sampling Date: 3/6/2018 / 03/07/2018

Sampling Time: 1335 / 1410  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning  
Repurge on 3/7 to collect TOC/Chloride/Nitrate/Sulfate



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                         |
|--------------------------------------------------|--------------------------------|-----------------------------------------|
| <b>Well I.D.:</b><br>MW-11S                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC                |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sleet, E 10 mph, 30F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC          |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1343     | <b>Well Diameter (in):</b><br>2"        |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/07/18           | <b>Purge Time:</b><br>1130        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                  |                                             |
|---------------------------------------------|--------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>15.10         | <b>D. Well Volume (ft):</b><br>0.16              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>1.33      | <b>E. Well Volume (gal) C*D):</b><br>2.20        | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>13.77 | <b>F. Three Well Volumes (gal) (E3):</b><br>6.61 | <b>Pump Designation:</b><br>14'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1135                     | ~1               | ---           | 0.3           | 7.60             | -235        | 10.68         | 0.951            | 0.56         | 257.0              |
| 1138                     |                  | 0.9           | 0.3           | 7.61             | -238        | 10.71         | 0.914            | 0.54         | 118.0              |
| 1141                     |                  | 1.8           | 0.3           | 7.64             | -243        | 10.76         | 0.908            | 0.52         | 58.0               |
| 1144                     |                  | 2.7           | 0.3           | 7.65             | -244        | 10.78         | 0.908            | 0.51         | 60.5               |
| 1147                     |                  | 3.6           | 0.3           | 7.70             | -252        | 10.77         | 0.905            | 0.61         | 44.1               |
| 1150                     |                  | 4.5           | 0.3           | 7.70             | -253        | 10.78         | 0.904            | 0.41         | 38.1               |
| 1153                     |                  | 5.4           | 0.3           | 7.71             | -254        | 10.78         | 0.891            | 0.41         | 27.7               |
| 1156                     |                  | 6.3           | 0.3           | 7.71             | -256        | 10.79         | 0.891            | 0.41         | 25.1               |
| 1159                     |                  | 7.2           | 0.3           | 7.72             | -256        | 10.79         | 0.891            | 0.41         | 21.9               |
| 1202                     |                  | 8.1           | 0.3           | 7.73             | -258        | 10.80         | 0.887            | 0.41         | 27.5               |
| 1205                     |                  | 9.0           | 0.3           | 7.74             | -258        | 10.81         | 0.886            | 0.43         | 25.5               |
| 1208                     |                  | 9.9           | 0.3           | 7.74             | -260        | 10.80         | 0.883            | 0.42         | 23.5               |
| 1211                     |                  | 10.8          | 0.3           | 7.74             | -260        | 10.81         | 0.883            | 0.43         | 21.3               |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 10.8  
Samplers: MM/SS  
Sampling Date: 03/07/2018

Sampling Time: 1212  
Split Sample With: DUP  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning

130110-DUP-030718 collected here for VOC and Metals



Metal Etching Co., Inc. Site No. 130110  
GROUNDWATER SAMPLING  
PURGE FORM

|                                                  |                                |                                         |
|--------------------------------------------------|--------------------------------|-----------------------------------------|
| <b>Well I.D.:</b><br>MW-11D                      | <b>Personnel:</b><br>SS/MM     | <b>Client:</b><br>NYSDEC                |
| <b>Location:</b><br>Metal Etching Co., Inc. Site | <b>Well Condition:</b><br>Good | <b>Weather:</b><br>Sleet, E 10 mph, 30F |
| <b>Sounding Method:</b><br>Heron Skinny Dipper T | <b>Gauge Date:</b><br>03/08/18 | <b>Measurement Ref:</b><br>TOC          |
| <b>Stick Up/Down (ft):</b><br>Flush              | <b>Gauge Time:</b><br>1345     | <b>Well Diameter (in):</b><br>2"        |

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| <b>Purge Date:</b><br>03/07/18           | <b>Purge Time:</b><br>1235        |
| <b>Purge Method:</b><br>Peristaltic Pump | <b>Field Technician:</b><br>MM/SS |

| Well Volume                                 |                                                   |                                             |
|---------------------------------------------|---------------------------------------------------|---------------------------------------------|
| <b>A. Well Depth (ft):</b><br>30.20         | <b>D. Well Volume (ft):</b><br>0.163              | <b>Depth/Height of Top of PVC:</b><br>-0.2" |
| <b>B. Depth to Water (ft):</b><br>1.29      | <b>E. Well Volume (gal) C*D):</b><br>4.71         | <b>Pump Type:</b><br>Peristaltic            |
| <b>C. Liquid Depth (ft) (A-B):</b><br>28.91 | <b>F. Three Well Volumes (gal) (E3):</b><br>14.14 | <b>Pump Designation:</b><br>29'             |

| Water Quality Parameters |                  |               |               |                  |             |               |                  |              |                    |
|--------------------------|------------------|---------------|---------------|------------------|-------------|---------------|------------------|--------------|--------------------|
| Time<br>(hrs)            | DTW<br>(ft btoc) | Volume<br>(L) | Rate<br>(Lpm) | pH<br>(pH units) | ORP<br>(mV) | Temp.<br>(°C) | Cond.<br>(mS/cm) | DO<br>(mg/L) | Turbidity<br>(ntu) |
| 1140                     | 1.50             | ---           | 0.3           | 7.09             | -116        | 10.09         | 1.590            | 1.28         | 27.8               |
| 1143                     |                  | 0.9           | 0.3           | 6.99             | -90         | 10.90         | 1.500            | 0.79         | 5.1                |
| 1146                     |                  | 1.8           | 0.3           | 6.93             | -52         | 11.43         | 1.470            | 0.63         | 2.2                |
| 1149                     |                  | 2.7           | 0.3           | 6.97             | -37         | 11.59         | 1.460            | 0.60         | 1.2                |
| 1152                     |                  | 3.6           | 0.3           | 7.00             | -32         | 11.61         | 1.460            | 0.58         | 0.0                |
| 1155                     |                  | 4.5           | 0.3           | 7.03             | -30         | 11.66         | 1.460            | 0.53         | 0.0                |
| 1158                     |                  | 5.4           | 0.3           | 7.01             | -26         | 11.70         | 1.460            | 0.49         | 0.0                |
| 1201                     |                  | 6.3           | 0.3           | 7.01             | -25         | 11.77         | 1.460            | 0.45         | 0.0                |
| 1204                     |                  | 7.2           | 0.3           | 7.01             | -25         | 11.82         | 1.460            | 0.43         | 0.0                |
|                          |                  |               |               |                  |             |               |                  |              |                    |
|                          |                  |               |               |                  |             |               |                  |              |                    |

Total Quantity of Water Removed (L): 7.2  
Samplers: MM/SS  
Sampling Date: 03/07/2018

Sampling Time: 1303  
Split Sample With: N/A  
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Water level not functioning

## **Attachment B**

### **Daily Field Reports**



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**DAILY FIELD REPORT**Day: **Tuesday** Date: **06 March 2018****Project Name:** Metal Etching, Inc.  
**NYSDEC Site #** 130110Department of  
Environmental  
Conservation**Contract #** D007624-09  
**Location:** Freeport, New York**Weather:** Sunny, 45F AM  
Sunny, 40 F PM**Arrive at site:** 0900  
**Leave site:** 1430**HEALTH & SAFETY:**Are there any changes to the Health & Safety Plan?  
(If yes, list the deviation under items for concern)

Yes ( ) No (X)

Are monitoring results at acceptable levels?

Soil

Yes ( ) N/A (X)

\* No ( )

Waters

Yes ( ) N/A (X)

\* No ( )

Air

Yes ( ) N/A (X)

\* No ( )

**OTHER ITEMS:**

- If No, provide comments

Site Sketch Attached: Yes ( ) No (X)

Photos Taken: Yes (X) No ( )

**DESCRIPTION OF DAILY WORK PERFORMED:**

S. Soldner and M. Miller (EA) on site for groundwater sampling. Arrived onsite at 0900. Began unpacking equipment and setting up at wells; noticed that flex tubing (silicon) had not been provided by Pine Environmental. Traveled offsite to a local Cascade Drilling (Zebra) office in Lynbrook, NY to get some tubing. Returned to the site at 1020. Began indoor and outdoor air sampling canisters (24 hour regulator; to pick up and ship on 3/7). Purged and sampled monitoring wells MW04, MW05R, MW06, MW10S, MW10M, MW10D one hour before until two hours after high tide. S. Soldner collected PFC field blank. Packed coolers and left site around 1415 to ship MNA samples at UPS.

| <u>Sample ID</u> | <u>QA/QC</u>               | <u>Description</u>                                                                |
|------------------|----------------------------|-----------------------------------------------------------------------------------|
| 130110-MW04      |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW05R     |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW06      |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW10S     |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW10M     |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW10D     |                            | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-IA-0318   |                            | TO-15                                                                             |
| 130110-OA-0318   | Duplicate: 130110-DUP-0318 | TO-15                                                                             |

**DAILY FIELD REPORT**

**Day: Tuesday Date: 06 March 2018**

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:**

*EA personnel:* Megan Miller, Stephen Soldner

**VISITORS TO SITE:**

None

**PROJECT SCHEDULE ISSUES:**

None

**PROJECT BUDGET ISSUES:**

None.

**ITEMS OF CONCERN:**

None

**COMMENTS:**

None

**ATTACHMENT(S) TO THIS REPORT:**

None

**SITE REPRESENTATIVE:**

Name: Stephen Soldner

A handwritten signature in black ink, appearing to read "Stephen Soldner", written in a cursive style.

Date: 07 March 2018

Photographs

Outdoor air cannisters set up



Typical sampling setup



**DAILY FIELD REPORT**Day: **Wednesday** Date: **07 March 2018****Project Name:** Metal Etching, Inc.  
**NYSDEC Site #** 130110Department of  
Environmental  
Conservation**Contract #** D007624-09  
**Location:** Freeport, New York**Weather:** Overcast, ENE 15 mph, 36F AM  
Sleet, NNE 25 mph, 33F PM**Arrive at site:** 0930  
**Leave site:** 1400**HEALTH & SAFETY:**Are there any changes to the Health & Safety Plan?  
(If yes, list the deviation under items for concern)

Yes ( ) No (X)

Are monitoring results at acceptable levels?

Soil

Yes ( ) N/A (X)

\* No ( )

Waters

Yes ( ) N/A (X)

\* No ( )

Air

Yes ( ) N/A (X)

\* No ( )

**OTHER ITEMS:**

- If No, provide comments

Site Sketch Attached: Yes ( ) No (X)

Photos Taken: Yes (X) No ( )

**DESCRIPTION OF DAILY WORK PERFORMED:**

S. Soldner and M. Miller (EA) on site for groundwater sampling. Arrived onsite at 0930. Began unpacking equipment and setting up at wells. Turned off and took down indoor and outdoor air monitors. Purged and sampled monitoring wells MW011S and MW11D; re-purged and sampled MW04, MW05R, MW06, MW10S, MW10M, and MW10D two hour before until two hours after high tide. S. Soldner collected PFC field blank. Packed coolers and left site around 1440 to ship MNA samples and air samples at UPS.

| <u>Sample ID</u> | <u>QA/QC</u>                                                  | <u>Description</u>                                                                |
|------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 130110-MW04      |                                                               | Sulfide/Chloride/Nitrate, TOC                                                     |
| 130110-MW05R     |                                                               | Sulfide/Chloride/Nitrate, TOC                                                     |
| 130110-MW06      |                                                               | VOC, Sulfide/Chloride/Nitrate, Dissolved Gases                                    |
| 130110-MW10S     |                                                               | Sulfide/Chloride/Nitrate, TOC                                                     |
| 130110-MW10M     |                                                               | Sulfide/Chloride/Nitrate                                                          |
| 130110-MW10D     |                                                               | Sulfide/Chloride/Nitrate                                                          |
| 130110-MW08SR    |                                                               | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW11S     | Duplicate 130110-DUP-030718 collected here for VOC and Metals | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW11D     |                                                               | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-FB-030718 |                                                               | PFC                                                                               |

**DAILY FIELD REPORT**

**Day: Wednesday Date: 07 March 2018**

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:**

*EA personnel:* Megan Miller, Stephen Soldner

**VISITORS TO SITE:**

None

**PROJECT SCHEDULE ISSUES:**

None

**PROJECT BUDGET ISSUES:**

None.

**ITEMS OF CONCERN:**

None

**COMMENTS:**

None

**ATTACHMENT(S) TO THIS REPORT:**

None

**SITE REPRESENTATIVE:**

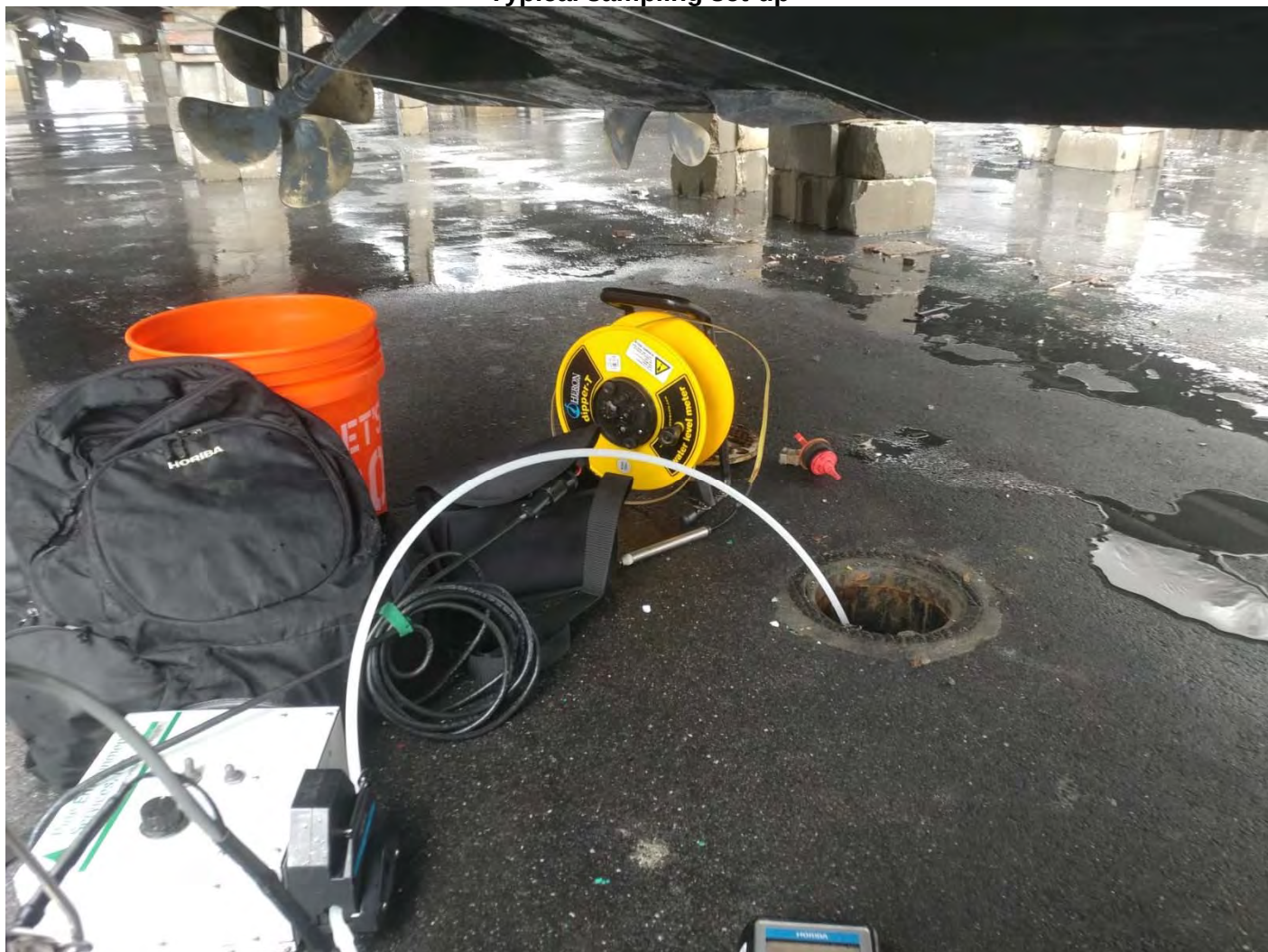
Name: Stephen Soldner

A handwritten signature in black ink, appearing to read 'Stephen Soldner', written over a faint dotted line.

Date: 07 March 2018



Photographs  
Typical sampling set-up



**DAILY FIELD REPORT**Day: **Thursday** Date: **08 March 2018****Project Name:** Metal Etching, Inc.  
**NYSDEC Site #** 130110Department of  
Environmental  
Conservation**Contract #** D007624-09  
**Location:** Freeport, New York**Weather:** Clear, NW 9 mph, 36F AM  
Overcast, W 13 mph, 39F PM**Arrive at site:** 1000  
**Leave site:** 1400**HEALTH & SAFETY:**Are there any changes to the Health & Safety Plan?  
(If yes, list the deviation under items for concern)

Yes ( ) No (X)

Are monitoring results at acceptable levels?

Soil

Yes ( ) N/A (X)

\* No ( )

Waters

Yes ( ) N/A (X)

\* No ( )

Air

Yes ( ) N/A (X)

\* No ( )

**OTHER ITEMS:**

- If No, provide comments

Site Sketch Attached: Yes ( ) No (X)

Photos Taken: Yes (X) No ( )

**DESCRIPTION OF DAILY WORK PERFORMED:**

S. Soldner and M. Miller (EA) on site for groundwater sampling. Arrived onsite at 1000. Began unpacking equipment and setting up at wells. Purged and sampled monitoring wells MW08SR, MW08DR, MW09SR, and MW09DR one hour before until two hours after high tide. S. Soldner collected PFC field blank. Gauged wells from 1315 to 1345 at high tide. M. Miller performed site-wide inspection. Packed coolers and left site around 1440 to ship MNA samples and air samples at UPS.

| <u>Sample ID</u> | <u>QA/QC</u>              | <u>Description</u>                                                                |
|------------------|---------------------------|-----------------------------------------------------------------------------------|
| 130110-MW08SR    |                           | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW08DR    | MS/MSD for VOC and Metals | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW09SR    |                           | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |
| 130110-MW09DR    |                           | VOC, Metals/Mercury, Sulfide/Chloride/Nitrate, TOC, Sulfate, Dissolved Gases, PFC |

**CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:***EA personnel:* Megan Miller, Stephen Soldner**VISITORS TO SITE:**

None

**PROJECT SCHEDULE ISSUES:**

None



## DAILY FIELD REPORT

Day: Thursday Date: 08 March 2018

### PROJECT BUDGET ISSUES:

None.

### ITEMS OF CONCERN:

None

### COMMENTS:

None

### ATTACHMENT(S) TO THIS REPORT:

None

### SITE REPRESENTATIVE:

Name: Stephen Soldner



Date: 08 March 2018

### Photographs View of asphalt at site





View of entrance and storm drain in need of repair



View of asphalt adjacent to office building



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## **Attachment C**

### **Laboratory Analytical Data, Chains-of-Custody and Data Usability Summary Reports**

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March 19, 2018

Megan Miller  
EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211

Project Location: Metal Etching - Freeport, NY  
Client Job Number:  
Project Number: 1490709  
Laboratory Work Order Number: 18C0404

Enclosed are results of analyses for samples received by the laboratory on March 9, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron L. Benoit", with a long horizontal line extending to the right.

Aaron L. Benoit  
Project Manager

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Chain of Custody/Sample Receipt

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

EA Engineering, Science & Tech. - NY  
6712 Brooklawn Parkway, Suite 104  
Syracuse, NY 13211  
ATTN: Megan Miller

REPORT DATE: 3/19/2018

PURCHASE ORDER NUMBER: 16385

PROJECT NUMBER: 1490709

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 18C0404

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Metal Etching - Freeport, NY

| FIELD SAMPLE #   | LAB ID:    | MATRIX       | SAMPLE DESCRIPTION | TEST          | SUB LAB |
|------------------|------------|--------------|--------------------|---------------|---------|
| 130110-MW-06     | 18C0404-01 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-05R    | 18C0404-02 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-04     | 18C0404-03 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-10S    | 18C0404-04 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-10M    | 18C0404-05 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-10D    | 18C0404-06 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-9S     | 18C0404-07 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-9D     | 18C0404-08 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-08SR   | 18C0404-09 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-08DR   | 18C0404-10 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-11S    | 18C0404-11 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-MW-11D    | 18C0404-12 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110--DUP-0318 | 18C0404-13 | Ground Water |                    | SOP 434-PFAAS |         |
| 130110-FB-030618 | 18C0404-14 | Field Blank  |                    | SOP 434-PFAAS |         |
| 130110-FB-030718 | 18C0404-15 | Field Blank  |                    | SOP 434-PFAAS |         |
| 130110-FB-030818 | 18C0404-16 | Field Blank  |                    | SOP 434-PFAAS |         |

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SOP 434-PFAAS****Qualifications:****MS-07A**

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.

Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

**Analyte & Samples(s) Qualified:****Perfluoroheptanoic acid (PFHpA)**

B198627-MS1, B198627-MSD1

**Perfluorohexanesulfonic acid (PFH)**

B198627-MS1

**Perfluorooctanesulfonic acid (PFO)**

B198627-MS1, B198627-MSD1

**Perfluorooctanoic acid (PFOA)**

B198627-MS1, B198627-MSD1

**MS-12**

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high

bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****Perfluorobutanesulfonic acid (PFB)**

B198627-MS1, B198627-MSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington  
Project Manager

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-06

Sampled: 3/6/2018 11:25

Sample ID: 18C0404-01

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | 47         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | 83         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 290        | 100             | ng/L      | 5        |           | SOP 434-PFAAS | 3/12/18       | 3/19/18 10:02      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:35      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 115        | 70-130          |           |          |           |               |               | 3/17/18 13:35      |         |
| 13C-PFHxA                            | 129        | 70-130          |           |          |           |               |               | 3/19/18 10:02      |         |
| 13C-PFDA                             | 73.5       | 70-130          |           |          |           |               |               | 3/17/18 13:35      |         |
| 13C-PFDA                             | 80.0       | 70-130          |           |          |           |               |               | 3/19/18 10:02      |         |
| d5-NEtFOSAA                          | 77.9       | 70-130          |           |          |           |               |               | 3/17/18 13:35      |         |
| d5-NEtFOSAA                          | 93.5       | 70-130          |           |          |           |               |               | 3/19/18 10:02      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-05R

Sampled: 3/6/2018 11:00

Sample ID: 18C0404-02

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | 22         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | 26         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 74         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorononanoic acid (PFNA)        | 23         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorodecanoic acid (PFDA)        | 25         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 13:48      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 101        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 81.7       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 88.7       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-04

Sampled: 3/6/2018 12:10

Sample ID: 18C0404-03

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | 88         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | 34         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 64         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorononanoic acid (PFNA)        | 63         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorodecanoic acid (PFDA)        | 38         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:01      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 120        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 82.5       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 85.1       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-10S

Sampled: 3/6/2018 12:40

Sample ID: 18C0404-04

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | 23         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | 24         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | 30         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 70         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 24         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:13      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 103        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 82.3       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 90.7       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-10M

Sampled: 3/6/2018 13:50

Sample ID: 18C0404-05

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | 33         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | 21         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | 31         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 84         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorononanoic acid (PFNA)        | 27         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorodecanoic acid (PFDA)        | 21         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:26      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 107        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 72.9       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 86.1       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-10D

Sampled: 3/6/2018 13:35

Sample ID: 18C0404-06

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:39      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 125        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 80.0       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 79.7       | 70-130          |           |          |           |               |               |                    |         |



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-9S

Sampled: 3/6/2018 11:37

Sample ID: 18C0404-07

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 18:55      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 90.5       | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 83.9       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 86.6       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-9D

Sampled: 3/6/2018 12:24

Sample ID: 18C0404-08

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 19:07      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 90.0       | 70-130          |           |          |           |               |               | 3/13/18 19:07      |         |
| 13C-PFDA                             | 82.9       | 70-130          |           |          |           |               |               | 3/13/18 19:07      |         |
| d5-NEtFOSAA                          | 84.7       | 70-130          |           |          |           |               |               | 3/13/18 19:07      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-08SR

Sampled: 3/6/2018 11:40

Sample ID: 18C0404-09

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | 76         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 22         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 14:52      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 108        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 79.6       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 95.7       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-08DR

Sampled: 3/6/2018 12:20

Sample ID: 18C0404-10

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | 86         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorooctanoic acid (PFOA)        | 26         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 30         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:04      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 114        | 70-130          |           |          |           |               |               | 3/17/18 15:04      |         |
| 13C-PFDA                             | 77.2       | 70-130          |           |          |           |               |               | 3/17/18 15:04      |         |
| d5-NEtFOSAA                          | 89.6       | 70-130          |           |          |           |               |               | 3/17/18 15:04      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-11S

Sampled: 3/6/2018 12:12

Sample ID: 18C0404-11

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 45         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:17      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 109        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 72.3       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 70.2       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-MW-11D

Sampled: 3/6/2018 13:03

Sample ID: 18C0404-12

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 34         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:11      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 78.5       | 70-130          |           |          |           |               |               | 3/13/18 20:11      |         |
| 13C-PFDA                             | 70.6       | 70-130          |           |          |           |               |               | 3/13/18 20:11      |         |
| d5-NEtFOSAA                          | 70.5       | 70-130          |           |          |           |               |               | 3/13/18 20:11      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110--DUP-0318

Sampled: 3/6/2018 00:00

Sample ID: 18C0404-13

Sample Matrix: Ground Water

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | 46         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/13/18 20:24      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 84.2       | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 82.7       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 72.4       | 70-130          |           |          |           |               |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-FB-030618

Sampled: 3/6/2018 14:10

Sample ID: 18C0404-14

Sample Matrix: Field Blank

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:30      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 121        | 70-130          |           |          |           |               |               | 3/17/18 15:30      |         |
| 13C-PFDA                             | 83.0       | 70-130          |           |          |           |               |               | 3/17/18 15:30      |         |
| d5-NEtFOSAA                          | 92.8       | 70-130          |           |          |           |               |               | 3/17/18 15:30      |         |



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-FB-030718

Sampled: 3/6/2018 14:20

Sample ID: 18C0404-15

Sample Matrix: Field Blank

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 15:55      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 128        | 70-130          |           |          |           |               |               | 3/17/18 15:55      |         |
| 13C-PFDA                             | 94.7       | 70-130          |           |          |           |               |               | 3/17/18 15:55      |         |
| d5-NEtFOSAA                          | 91.6       | 70-130          |           |          |           |               |               | 3/17/18 15:55      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Metal Etching - Freeport, NY

Sample Description:

Work Order: 18C0404

Date Received: 3/9/2018

Field Sample #: 130110-FB-030818

Sampled: 3/6/2018 13:00

Sample ID: 18C0404-16

Sample Matrix: Field Blank

### Miscellaneous Organic Analyses

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method        | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|---------------|---------------|--------------------|---------|
| Perfluorobutanesulfonic acid (PFBS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorohexanoic acid (PFHxA)       | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluoroheptanoic acid (PFHpA)      | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorohexanesulfonic acid (PFHxS) | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorooctanoic acid (PFOA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorooctanesulfonic acid (PFOS)  | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorononanoic acid (PFNA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorodecanoic acid (PFDA)        | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| NMeFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluoroundecanoic acid (PFUnA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| NEtFOSAA                             | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorododecanoic acid (PFDoA)     | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorotridecanoic acid (PFTrDA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Perfluorotetradecanoic acid (PFTA)   | ND         | 20              | ng/L      | 1        |           | SOP 434-PFAAS | 3/12/18       | 3/17/18 16:08      | KAF     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |               |               |                    |         |
| 13C-PFHxA                            | 111        | 70-130          |           |          |           |               |               |                    |         |
| 13C-PFDA                             | 78.6       | 70-130          |           |          |           |               |               |                    |         |
| d5-NEtFOSAA                          | 86.1       | 70-130          |           |          |           |               |               |                    |         |

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332**Sample Extraction Data****Prep Method: EPA 537-SOP 434-PFAAS**

| Lab Number [Field ID]         | Batch   | Initial [mL] | Final [mL] | Date     |
|-------------------------------|---------|--------------|------------|----------|
| 18C0404-01 [130110-MW-06]     | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-01RE1 [130110-MW-06]  | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-02 [130110-MW-05R]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-03 [130110-MW-04]     | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-04 [130110-MW-10S]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-05 [130110-MW-10M]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-06 [130110-MW-10D]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-07 [130110-MW-9S]     | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-08 [130110-MW-9D]     | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-09 [130110-MW-08SR]   | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-10 [130110-MW-08DR]   | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-11 [130110-MW-11S]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-12 [130110-MW-11D]    | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-13 [130110--DUP-0318] | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-14 [130110-FB-030618] | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-15 [130110-FB-030718] | B198627 | 250          | 1.00       | 03/12/18 |
| 18C0404-16 [130110-FB-030818] | B198627 | 250          | 1.00       | 03/12/18 |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## QUALITY CONTROL

## Miscellaneous Organic Analyses - Quality Control

| Analyte                                                  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC   | %REC Limits | RPD | RPD Limit | Notes  |
|----------------------------------------------------------|--------|-----------------|-------|-------------|---------------|--------|-------------|-----|-----------|--------|
| <b>Batch B198627 - EPA 537</b>                           |        |                 |       |             |               |        |             |     |           |        |
| <b>Blank (B198627-BLK1)</b>                              |        |                 |       |             |               |        |             |     |           |        |
| Prepared: 03/12/18 Analyzed: 03/13/18                    |        |                 |       |             |               |        |             |     |           |        |
| Perfluorobutanesulfonic acid (PFBS)                      | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorohexanoic acid (PFHxA)                           | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluoroheptanoic acid (PFHpA)                          | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorohexanesulfonic acid (PFHxS)                     | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorooctanoic acid (PFOA)                            | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorooctanesulfonic acid (PFOS)                      | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorononanoic acid (PFNA)                            | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorodecanoic acid (PFDA)                            | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| NMeFOSAA                                                 | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluoroundecanoic acid (PFUnA)                         | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| NEtFOSAA                                                 | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorododecanoic acid (PFDoA)                         | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorotridecanoic acid (PFTrDA)                       | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Perfluorotetradecanoic acid (PFTA)                       | ND     | 20              | ng/L  |             |               |        |             |     |           |        |
| Surrogate: 13C-PFHxA                                     | 33.7   |                 | ng/L  | 40.0        |               | 84.2   | 70-130      |     |           |        |
| Surrogate: 13C-PFDA                                      | 29.2   |                 | ng/L  | 40.0        |               | 73.0   | 70-130      |     |           |        |
| Surrogate: d5-NEtFOSAA                                   | 127    |                 | ng/L  | 160         |               | 79.3   | 70-130      |     |           |        |
| <b>LCS (B198627-BS1)</b>                                 |        |                 |       |             |               |        |             |     |           |        |
| Prepared: 03/12/18 Analyzed: 03/13/18                    |        |                 |       |             |               |        |             |     |           |        |
| Perfluorobutanesulfonic acid (PFBS)                      | 8.15   | 20              | ng/L  | 8.85        |               | 92.1   | 70-130      |     |           |        |
| Perfluorohexanoic acid (PFHxA)                           | 9.67   | 20              | ng/L  | 10.0        |               | 96.7   | 70-130      |     |           |        |
| Perfluoroheptanoic acid (PFHpA)                          | 8.64   | 20              | ng/L  | 10.0        |               | 86.4   | 70-130      |     |           |        |
| Perfluorohexanesulfonic acid (PFHxS)                     | 7.49   | 20              | ng/L  | 9.10        |               | 82.3   | 70-130      |     |           |        |
| Perfluorooctanoic acid (PFOA)                            | 9.67   | 20              | ng/L  | 10.0        |               | 96.7   | 70-130      |     |           |        |
| Perfluorooctanesulfonic acid (PFOS)                      | 8.73   | 20              | ng/L  | 9.25        |               | 94.4   | 70-130      |     |           |        |
| Perfluorononanoic acid (PFNA)                            | 9.62   | 20              | ng/L  | 10.0        |               | 96.2   | 70-130      |     |           |        |
| Perfluorodecanoic acid (PFDA)                            | 8.92   | 20              | ng/L  | 10.0        |               | 89.2   | 70-130      |     |           |        |
| NMeFOSAA                                                 | 10.0   | 20              | ng/L  | 10.0        |               | 100    | 70-130      |     |           |        |
| Perfluoroundecanoic acid (PFUnA)                         | 9.59   | 20              | ng/L  | 10.0        |               | 95.9   | 70-130      |     |           |        |
| NEtFOSAA                                                 | 8.29   | 20              | ng/L  | 10.0        |               | 82.9   | 70-130      |     |           |        |
| Perfluorododecanoic acid (PFDoA)                         | 8.43   | 20              | ng/L  | 10.0        |               | 84.3   | 70-130      |     |           |        |
| Perfluorotridecanoic acid (PFTrDA)                       | 8.13   | 20              | ng/L  | 10.0        |               | 81.3   | 70-130      |     |           |        |
| Perfluorotetradecanoic acid (PFTA)                       | 9.39   | 20              | ng/L  | 10.0        |               | 93.9   | 70-130      |     |           |        |
| Surrogate: 13C-PFHxA                                     | 35.5   |                 | ng/L  | 40.0        |               | 88.7   | 70-130      |     |           |        |
| Surrogate: 13C-PFDA                                      | 30.4   |                 | ng/L  | 40.0        |               | 76.1   | 70-130      |     |           |        |
| Surrogate: d5-NEtFOSAA                                   | 129    |                 | ng/L  | 160         |               | 80.8   | 70-130      |     |           |        |
| <b>Matrix Spike (B198627-MS1)</b>                        |        |                 |       |             |               |        |             |     |           |        |
| Source: 18C0404-10 Prepared: 03/12/18 Analyzed: 03/13/18 |        |                 |       |             |               |        |             |     |           |        |
| Perfluorobutanesulfonic acid (PFBS)                      | 55.0   | 20              | ng/L  | 8.85        | 86.4          | -354 * | 70-130      |     |           | MS-12  |
| Perfluorohexanoic acid (PFHxA)                           | 17.2   | 20              | ng/L  | 10.0        | 8.53          | 86.3   | 70-130      |     |           |        |
| Perfluoroheptanoic acid (PFHpA)                          | 16.0   | 20              | ng/L  | 10.0        | 9.67          | 63.5 * | 70-130      |     |           | MS-07A |
| Perfluorohexanesulfonic acid (PFHxS)                     | 11.8   | 20              | ng/L  | 9.10        | 6.01          | 63.6 * | 70-130      |     |           | MS-07A |
| Perfluorooctanoic acid (PFOA)                            | 32.3   | 20              | ng/L  | 10.0        | 25.8          | 65.5 * | 70-130      |     |           | MS-07A |
| Perfluorooctanesulfonic acid (PFOS)                      | 35.2   | 20              | ng/L  | 9.25        | 29.6          | 60.7 * | 70-130      |     |           | MS-07A |
| Perfluorononanoic acid (PFNA)                            | 15.1   | 20              | ng/L  | 10.0        | 5.30          | 98.5   | 70-130      |     |           |        |
| Perfluorodecanoic acid (PFDA)                            | 16.6   | 20              | ng/L  | 10.0        | 5.45          | 112    | 70-130      |     |           |        |
| NMeFOSAA                                                 | 8.51   | 20              | ng/L  | 10.0        | ND            | 85.1   | 70-130      |     |           |        |
| Perfluoroundecanoic acid (PFUnA)                         | 10.7   | 20              | ng/L  | 10.0        | 1.56          | 91.3   | 70-130      |     |           |        |
| NEtFOSAA                                                 | 8.27   | 20              | ng/L  | 10.0        | ND            | 82.7   | 70-130      |     |           |        |
| Perfluorododecanoic acid (PFDoA)                         | 8.69   | 20              | ng/L  | 10.0        | ND            | 86.9   | 70-130      |     |           |        |
| Perfluorotridecanoic acid (PFTrDA)                       | 8.27   | 20              | ng/L  | 10.0        | ND            | 82.7   | 70-130      |     |           |        |
| Perfluorotetradecanoic acid (PFTA)                       | 8.36   | 20              | ng/L  | 10.0        | ND            | 83.6   | 70-130      |     |           |        |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**
**Miscellaneous Organic Analyses - Quality Control**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch B198627 - EPA 537**
**Matrix Spike (B198627-MS1)**
**Source: 18C0404-10**

Prepared: 03/12/18 Analyzed: 03/13/18

|                        |      |  |      |      |  |      |        |  |  |  |
|------------------------|------|--|------|------|--|------|--------|--|--|--|
| Surrogate: 13C-PFHxA   | 33.0 |  | ng/L | 40.0 |  | 82.6 | 70-130 |  |  |  |
| Surrogate: 13C-PFDA    | 34.0 |  | ng/L | 40.0 |  | 84.9 | 70-130 |  |  |  |
| Surrogate: d5-NEtFOSAA | 118  |  | ng/L | 160  |  | 73.9 | 70-130 |  |  |  |

**Matrix Spike Dup (B198627-MSD1)**
**Source: 18C0404-10**

Prepared: 03/12/18 Analyzed: 03/13/18

|                                            |      |    |      |      |      |             |   |        |       |    |        |
|--------------------------------------------|------|----|------|------|------|-------------|---|--------|-------|----|--------|
| <b>Perfluorobutanesulfonic acid (PFBS)</b> | 62.6 | 20 | ng/L | 8.85 | 86.4 | <b>-269</b> | * | 70-130 | 12.8  | 30 | MS-12  |
| Perfluorohexanoic acid (PFHxA)             | 17.1 | 20 | ng/L | 10.0 | 8.53 | 85.6        |   | 70-130 | 0.394 | 30 |        |
| <b>Perfluoroheptanoic acid (PFHpA)</b>     | 16.5 | 20 | ng/L | 10.0 | 9.67 | <b>68.1</b> | * | 70-130 | 2.82  | 30 | MS-07A |
| Perfluorohexanesulfonic acid (PFHxS)       | 13.0 | 20 | ng/L | 9.10 | 6.01 | 77.3        |   | 70-130 | 10.0  | 30 |        |
| <b>Perfluorooctanoic acid (PFOA)</b>       | 32.5 | 20 | ng/L | 10.0 | 25.8 | <b>67.4</b> | * | 70-130 | 0.589 | 30 | MS-07A |
| <b>Perfluorooctanesulfonic acid (PFOS)</b> | 35.4 | 20 | ng/L | 9.25 | 29.6 | <b>62.9</b> | * | 70-130 | 0.585 | 30 | MS-07A |
| Perfluorononanoic acid (PFNA)              | 14.1 | 20 | ng/L | 10.0 | 5.30 | 88.0        |   | 70-130 | 7.12  | 30 |        |
| Perfluorodecanoic acid (PFDA)              | 15.8 | 20 | ng/L | 10.0 | 5.45 | 104         |   | 70-130 | 4.98  | 30 |        |
| NMeFOSAA                                   | 8.84 | 20 | ng/L | 10.0 | ND   | 88.4        |   | 70-130 | 3.88  | 30 |        |
| Perfluoroundecanoic acid (PFUnA)           | 10.3 | 20 | ng/L | 10.0 | 1.56 | 87.8        |   | 70-130 | 3.27  | 30 |        |
| NEtFOSAA                                   | 7.90 | 20 | ng/L | 10.0 | ND   | 79.0        |   | 70-130 | 4.56  | 30 |        |
| Perfluorododecanoic acid (PFDoA)           | 8.54 | 20 | ng/L | 10.0 | ND   | 85.4        |   | 70-130 | 1.70  | 30 |        |
| Perfluorotridecanoic acid (PFTrDA)         | 7.83 | 20 | ng/L | 10.0 | ND   | 78.3        |   | 70-130 | 5.50  | 30 |        |
| Perfluorotetradecanoic acid (PFTA)         | 8.16 | 20 | ng/L | 10.0 | ND   | 81.6        |   | 70-130 | 2.41  | 30 |        |
| Surrogate: 13C-PFHxA                       | 33.4 |    | ng/L | 40.0 |      | 83.6        |   | 70-130 |       |    |        |
| Surrogate: 13C-PFDA                        | 33.8 |    | ng/L | 40.0 |      | 84.6        |   | 70-130 |       |    |        |
| Surrogate: d5-NEtFOSAA                     | 125  |    | ng/L | 160  |      | 78.3        |   | 70-130 |       |    |        |

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

|        |                                                                                                                                                                                                                                                          |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *      | QC result is outside of established limits.                                                                                                                                                                                                              |
| †      | Wide recovery limits established for difficult compound.                                                                                                                                                                                                 |
| ‡      | Wide RPD limits established for difficult compound.                                                                                                                                                                                                      |
| #      | Data exceeded client recommended or regulatory level                                                                                                                                                                                                     |
| ND     | Not Detected                                                                                                                                                                                                                                             |
| RL     | Reporting Limit is at the level of quantitation (LOQ)                                                                                                                                                                                                    |
| DL     | Detection Limit is the lower limit of detection determined by the MDL study                                                                                                                                                                              |
| MCL    | Maximum Contaminant Level                                                                                                                                                                                                                                |
|        | Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.                                                                                                   |
|        | No results have been blank subtracted unless specified in the case narrative section.                                                                                                                                                                    |
| MS-07A | Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated. |
| MS-12  | Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.                          |

# CERTIFICATIONS

## Certified Analyses included in this Report

| Analyte                              | Certifications |
|--------------------------------------|----------------|
| <b><i>SOP 434-PFAAS in Water</i></b> |                |
| Perfluorobutanesulfonic acid (PFBS)  | NH-P           |
| Perfluorohexanoic acid (PFHxA)       | NH-P           |
| Perfluoroheptanoic acid (PFHpA)      | NH-P           |
| Perfluorohexanesulfonic acid (PFHxS) | NH-P           |
| Perfluorooctanoic acid (PFOA)        | NH-P           |
| Perfluorooctanesulfonic acid (PFOS)  | NH-P           |
| Perfluorononanoic acid (PFNA)        | NH-P           |
| Perfluorodecanoic acid (PFDA)        | NH-P           |
| NMeFOSAA                             | NH-P           |
| Perfluoroundecanoic acid (PFUnA)     | NH-P           |
| NEtFOSAA                             | NH-P           |
| Perfluorododecanoic acid (PFDoA)     | NH-P           |
| Perfluorotridecanoic acid (PFTrDA)   | NH-P           |
| Perfluorotetradecanoic acid (PFTA)   | NH-P           |

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

| Code  | Description                                  | Number        | Expires    |
|-------|----------------------------------------------|---------------|------------|
| AIHA  | AIHA-LAP, LLC - ISO17025:2005                | 100033        | 03/1/2020  |
| MA    | Massachusetts DEP                            | M-MA100       | 06/30/2018 |
| CT    | Connecticut Department of Public Health      | PH-0567       | 09/30/2019 |
| NY    | New York State Department of Health          | 10899 NELAP   | 04/1/2018  |
| NH-S  | New Hampshire Environmental Lab              | 2516 NELAP    | 02/5/2019  |
| RI    | Rhode Island Department of Health            | LAO00112      | 12/30/2018 |
| NC    | North Carolina Div. of Water Quality         | 652           | 12/31/2018 |
| NJ    | New Jersey DEP                               | MA007 NELAP   | 06/30/2018 |
| FL    | Florida Department of Health                 | E871027 NELAP | 06/30/2018 |
| VT    | Vermont Department of Health Lead Laboratory | LL015036      | 07/30/2018 |
| ME    | State of Maine                               | 2011028       | 06/9/2019  |
| VA    | Commonwealth of Virginia                     | 460217        | 12/14/2018 |
| NH-P  | New Hampshire Environmental Lab              | 2557 NELAP    | 09/6/2018  |
| VT-DW | Vermont Department of Health Drinking Water  | VT-255716     | 06/12/2018 |
| NC-DW | North Carolina Department of Health          | 25703         | 07/31/2018 |



Company Name:

Address: 6702 Brooktown Pkwy Syracuse, NY 13211

Phone:

Project Name:

Project Location: Freeport, NY

Project Number:

Project Manager:

Con-Test Quote Name/Number:

Invoice Recipient:

Sampled By: Megan Miller - Stephen Soldner

Con-Test Work Order#

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Conc Code

ANALYSIS REQUESTED

1-Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

A = Air

S = Soil

SL = Sludge

SOL = Solid

O = Other (please define)

2 Preservation Codes:

I = Iced

H = HCL

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium Bisulfate

X = Sodium Hydroxide

T = Sodium

Thiosulfate

O = Other (please define)

3 Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

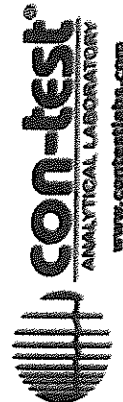
T = Tedlar Bag

O = Other (please define)

PCB ONLY

Soxhlet

Non Soxhlet



NELAC and AHA-LAP, LLC Accredited

Other

Chromatogram

AIHA-LAP, LLC





Email: info@contestlabs.com

EA Science and Tech

Address: 6712 Brooktown Pkwy Syracuse NY 13211

Phone:

Project Name: Metal Etching (NYSDEC)

Project Location: Freeport, NY

Project Number: 1490709

Project Manager: Morgan Miller

Con-Test Quote Name/Number:

Invoice Recipient: Northeastap@quest.com

Sampled By: Morgan Miller - Stephen Soldner

|                                                      |                                            |
|------------------------------------------------------|--------------------------------------------|
| Requested Turnaround Time                            |                                            |
| 7-Day <input type="checkbox"/>                       | 10-Day <input checked="" type="checkbox"/> |
| Due Date:                                            |                                            |
| Rush-Approval Required                               |                                            |
| 1-Day <input type="checkbox"/>                       | 3-Day <input type="checkbox"/>             |
| 2-Day <input type="checkbox"/>                       | 4-Day <input type="checkbox"/>             |
| Data Delivery                                        |                                            |
| Format: PDF <input checked="" type="checkbox"/>      | EXCEL <input checked="" type="checkbox"/>  |
| Other:                                               |                                            |
| CLP Like Data Pkg Required: <input type="checkbox"/> |                                            |
| Email To:                                            | NYS ASP CAT A <input type="checkbox"/>     |
| Fax To #:                                            |                                            |

| Con-Test Work Order # | Client Sample ID / Description | Beginning Date/Time | Ending Date/Time | Composite | Grab | Matrix Code | Conc Code |
|-----------------------|--------------------------------|---------------------|------------------|-----------|------|-------------|-----------|
| 1                     | 130110 - MW-11S                | 3/7/18 12:12        | 3/7/18 12:12     |           | X    | GW          | L         |
| 2                     | 130110 - MW-11D                | 3/7/18 13:03        | 3/7/18 13:03     |           | X    | GW          | L         |
| 3                     | 130110 - DVP-0318              | 3/10/18 14:10       | 3/10/18 14:10    |           | X    | GW          | U         |
| 4                     | 130110 - FB-030018             | 3/7/18 14:20        | 3/7/18 14:20     |           | X    | GW          | O         |
| 5                     | 130110 - FB-030718             | 3/8/18 13:00        | 3/8/18 13:00     |           | X    | GW          | O         |
| 6                     | 130110 - FB-030818             |                     |                  |           |      |             |           |

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:

H - High; M - Medium; L - Low; C - Clean; U - Unknown

|                                                      |                         |                                                          |                                                |                                          |                                          |                                               |
|------------------------------------------------------|-------------------------|----------------------------------------------------------|------------------------------------------------|------------------------------------------|------------------------------------------|-----------------------------------------------|
| Relinquished by: (signature)<br><i>Morgan Miller</i> | Date/Time: 3/8/18 13:30 | Detection Limit Requirements                             | MA <input type="checkbox"/>                    | MA MCP Required <input type="checkbox"/> | Special Requirements                     | MA MCP Required <input type="checkbox"/>      |
| Received by: (signature)<br><i>UPS</i>               | Date/Time:              | MCP Certification Form Required <input type="checkbox"/> | CT <input type="checkbox"/>                    | CT RCP Required <input type="checkbox"/> | CT RCP Required <input type="checkbox"/> | MA State DW Required <input type="checkbox"/> |
| Relinquished by: (signature)                         | Date/Time:              | Other                                                    | PWSID #                                        |                                          |                                          |                                               |
| Received by: (signature)<br><i>Morgan Miller</i>     | Date/Time: 3/9/18 13:30 | Project Entity                                           | Government <input checked="" type="checkbox"/> | Municipality <input type="checkbox"/>    | MWRA <input type="checkbox"/>            | Other                                         |
| Relinquished by: (signature)                         | Date/Time:              | Federal <input type="checkbox"/>                         | City <input type="checkbox"/>                  | 21 J <input type="checkbox"/>            | School <input type="checkbox"/>          | Chromatogram <input type="checkbox"/>         |
| Received by: (signature)                             | Date/Time:              | City <input type="checkbox"/>                            | Brownfield <input type="checkbox"/>            | MBTA <input type="checkbox"/>            |                                          | AIHA-LAP, LLC <input type="checkbox"/>        |



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Friday, 03/09/2018 , By End of Day

**Notify me with Updates****Last Location:**

W Springfield, MA, United States, Friday, 03/09/2018

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**con-test®**  
 ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False**

Statement will be brought to the attention of the Client - State True or False

Client EA Science + TechReceived By SEDate 3/9/18Time 1330

How were the samples received?

In Cooler TNo Cooler       On Ice TNo Ice       Direct from Sampling       Ambient       Melted Ice       Were samples within Temperature? 2-6°C TBy Gun # 577Actual Temp - 3.4By Blank #       Actual Temp -       Was Custody Seal Intact? N/AWere Samples Tampered with? N/AWas COC Relinquished? TDoes Chain Agree With Samples? TAre there broken/leaking/loose caps on any samples? FIs COC in ink/ Legible? TWere samples received within holding time? TDid COC include all pertinent Information? TClient T  
Project TAnalysis T  
ID's TSampler Name TCollection Dates/Times TAre Sample labels filled out and legible? TAre there Lab to Filters? FAre there Rushes? FAre there Short Holds? FIs there enough Volume? TIs there Headspace where applicable? N/AProper Media/Containers Used? TWere trip blanks received? FDo all samples have the proper pH? N/AWho was notified?       Who was notified?       Who was notified?       MS/MSD? TIs splitting samples required? FOn COC? N/AAcid       Base       

| Vials        | # | Containers:   | # |                 | #         |               | # |
|--------------|---|---------------|---|-----------------|-----------|---------------|---|
| Unp-         |   | 1 Liter Amb.  |   | 1 Liter Plastic |           | 16 oz Amb.    |   |
| HCL-         |   | 500 mL Amb.   |   | 500 mL Plastic  |           | 8oz Amb/Clear |   |
| Meoh-        |   | 250 mL Amb.   |   | 250 mL Plastic  | <u>18</u> | 4oz Amb/Clear |   |
| Bisulfate-   |   | Col./Bacteria |   | Flashpoint      |           | 2oz Amb/Clear |   |
| DI-          |   | Other Plastic |   | Other Glass     |           | Encore        |   |
| Thiosulfate- |   | SOC Kit       |   | Plastic Bag     |           | Frozen:       |   |
| Sulfuric-    |   | Perchlorate   |   | Ziplock         |           |               |   |

**Unused Media**

| Vials        | # | Containers:   | # |                 | # |               | # |
|--------------|---|---------------|---|-----------------|---|---------------|---|
| Unp-         |   | 1 Liter Amb.  |   | 1 Liter Plastic |   | 16 oz Amb.    |   |
| HCL-         |   | 500 mL Amb.   |   | 500 mL Plastic  |   | 8oz Amb/Clear |   |
| Meoh-        |   | 250 mL Amb.   |   | 250 mL Plastic  |   | 4oz Amb/Clear |   |
| Bisulfate-   |   | Col./Bacteria |   | Flashpoint      |   | 2oz Amb/Clear |   |
| DI-          |   | Other Plastic |   | Other Glass     |   | Encore        |   |
| Thiosulfate- |   | SOC Kit       |   | Plastic Bag     |   | Frozen:       |   |
| Sulfuric-    |   | Perchlorate   |   | Ziplock         |   |               |   |

 Comments:

**DATA USABILITY SUMMARY REPORT  
METAL ETCHING, FREEPORT, LONG ISLAND, NEW YORK**

Client: EA Engineering, Science & Technology, Inc., Syracuse, New York  
SDG: SC44537  
Laboratory: Eurofins Spectrum Analytical, Agawam, Massachusetts  
Site: Metal Etching, Freeport, Long Island, New York  
Date: June 4, 2018

| VOC    |                  |                      |        |
|--------|------------------|----------------------|--------|
| EDS ID | Client Sample ID | Laboratory Sample ID | Matrix |
| 1      | 130110-MW-05R    | SC44537-02           | Water  |
| 2      | 130110-MW-10S    | SC44537-03           | Water  |
| 3      | 130110-MW-10M    | SC44537-04           | Water  |
| 4      | 130110-MW-04     | SC44537-05           | Water  |
| 5      | 130110-MW-10D    | SC44537-06           | Water  |

A Data Usability Summary Review was performed on the analytical data for five water samples collected on March 6, 2018 by EA Engineering at the Metal Etching site in Freeport, Long Island, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions".

Specific method references are as follows:

Analysis  
VOCs

Method References  
USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 0, July 2015: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

***Organics***

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries

- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

### **Data Usability Assessment**

There was no rejection of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- Three compounds were qualified as estimated in all samples due to high continuing calibration %D values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

### **Data Completeness**

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

### **Volatile Organic Compounds (VOC)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

#### **Initial Calibration**

- All %RSD and/or correlation coefficients and mean RRF criteria were met.

### Continuing Calibration

- The following table presents compounds that exceeded percent deviation (%D) criteria and/or RRF values <0.05 (0.01 for poor performers) in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

| CCAL Date | Compound               | %D/RRF | Qualifier | Affected Samples |
|-----------|------------------------|--------|-----------|------------------|
| 3/8/18    | Chloroethane           | 28.2%  | J/UJ      | All Samples      |
|           | Trichlorofluoromethane | 31.9%  |           |                  |
|           | Ethyl Ether            | 21.4%  |           |                  |

### Method Blank

- The method blanks were free of contamination.

### Field Blank

- Field QC samples were not collected.

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

### Laboratory Control Samples

- The following table presents LCS samples that exhibited percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

| LCS ID      | Compound               | %R   | Qualifier | Affected Samples  |
|-------------|------------------------|------|-----------|-------------------|
| 1803225-BS1 | Trichlorofluoromethane | 135% | None      | All Associated ND |

#### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

#### Target Compound Identification

- All mass spectra and quantitation criteria were met.

#### Compound Quantitation

- All criteria were met.

#### Tentatively Identified Compounds (TICs)

- TICs were not reported.

#### Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:

  
Nancy Weaver  
Senior Chemist

Dated: 6/4/18

## Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.





# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-05R

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-02 File ID: 4453702.D  
 Sampled: 03/06/18 11:00 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 03:45  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 7.81          | 0.80 | 10.0 | J |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 0.40          | 0.32 | 1.00 | J |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-05R

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-02 File ID: 4453702.D  
 Sampled: 03/06/18 11:00 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 03:45  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.19          | 0.24 | 1.00 |   |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 0.83          | 0.30 | 1.00 | J |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 0.76          | 0.36 | 1.00 | J |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 0.40          | 0.38 | 2.00 | J |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 0.33          | 0.29 | 1.00 | J |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10S

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-03 File ID: 4453703.D  
 Sampled: 03/06/18 12:40 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 04:12  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO     | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 1.24          | 0.80 | 10.0 | J |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10S

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-03 File ID: 4453703.D  
 Sampled: 03/06/18 12:40 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 04:12  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.37          | 0.24 | 1.00 |   |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10M

3

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-04 File ID: 4453704.D  
 Sampled: 03/06/18 13:50 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 04:39  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

UJ

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# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10M

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537 3  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-04 File ID: 4453704.D  
 Sampled: 03/06/18 13:50 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 04:39  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q               |
|-------------|-----------------------------------|---------------|------|------|-----------------|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U               |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U               |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U               |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U               |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U               |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U               |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U               |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U               |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U               |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U               |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U               |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U               |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U               |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U               |
| 127-18-4    | Tetrachloroethene                 | 0.97          | 0.57 | 1.00 | J               |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U               |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U               |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U               |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U               |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U               |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U               |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U               |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | <del>U</del> uJ |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U               |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U               |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U               |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U               |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U               |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U               |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U               |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | <del>U</del> uJ |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U               |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U               |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U               |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U               |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U               |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U               |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U               |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-04

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537 4  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-05 File ID: 4453705.D  
 Sampled: 03/06/18 12:10 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 05:07  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 0.60          | 0.33 | 1.00 | J |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-04

4

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-05 File ID: 4453705.D  
 Sampled: 03/06/18 12:10 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 05:07  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |

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# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10D

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537 5  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-06 File ID: 4453706.D  
 Sampled: 03/06/18 13:35 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 05:34  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-10D

5

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44537  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/07/18 10:31  
 Matrix: Ground Water Laboratory ID: SC44537-06 File ID: 4453706.D  
 Sampled: 03/06/18 13:35 Prepared: 03/08/18 09:11 Analyzed: 03/09/18 05:34  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803225 Sequence: S817447 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |

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new 6/4/18

Report Date:  
23-Mar-18 16:37

## Laboratory Report SC44537

EA Engineering, Science, & Technology  
6712 Brooklawn Parkway Suite 104  
Syracuse, NY 13211  
Attn: Megan Miller

Project: Metal Etching - Freeport, NY  
Project #: 1490709

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87936  
Maine # MA138  
New Hampshire # 2972/2538  
New Jersey # MA011  
New York # 11393  
Pennsylvania # 68-04426/68-02924  
Rhode Island # LAO00348  
USDA # P330-15-00375  
Vermont # VT-11393



Authorized by:  
Christina White  
Technical Director



Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 41 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

*Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

## Sample Summary

**Work Order:** SC44537  
**Project:** Metal Etching - Freeport, NY  
**Project Number:** 1490709

| <u>Laboratory ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Date Sampled</u> | <u>Date Received</u> |
|----------------------|-------------------------|---------------|---------------------|----------------------|
| SC44537-01           | 130110-MW-06            | Ground Water  | 06-Mar-18 11:25     | 07-Mar-18 10:31      |
| SC44537-02           | 130110-MW-05R           | Ground Water  | 06-Mar-18 11:00     | 07-Mar-18 10:31      |
| SC44537-03           | 130110-MW-10S           | Ground Water  | 06-Mar-18 12:40     | 07-Mar-18 10:31      |
| SC44537-04           | 130110-MW-10M           | Ground Water  | 06-Mar-18 13:50     | 07-Mar-18 10:31      |
| SC44537-05           | 130110-MW-04            | Ground Water  | 06-Mar-18 12:10     | 07-Mar-18 10:31      |
| SC44537-06           | 130110-MW-10D           | Ground Water  | 06-Mar-18 13:35     | 07-Mar-18 10:31      |

## CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 2.8 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

### SM5310B (00, 11)

#### Duplicates:

1803431-DUP1      *Source: SC44537-06*

---

Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results

Total Organic Carbon

#### Samples:

SC44537-01      *130110-MW-06*

---

The Reporting Limit has been raised to account for matrix interference.

Total Organic Carbon

### SW846 6010C

#### Blanks:

1803456-BLK1

---

The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.

Sodium

#### Laboratory Control Samples:

1803456-BS1

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

1803456-BSD1

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

#### Spikes:

1803456-MS1      *Source: SC44537-01*

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Magnesium

## **SW846 6010C**

### **Spikes:**

1803456-MS2      *Source: SC44537-01*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

1803456-MSD2      *Source: SC44537-01*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

1803456-PS2      *Source: SC44537-01*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

### **Duplicates:**

1803456-DUP2      *Source: SC44537-01*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sodium

### **Samples:**

SC44537-01      *130110-MW-06*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sodium

SC44537-02      *130110-MW-05R*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

SC44537-03      *130110-MW-10S*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

SC44537-04      *130110-MW-10M*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium



## **SW846 6010C**

### **Samples:**

SC44537-05                      *130110-MW-04*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

SC44537-06                      *130110-MW-10D*

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Sodium

## **SW846 8260C**

### **Calibration:**

1802088

---

Analyte quantified by quadratic equation type calibration.

Bromoform

Carbon tetrachloride

This affected the following samples:

130110-MW-04  
130110-MW-05R  
130110-MW-10D  
130110-MW-10M  
130110-MW-10S  
1803225-BLK1  
1803225-BS1  
1803225-BSD1  
S817144-ICV1  
S817447-CCV1

### **Laboratory Control Samples:**

1803225 BS/BSD

---

Ethyl ether percent recoveries (130/131) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-04  
130110-MW-05R  
130110-MW-10D  
130110-MW-10M  
130110-MW-10S

Trichlorofluoromethane (Freon 11) percent recoveries (135/129) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-04  
130110-MW-05R  
130110-MW-10D  
130110-MW-10M  
130110-MW-10S

### **Samples:**

S817447-CCV1

---



## **SW846 8260C**

### **Samples:**

S817447-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Bromomethane (21.5%)

Ethyl ether (21.4%)

Trichlorofluoromethane (Freon 11) (31.9%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Chloroethane (28.2%)

This affected the following samples:

130110-MW-04

130110-MW-05R

130110-MW-10D

130110-MW-10M

130110-MW-10S

1803225-BLK1

1803225-BS1

1803225-BSD1

## Sample Acceptance Check Form

Client: EA Engineering, Science, & Technology - Syracuse  
Project: Metal Etching - Freeport, NY / 1490709  
Work Order: SC44537  
Sample(s) received on: 3/7/2018

*The following outlines the condition of samples for the attached Chain of Custody upon receipt.*

|                                                                                                                                                                                                                                                                                      | <u>Yes</u>                          | <u>No</u>                           | <u>N/A</u>                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Were custody seals present?                                                                                                                                                                                                                                                          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Were custody seals intact?                                                                                                                                                                                                                                                           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were samples received at a temperature of $\leq 6^{\circ}\text{C}$ ?                                                                                                                                                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples cooled on ice upon transfer to laboratory representative?                                                                                                                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were sample containers received intact?                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples accompanied by a Chain of Custody document?                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Did sample container labels agree with Chain of Custody document?                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples received within method-specific holding times?                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

## Summary of Hits

**Lab ID:** SC44537-01

**Client ID:** 130110-MW-06

| Parameter            | Result | Flag   | Reporting Limit | Units | Analytical Method |
|----------------------|--------|--------|-----------------|-------|-------------------|
| Sulfide              | 0.11   |        | 0.05            | mg/l  | SM4500S-D-00,-11  |
| Total Organic Carbon | 13.6   | R01, D | 10.0            | mg/l  | SM5310B (00, 11)  |
| Aluminum             | 0.0200 | J      | 0.0250          | mg/l  | SW846 6010C       |
| Barium               | 0.0178 |        | 0.0050          | mg/l  | SW846 6010C       |
| Calcium              | 142    |        | 0.100           | mg/l  | SW846 6010C       |
| Chromium             | 0.0010 | J      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                 | 7.15   |        | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium            | 47.7   |        | 0.0100          | mg/l  | SW846 6010C       |
| Manganese            | 0.370  |        | 0.0020          | mg/l  | SW846 6010C       |
| Nickel               | 0.0012 | J      | 0.0050          | mg/l  | SW846 6010C       |
| Potassium            | 15.0   |        | 0.500           | mg/l  | SW846 6010C       |
| Sodium               | 319    | GS1, D | 2.50            | mg/l  | SW846 6010C       |
| Zinc                 | 0.0046 | J      | 0.0050          | mg/l  | SW846 6010C       |

**Lab ID:** SC44537-02

**Client ID:** 130110-MW-05R

| Parameter               | Result | Flag | Reporting Limit | Units | Analytical Method |
|-------------------------|--------|------|-----------------|-------|-------------------|
| Sulfide                 | 0.45   |      | 0.05            | mg/l  | SM4500S-D-00,-11  |
| Aluminum                | 0.0447 |      | 0.0250          | mg/l  | SW846 6010C       |
| Barium                  | 0.302  |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium                 | 0.0011 | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium                 | 110    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium                | 0.0011 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper                  | 0.0145 |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                    | 20.9   |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium               | 24.8   |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese               | 0.870  |      | 0.0020          | mg/l  | SW846 6010C       |
| Potassium               | 16.6   |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium                  | 212    | B    | 0.250           | mg/l  | SW846 6010C       |
| Vanadium                | 0.0036 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                    | 0.0074 |      | 0.0050          | mg/l  | SW846 6010C       |
| 1,2,4-Trimethylbenzene  | 0.76   | J    | 1.00            | µg/l  | SW846 8260C       |
| Acetone                 | 7.81   | J    | 10.0            | µg/l  | SW846 8260C       |
| Di-isopropyl ether      | 0.33   | J    | 1.00            | µg/l  | SW846 8260C       |
| m,p-Xylene              | 0.40   | J    | 2.00            | µg/l  | SW846 8260C       |
| Methyl tert-butyl ether | 1.19   |      | 1.00            | µg/l  | SW846 8260C       |
| tert-Butylbenzene       | 0.40   | J    | 1.00            | µg/l  | SW846 8260C       |
| Toluene                 | 0.83   | J    | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44537-03

**Client ID:** 130110-MW-10S

| Parameter               | Result | Flag | Reporting Limit | Units | Analytical Method |
|-------------------------|--------|------|-----------------|-------|-------------------|
| Methane (dissolved)     | 121    |      | 2.20            | µg/l  | RSK-175           |
| Sulfide                 | 0.09   |      | 0.05            | mg/l  | SM4500S-D-00,-11  |
| Barium                  | 0.385  |      | 0.0050          | mg/l  | SW846 6010C       |
| Calcium                 | 115    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium                | 0.0020 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper                  | 0.0066 |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                    | 4.51   |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium               | 16.4   |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese               | 0.569  |      | 0.0020          | mg/l  | SW846 6010C       |
| Potassium               | 10.6   |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium                  | 89.4   | B    | 0.250           | mg/l  | SW846 6010C       |
| Vanadium                | 0.0011 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                    | 0.0115 |      | 0.0050          | mg/l  | SW846 6010C       |
| Acetone                 | 1.24   | J    | 10.0            | µg/l  | SW846 8260C       |
| Methyl tert-butyl ether | 1.37   |      | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44537-04

**Client ID:** 130110-MW-10M

| Parameter            | Result  | Flag | Reporting Limit | Units | Analytical Method |
|----------------------|---------|------|-----------------|-------|-------------------|
| Total Organic Carbon | 4.44    |      | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum             | 0.199   |      | 0.0250          | mg/l  | SW846 6010C       |
| Antimony             | 0.0018  | J    | 0.0060          | mg/l  | SW846 6010C       |
| Arsenic              | 0.00370 | J    | 0.00400         | mg/l  | SW846 6010C       |
| Barium               | 0.0162  |      | 0.0050          | mg/l  | SW846 6010C       |
| Calcium              | 55.2    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium             | 0.0046  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper               | 0.0646  |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                 | 1.89    |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium            | 19.6    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese            | 0.426   |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel               | 0.0028  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Potassium            | 9.12    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium               | 216     | B    | 0.250           | mg/l  | SW846 6010C       |
| Vanadium             | 0.0011  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                 | 0.0339  |      | 0.0050          | mg/l  | SW846 6010C       |
| Tetrachloroethene    | 0.97    | J    | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44537-05

**Client ID:** 130110-MW-04

| Parameter              | Result | Flag | Reporting Limit | Units | Analytical Method |
|------------------------|--------|------|-----------------|-------|-------------------|
| Aluminum               | 0.271  |      | 0.0250          | mg/l  | SW846 6010C       |
| Barium                 | 0.0050 |      | 0.0050          | mg/l  | SW846 6010C       |
| Calcium                | 19.7   |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium               | 0.0039 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper                 | 0.0128 |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                   | 0.788  |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium              | 2.36   |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese              | 0.354  |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel                 | 0.0032 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Potassium              | 3.17   |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium                 | 44.9   | B    | 0.250           | mg/l  | SW846 6010C       |
| Zinc                   | 0.0140 |      | 0.0050          | mg/l  | SW846 6010C       |
| cis-1,2-Dichloroethene | 0.60   | J    | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44537-06

**Client ID:** 130110-MW-10D

| Parameter            | Result | Flag | Reporting Limit | Units | Analytical Method |
|----------------------|--------|------|-----------------|-------|-------------------|
| Total Organic Carbon | 0.671  | J    | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum             | 0.0112 | J    | 0.0250          | mg/l  | SW846 6010C       |
| Antimony             | 0.0016 | J    | 0.0060          | mg/l  | SW846 6010C       |
| Barium               | 0.0060 |      | 0.0050          | mg/l  | SW846 6010C       |
| Calcium              | 19.7   |      | 0.100           | mg/l  | SW846 6010C       |
| Copper               | 0.0036 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Iron                 | 8.08   |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium            | 8.23   |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese            | 0.652  |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel               | 0.0016 | J    | 0.0050          | mg/l  | SW846 6010C       |
| Potassium            | 3.30   |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium               | 65.3   | B    | 0.250           | mg/l  | SW846 6010C       |
| Zinc                 | 0.0212 |      | 0.0050          | mg/l  | SW846 6010C       |

*Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.*

Sample Identification

130110-MW-06

SC44537-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 11:25

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |           |              |      |         |         |    |             |           |           |       |         |   |
|-----------|-----------|-----------|--------------|------|---------|---------|----|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050  | U            | mg/l | 0.0050  | 0.0006  | 1  | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | 0.0200    | J            | mg/l | 0.0250  | 0.0103  | 1  | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | < 0.00400 | U            | mg/l | 0.00400 | 0.00138 | 1  | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0178    |              | mg/l | 0.0050  | 0.0007  | 1  | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020  | U            | mg/l | 0.0020  | 0.0003  | 1  | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 142       |              | mg/l | 0.100   | 0.0071  | 1  | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | < 0.0025  | U            | mg/l | 0.0025  | 0.0004  | 1  | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050  | U            | mg/l | 0.0050  | 0.0008  | 1  | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | 0.0010    | J            | mg/l | 0.0050  | 0.0009  | 1  | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | < 0.0050  | U            | mg/l | 0.0050  | 0.0023  | 1  | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 7.15      |              | mg/l | 0.0150  | 0.0045  | 1  | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 15.0      |              | mg/l | 0.500   | 0.0600  | 1  | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 47.7      |              | mg/l | 0.0100  | 0.0044  | 1  | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.370     |              | mg/l | 0.0020  | 0.0019  | 1  | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 319       | GS1, D,<br>B | mg/l | 2.50    | 0.392   | 10 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-02-0 | Nickel    | 0.0012    | J            | mg/l | 0.0050  | 0.0009  | 1  | "           | "         | 16-Mar-18 | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075  | U            | mg/l | 0.0075  | 0.0062  | 1  | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060  | U            | mg/l | 0.0060  | 0.0016  | 1  | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150  | U            | mg/l | 0.0150  | 0.0042  | 1  | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050  | U            | mg/l | 0.0050  | 0.0021  | 1  | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | < 0.0050  | U            | mg/l | 0.0050  | 0.0011  | 1  | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0046    | J            | mg/l | 0.0050  | 0.0016  | 1  | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

Total Organic Carbon

13.6

R01, D

mg/l

10.0

2.38

10

SM5310B (00,  
11)

13-Mar-18

13-Mar-18

RLT

1803431

X

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |         |      |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | 0.11 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>11:59 | M-CTO | 422315A |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

Sample Identification

130110-MW-05R

SC44537-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 11:00

Received

07-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 67-64-1                                         | Acetone                                    | 7.81          | J           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | 0.40          | J           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-05R

SC44537-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 11:00

Received

07-Mar-18

| <i>CAS No.</i>                           | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>        |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Volatile Organic Compounds by SW846 8260 |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                  | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 99-87-6                                  | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                | Methyl tert-butyl ether           | 1.19          |             | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                 | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                  | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                  | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                 | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                 | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                 | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                  | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                 | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                 | Toluene                           | 0.83          | J           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                  | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                 | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                 | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                  | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                  | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                  | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                  | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                  | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                  | 1,2,4-Trimethylbenzene            | 0.76          | J           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                 | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                  | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                              | m,p-Xylene                        | 0.40          | J           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                  | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                 | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                  | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                 | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                 | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                 | Di-isopropyl ether                | 0.33          | J           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                  | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                 | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                 | trans-1,4-Dichloro-2-buten<br>e   | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                  | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 93  |  | 70-130 % | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 97  |  | 70-130 % | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 106 |  | 70-130 % | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 97  |  | 70-130 % | " | " | " | " | " |

Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal



Sample Identification

130110-MW-05R

SC44537-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 11:00

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |           |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|-----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050  | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | 0.0447    |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | < 0.00400 | U | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.302     |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020  | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 110       |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | 0.0011    | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050  | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | 0.0011    | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0145    |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 20.9      |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 16.6      |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 24.8      |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.870     |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 212       | B | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | < 0.0050  | U | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075  | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060  | U | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150  | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050  | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | 0.0036    | J | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0074    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 15-Mar-18 | 15-Mar-18 | SAD | 1803634 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \*- CT007

|            |         |      |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | 0.45 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>12:00 | M-CTO | 422315A |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

130110-MW-10S

SC44537-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:40

Received

07-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 67-64-1                                         | Acetone                                    | 1.24          | J           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-10S

SC44537-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:40

Received

07-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | 1.37          |             | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-butene       | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 93  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 97  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 105 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 95  |  | 70-130 % |  | " | " | " | " | " |

Total Metals by EPA 200/6000 Series Methods

Prepared by method General Prep-Metal

Sample Identification

130110-MW-10S

SC44537-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:40

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |           |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|-----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050  | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | < 0.0250  | U | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | < 0.00400 | U | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.385     |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020  | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 115       |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | < 0.0025  | U | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050  | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | 0.0020    | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0066    |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 4.51      |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 10.6      |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 16.4      |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.569     |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 89.4      | B | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | < 0.0050  | U | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075  | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060  | U | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150  | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050  | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | 0.0011    | J | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0115    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | 121    |   | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 15-Mar-18 | 15-Mar-18 | SAD | 1803634 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \*- CT007

|            |         |      |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | 0.09 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>12:01 | M-CTO | 422315A |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

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Sample Identification

130110-MW-10M

SC44537-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:50

Received

07-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-10M

SC44537-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:50

Received

07-Mar-18

| <i>CAS No.</i>                           | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>        |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Volatile Organic Compounds by SW846 8260 |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                  | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 99-87-6                                  | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                 | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                  | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                  | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                 | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                 | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                 | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                  | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                 | Tetrachloroethene                 | 0.97          | J           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                 | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                  | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                 | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                 | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                  | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                  | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                  | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                  | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                  | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                  | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                 | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                  | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                              | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                  | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                 | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                  | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                 | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                 | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                 | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                  | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                 | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                 | trans-1,4-Dichloro-2-buten<br>e   | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                  | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 93  |  | 70-130 % | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 96  |  | 70-130 % | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 106 |  | 70-130 % | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 95  |  | 70-130 % | " | " | " | " | " |

Total Metals by EPA 200/6000 Series Methods

Prepared by method General Prep-Metal

Sample Identification

130110-MW-10M

SC44537-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:50

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | 0.199    |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | 0.00370  | J | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0162   |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020 | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 55.2     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | < 0.0025 | U | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050 | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | 0.0046   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0646   |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 1.89     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 9.12     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 19.6     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.426    |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 216      | B | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | 0.0028   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075 | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | 0.0018   | J | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | 0.0011   | J | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0339   |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

Total Organic Carbon

4.44

mg/l

1.00

0.238

1

SM5310B (00,  
11)

13-Mar-18

13-Mar-18

RLT

1803431

X

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 15-Mar-18 | 15-Mar-18 | SAD | 1803634 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |         |        |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>12:01 | M-CTO | 422315A |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

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Sample Identification

130110-MW-04

SC44537-05

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:10

Received

07-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | 0.60          | J           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*



Sample Identification

130110-MW-04

SC44537-05

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:10

Received

07-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-butene       | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 91  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 97  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 106 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 96  |  | 70-130 % |  | " | " | " | " | " |

Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Sample Identification

130110-MW-04

SC44537-05

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 12:10

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |           |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|-----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050  | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | 0.271     |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | < 0.00400 | U | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0050    |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020  | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 19.7      |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | < 0.0025  | U | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050  | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | 0.0039    | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0128    |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 0.788     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 3.17      |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 2.36      |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.354     |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 44.9      | B | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | 0.0032    | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075  | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060  | U | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150  | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050  | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | < 0.0050  | U | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0140    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 15-Mar-18 | 15-Mar-18 | SAD | 1803634 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \*- CT007

|            |         |        |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>12:02 | M-CT0 | 422315A |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

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Sample Identification

130110-MW-10D

SC44537-06

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:35

Received

07-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-10D

SC44537-06

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:35

Received

07-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 08-Mar-18       | 09-Mar-18       | GMA            | 1803225      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 91  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 97  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 108 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 96  |  | 70-130 % |  | " | " | " | " | " |

Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Sample Identification

130110-MW-10D

SC44537-06

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

06-Mar-18 13:35

Received

07-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

08-Mar-18

JS

1803265

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |           |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|-----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050  | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 14-Mar-18 | 16-Mar-18 | SJR/T | 1803456 | X |
| 7429-90-5 | Aluminum  | 0.0112    | J | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | < 0.00400 | U | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0060    |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020  | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 19.7      |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | < 0.0025  | U | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050  | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | < 0.0050  | U | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0036    | J | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 8.08      |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 3.30      |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 8.23      |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.652     |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 65.3      | B | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | 0.0016    | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075  | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | 0.0016    | J | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150  | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | 16-Mar-18 | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050  | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | < 0.0050  | U | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0212    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 15-Mar-18 | ABW | 1803457 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|                      |       |   |      |      |       |   |                     |           |           |     |         |   |
|----------------------|-------|---|------|------|-------|---|---------------------|-----------|-----------|-----|---------|---|
| Total Organic Carbon | 0.671 | J | mg/l | 1.00 | 0.238 | 1 | SM5310B (00,<br>11) | 13-Mar-18 | 13-Mar-18 | RLT | 1803431 | X |
|----------------------|-------|---|------|------|-------|---|---------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 16-Mar-18 | 16-Mar-18 | SAD | 1803637 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422315-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \*- CT007

|            |         |        |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 |  | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 09-Mar-18 | 09-Mar-18<br>12:02 | M-CT0 | 422315A |  |
|------------|---------|--------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803225 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803225-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 08-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Acetone                                    | < 10.0 | U    | µg/l  | 10.0 |                                           |               |      |             |     |           |
| Acrylonitrile                              | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Benzene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromobenzene                               | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromochloromethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromodichloromethane                       | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Bromoform                                  | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromomethane                               | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 2-Butanone (MEK)                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| n-Butylbenzene                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| sec-Butylbenzene                           | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| tert-Butylbenzene                          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Carbon disulfide                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Carbon tetrachloride                       | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chlorobenzene                              | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chloroethane                               | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Chloroform                                 | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chloromethane                              | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 2-Chlorotoluene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Chlorotoluene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Dibromochloromethane                       | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                    | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Dibromomethane                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,4-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)          | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 1,1-Dichloroethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichloroethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1-Dichloroethene                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| cis-1,2-Dichloroethene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| trans-1,2-Dichloroethene                   | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 2,2-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1-Dichloropropene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| cis-1,3-Dichloropropene                    | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Ethylbenzene                               | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Isopropylbenzene                           | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Methylene chloride                         | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Naphthalene                                | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| n-Propylbenzene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803225 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803225-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 08-Mar-18</u> |               |      |             |     |           |
| Styrene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Tetrachloroethene                          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Toluene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Trichloroethene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Vinyl chloride                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| m,p-Xylene                                 | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| o-Xylene                                   | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tetrahydrofuran                            | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Ethyl ether                                | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Di-isopropyl ether                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 10.0 | U    | µg/l  | 10.0 |                                           |               |      |             |     |           |
| 1,4-Dioxane                                | < 20.0 | U    | µg/l  | 20.0 |                                           |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 5.00 | U    | µg/l  | 5.00 |                                           |               |      |             |     |           |
| Ethanol                                    | < 200  | U    | µg/l  | 200  |                                           |               |      |             |     |           |
| <hr/>                                      |        |      |       |      |                                           |               |      |             |     |           |
| Surrogate: 4-Bromofluorobenzene            | 49.1   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 51.8   |      | µg/l  |      | 50.0                                      |               | 104  | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.1   |      | µg/l  |      | 50.0                                      |               | 106  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 49.0   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| <b>LCS (1803225-BS1)</b>                   |        |      |       |      | <u>Prepared &amp; Analyzed: 08-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 23.8   |      | µg/l  |      | 20.0                                      |               | 119  | 70-130      |     |           |
| Acetone                                    | 22.6   |      | µg/l  |      | 20.0                                      |               | 113  | 70-130      |     |           |
| Acrylonitrile                              | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Benzene                                    | 21.5   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      |     |           |
| Bromobenzene                               | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| Bromochloromethane                         | 23.0   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      |     |           |
| Bromodichloromethane                       | 24.1   |      | µg/l  |      | 20.0                                      |               | 120  | 70-130      |     |           |
| Bromoform                                  | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      |     |           |
| Bromomethane                               | 25.9   |      | µg/l  |      | 20.0                                      |               | 130  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| n-Butylbenzene                             | 16.9   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| sec-Butylbenzene                           | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| tert-Butylbenzene                          | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |     |           |
| Carbon disulfide                           | 23.5   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      |     |           |
| Carbon tetrachloride                       | 24.0   |      | µg/l  |      | 20.0                                      |               | 120  | 70-130      |     |           |
| Chlorobenzene                              | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| Chloroethane                               | 26.0   |      | µg/l  |      | 20.0                                      |               | 130  | 70-130      |     |           |
| Chloroform                                 | 23.0   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                    | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|-------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                                           |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803225 - SW846 5030 Water MS</b> |                                           |      |       |      |             |               |      |             |     |           |
| <b>LCS (1803225-BS1)</b>                   | <b>Prepared &amp; Analyzed: 08-Mar-18</b> |      |       |      |             |               |      |             |     |           |
| Chloromethane                              | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| 2-Chlorotoluene                            | 20.2                                      |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| 4-Chlorotoluene                            | 20.3                                      |      | µg/l  |      | 20.0        |               | 102  | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 20.3                                      |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| Dibromochloromethane                       | 24.5                                      |      | µg/l  |      | 20.0        |               | 123  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 22.6                                      |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| Dibromomethane                             | 22.8                                      |      | µg/l  |      | 20.0        |               | 114  | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 18.5                                      |      | µg/l  |      | 20.0        |               | 92   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.2                                      |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 21.0                                      |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| 1,1-Dichloroethane                         | 22.0                                      |      | µg/l  |      | 20.0        |               | 110  | 70-130      |     |           |
| 1,2-Dichloroethane                         | 23.4                                      |      | µg/l  |      | 20.0        |               | 117  | 70-130      |     |           |
| 1,1-Dichloroethene                         | 22.1                                      |      | µg/l  |      | 20.0        |               | 110  | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 21.2                                      |      | µg/l  |      | 20.0        |               | 106  | 70-130      |     |           |
| 1,2-Dichloropropane                        | 21.4                                      |      | µg/l  |      | 20.0        |               | 107  | 70-130      |     |           |
| 1,3-Dichloropropane                        | 21.6                                      |      | µg/l  |      | 20.0        |               | 108  | 70-130      |     |           |
| 2,2-Dichloropropane                        | 20.2                                      |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| 1,1-Dichloropropene                        | 20.9                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 22.3                                      |      | µg/l  |      | 20.0        |               | 112  | 70-130      |     |           |
| Ethylbenzene                               | 19.1                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| Hexachlorobutadiene                        | 17.2                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 20.6                                      |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| Isopropylbenzene                           | 19.1                                      |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 18.0                                      |      | µg/l  |      | 20.0        |               | 90   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 21.3                                      |      | µg/l  |      | 20.0        |               | 107  | 70-130      |     |           |
| Methylene chloride                         | 21.6                                      |      | µg/l  |      | 20.0        |               | 108  | 70-130      |     |           |
| Naphthalene                                | 21.7                                      |      | µg/l  |      | 20.0        |               | 108  | 70-130      |     |           |
| n-Propylbenzene                            | 19.6                                      |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| Styrene                                    | 19.6                                      |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 21.6                                      |      | µg/l  |      | 20.0        |               | 108  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| Tetrachloroethene                          | 21.8                                      |      | µg/l  |      | 20.0        |               | 109  | 70-130      |     |           |
| Toluene                                    | 21.8                                      |      | µg/l  |      | 20.0        |               | 109  | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 19.2                                      |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 18.7                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 19.3                                      |      | µg/l  |      | 20.0        |               | 97   | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 24.0                                      |      | µg/l  |      | 20.0        |               | 120  | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 22.7                                      |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| Trichloroethene                            | 22.5                                      |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 26.9                                      | QM9  | µg/l  |      | 20.0        |               | 135  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 20.8                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 19.8                                      |      | µg/l  |      | 20.0        |               | 99   | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 20.0                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| Vinyl chloride                             | 25.4                                      |      | µg/l  |      | 20.0        |               | 127  | 70-130      |     |           |
| m,p-Xylene                                 | 19.1                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| o-Xylene                                   | 18.8                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b><u>SW846 8260C</u></b>                  |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803225 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b><u>LCS (1803225-BS1)</u></b>            |        |      |       |      | <u>Prepared &amp; Analyzed: 08-Mar-18</u> |               |      |             |      |           |
| Tetrahydrofuran                            | 19.3   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |      |           |
| Ethyl ether                                | 25.9   |      | µg/l  |      | 20.0                                      |               | 130  | 70-130      |      |           |
| Tert-amyl methyl ether                     | 20.7   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |      |           |
| Ethyl tert-butyl ether                     | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |      |           |
| Di-isopropyl ether                         | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |      |           |
| Tert-Butanol / butyl alcohol               | 205    |      | µg/l  |      | 200                                       |               | 103  | 70-130      |      |           |
| 1,4-Dioxane                                | 190    |      | µg/l  |      | 200                                       |               | 95   | 70-130      |      |           |
| trans-1,4-Dichloro-2-butene                | 23.6   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      |      |           |
| Ethanol                                    | 446    |      | µg/l  |      | 400                                       |               | 112  | 70-130      |      |           |
| Surrogate: 4-Bromofluorobenzene            | 51.4   |      | µg/l  |      | 50.0                                      |               | 103  | 70-130      |      |           |
| Surrogate: Toluene-d8                      | 52.7   |      | µg/l  |      | 50.0                                      |               | 105  | 70-130      |      |           |
| Surrogate: 1,2-Dichloroethane-d4           | 52.5   |      | µg/l  |      | 50.0                                      |               | 105  | 70-130      |      |           |
| Surrogate: Dibromofluoromethane            | 49.7   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |      |           |
| <b><u>LCS Dup (1803225-BSD1)</u></b>       |        |      |       |      | <u>Prepared &amp; Analyzed: 08-Mar-18</u> |               |      |             |      |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 22.3   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      | 7    | 20        |
| Acetone                                    | 22.9   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      | 1    | 20        |
| Acrylonitrile                              | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 5    | 20        |
| Benzene                                    | 21.3   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 0.8  | 20        |
| Bromobenzene                               | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 0.9  | 20        |
| Bromochloromethane                         | 22.9   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      | 0.4  | 20        |
| Bromodichloromethane                       | 23.8   |      | µg/l  |      | 20.0                                      |               | 119  | 70-130      | 1    | 20        |
| Bromoform                                  | 20.9   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      | 4    | 20        |
| Bromomethane                               | 25.9   |      | µg/l  |      | 20.0                                      |               | 130  | 70-130      | 0    | 20        |
| 2-Butanone (MEK)                           | 21.5   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 3    | 20        |
| n-Butylbenzene                             | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2    | 20        |
| sec-Butylbenzene                           | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 0.3  | 20        |
| tert-Butylbenzene                          | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 1    | 20        |
| Carbon disulfide                           | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 9    | 20        |
| Carbon tetrachloride                       | 23.3   |      | µg/l  |      | 20.0                                      |               | 117  | 70-130      | 3    | 20        |
| Chlorobenzene                              | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 0.05 | 20        |
| Chloroethane                               | 25.4   |      | µg/l  |      | 20.0                                      |               | 127  | 70-130      | 2    | 20        |
| Chloroform                                 | 22.5   |      | µg/l  |      | 20.0                                      |               | 113  | 70-130      | 2    | 20        |
| Chloromethane                              | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4    | 20        |
| 2-Chlorotoluene                            | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 1    | 20        |
| 4-Chlorotoluene                            | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 2    | 20        |
| 1,2-Dibromo-3-chloropropane                | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 3    | 20        |
| Dibromochloromethane                       | 24.3   |      | µg/l  |      | 20.0                                      |               | 122  | 70-130      | 0.8  | 20        |
| 1,2-Dibromoethane (EDB)                    | 22.6   |      | µg/l  |      | 20.0                                      |               | 113  | 70-130      | 0    | 20        |
| Dibromomethane                             | 23.1   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      | 1    | 20        |
| 1,2-Dichlorobenzene                        | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 0.6  | 20        |
| 1,3-Dichlorobenzene                        | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 2    | 20        |
| 1,4-Dichlorobenzene                        | 18.5   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 0.9  | 20        |
| Dichlorodifluoromethane (Freon12)          | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 5    | 20        |
| 1,1-Dichloroethane                         | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 3    | 20        |
| 1,2-Dichloroethane                         | 23.4   |      | µg/l  |      | 20.0                                      |               | 117  | 70-130      | 0.09 | 20        |
| 1,1-Dichloroethene                         | 21.7   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 2    | 20        |
| cis-1,2-Dichloroethene                     | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 0.7  | 20        |
| trans-1,2-Dichloroethene                   | 20.5   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 4    | 20        |
| 1,2-Dichloropropane                        | 21.3   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 0.1  | 20        |
| 1,3-Dichloropropane                        | 21.8   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      | 1    | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803225 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>LCS Dup (1803225-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 08-Mar-18</b> |               |      |             |     |           |
| 2,2-Dichloropropane                        | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 3   | 20        |
| 1,1-Dichloropropene                        | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4   | 20        |
| cis-1,3-Dichloropropene                    | 20.5   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 1   | 20        |
| trans-1,3-Dichloropropene                  | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      | 1   | 20        |
| Ethylbenzene                               | 18.8   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 1   | 20        |
| Hexachlorobutadiene                        | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 7   | 20        |
| 2-Hexanone (MBK)                           | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 2   | 20        |
| Isopropylbenzene                           | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 0.6 | 20        |
| 4-Isopropyltoluene                         | 18.1   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.5 | 20        |
| Methyl tert-butyl ether                    | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 1   | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 0.3 | 20        |
| Methylene chloride                         | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 0.1 | 20        |
| Naphthalene                                | 22.4   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 3   | 20        |
| n-Propylbenzene                            | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 2   | 20        |
| Styrene                                    | 19.3   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 1   | 20        |
| 1,1,1,2-Tetrachloroethane                  | 21.8   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      | 1   | 20        |
| 1,1,2,2-Tetrachloroethane                  | 21.3   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 2   | 20        |
| Tetrachloroethene                          | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 3   | 20        |
| Toluene                                    | 21.3   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 2   | 20        |
| 1,2,3-Trichlorobenzene                     | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 5   | 20        |
| 1,2,4-Trichlorobenzene                     | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 5   | 20        |
| 1,3,5-Trichlorobenzene                     | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 1   | 20        |
| 1,1,1-Trichloroethane                      | 23.2   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 3   | 20        |
| 1,1,2-Trichloroethane                      | 22.6   |      | µg/l  |      | 20.0                                      |               | 113  | 70-130      | 0.4 | 20        |
| Trichloroethene                            | 22.1   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      | 2   | 20        |
| Trichlorofluoromethane (Freon 11)          | 25.8   |      | µg/l  |      | 20.0                                      |               | 129  | 70-130      | 4   | 20        |
| 1,2,3-Trichloropropane                     | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 2   | 20        |
| 1,2,4-Trimethylbenzene                     | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 1   | 20        |
| 1,3,5-Trimethylbenzene                     | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 3   | 20        |
| Vinyl chloride                             | 23.9   |      | µg/l  |      | 20.0                                      |               | 120  | 70-130      | 6   | 20        |
| m,p-Xylene                                 | 18.9   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 1   | 20        |
| o-Xylene                                   | 18.7   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 0.7 | 20        |
| Tetrahydrofuran                            | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 4   | 20        |
| Ethyl ether                                | 26.3   | QM9  | µg/l  |      | 20.0                                      |               | 131  | 70-130      | 1   | 20        |
| Tert-amyl methyl ether                     | 20.8   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      | 0.9 | 20        |
| Ethyl tert-butyl ether                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 1   | 20        |
| Di-isopropyl ether                         | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 1   | 20        |
| Tert-Butanol / butyl alcohol               | 208    |      | µg/l  |      | 200                                       |               | 104  | 70-130      | 1   | 20        |
| 1,4-Dioxane                                | 198    |      | µg/l  |      | 200                                       |               | 99   | 70-130      | 4   | 20        |
| trans-1,4-Dichloro-2-butene                | 23.0   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      | 3   | 20        |
| Ethanol                                    | 450    |      | µg/l  |      | 400                                       |               | 113  | 70-130      | 0.9 | 20        |
| Surrogate: 4-Bromofluorobenzene            | 51.1   |      | µg/l  |      | 50.0                                      |               | 102  | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 52.1   |      | µg/l  |      | 50.0                                      |               | 104  | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 51.7   |      | µg/l  |      | 50.0                                      |               | 103  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 49.6   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |

# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                           | Result    | Flag | Units | *RDL    | Spike Level                                    | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------|-----------|------|-------|---------|------------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>            |           |      |       |         |                                                |               |      |             |     |           |
| <b>Batch 1803456 - SW846 3005A</b>   |           |      |       |         |                                                |               |      |             |     |           |
| <b><u>Blank (1803456-BLK1)</u></b>   |           |      |       |         | <u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Potassium                            | 0.123     | J    | mg/l  | 0.500   |                                                |               |      |             |     |           |
| Iron                                 | 0.0070    | J    | mg/l  | 0.0150  |                                                |               |      |             |     |           |
| Sodium                               | 0.285     | QB1  | mg/l  | 0.250   |                                                |               |      |             |     |           |
| Manganese                            | < 0.0020  | U    | mg/l  | 0.0020  |                                                |               |      |             |     |           |
| Vanadium                             | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Zinc                                 | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Beryllium                            | < 0.0020  | U    | mg/l  | 0.0020  |                                                |               |      |             |     |           |
| Selenium                             | < 0.0150  | U    | mg/l  | 0.0150  |                                                |               |      |             |     |           |
| Antimony                             | 0.0023    | J    | mg/l  | 0.0060  |                                                |               |      |             |     |           |
| Lead                                 | < 0.0075  | U    | mg/l  | 0.0075  |                                                |               |      |             |     |           |
| Nickel                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Magnesium                            | < 0.0100  | U    | mg/l  | 0.0100  |                                                |               |      |             |     |           |
| Thallium                             | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Calcium                              | 0.0077    | J    | mg/l  | 0.100   |                                                |               |      |             |     |           |
| Silver                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Aluminum                             | < 0.0250  | U    | mg/l  | 0.0250  |                                                |               |      |             |     |           |
| Barium                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Cadmium                              | < 0.0025  | U    | mg/l  | 0.0025  |                                                |               |      |             |     |           |
| Cobalt                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Chromium                             | 0.0020    | J    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Copper                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |     |           |
| Arsenic                              | < 0.00400 | U    | mg/l  | 0.00400 |                                                |               |      |             |     |           |
| <b><u>Blank (1803456-BLK2)</u></b>   |           |      |       |         | <u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Antimony                             | < 0.0060  | U    | mg/l  | 0.0060  |                                                |               |      |             |     |           |
| <b><u>LCS (1803456-BS1)</u></b>      |           |      |       |         | <u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Sodium                               | 5.94      | B    | mg/l  | 0.250   | 6.25                                           |               | 95   | 85-115      |     |           |
| Manganese                            | 1.32      |      | mg/l  | 0.0020  | 1.25                                           |               | 106  | 85-115      |     |           |
| Potassium                            | 12.2      |      | mg/l  | 0.500   | 12.5                                           |               | 97   | 85-115      |     |           |
| Iron                                 | 1.35      |      | mg/l  | 0.0150  | 1.25                                           |               | 108  | 85-115      |     |           |
| Copper                               | 1.29      |      | mg/l  | 0.0050  | 1.25                                           |               | 103  | 85-115      |     |           |
| Chromium                             | 1.32      |      | mg/l  | 0.0050  | 1.25                                           |               | 105  | 85-115      |     |           |
| Magnesium                            | 1.31      |      | mg/l  | 0.0100  | 1.25                                           |               | 105  | 85-115      |     |           |
| Cobalt                               | 1.24      |      | mg/l  | 0.0050  | 1.25                                           |               | 99   | 85-115      |     |           |
| Cadmium                              | 1.26      |      | mg/l  | 0.0025  | 1.25                                           |               | 101  | 85-115      |     |           |
| Aluminum                             | 1.24      |      | mg/l  | 0.0250  | 1.25                                           |               | 99   | 85-115      |     |           |
| Arsenic                              | 1.222     |      | mg/l  | 0.00400 | 1.25                                           |               | 98   | 85-115      |     |           |
| Calcium                              | 6.54      |      | mg/l  | 0.100   | 6.25                                           |               | 105  | 85-115      |     |           |
| Barium                               | 1.30      |      | mg/l  | 0.0050  | 1.25                                           |               | 104  | 85-115      |     |           |
| Beryllium                            | 1.43      |      | mg/l  | 0.0020  | 1.25                                           |               | 114  | 85-115      |     |           |
| Silver                               | 1.23      |      | mg/l  | 0.0050  | 1.25                                           |               | 99   | 85-115      |     |           |
| Vanadium                             | 1.24      |      | mg/l  | 0.0050  | 1.25                                           |               | 100  | 85-115      |     |           |
| Nickel                               | 1.25      |      | mg/l  | 0.0050  | 1.25                                           |               | 100  | 85-115      |     |           |
| Thallium                             | 1.26      |      | mg/l  | 0.0050  | 1.25                                           |               | 101  | 85-115      |     |           |
| Lead                                 | 1.28      |      | mg/l  | 0.0075  | 1.25                                           |               | 103  | 85-115      |     |           |
| Antimony                             | 1.20      |      | mg/l  | 0.0060  | 1.25                                           |               | 96   | 85-115      |     |           |
| Selenium                             | 1.25      |      | mg/l  | 0.0150  | 1.25                                           |               | 100  | 85-115      |     |           |
| Zinc                                 | 1.29      |      | mg/l  | 0.0050  | 1.25                                           |               | 103  | 85-115      |     |           |
| <b><u>LCS (1803456-BS2)</u></b>      |           |      |       |         | <u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Antimony                             | 1.29      |      | mg/l  | 0.0060  | 1.25                                           |               | 103  | 85-115      |     |           |
| <b><u>LCS Dup (1803456-BSD1)</u></b> |           |      |       |         | <u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u> |               |      |             |     |           |

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte(s)                             | Result    | Flag      | Units | *RDL    | Spike Level                                           | Source Result | %REC                                                  | %REC Limits | RPD  | RPD Limit |
|----------------------------------------|-----------|-----------|-------|---------|-------------------------------------------------------|---------------|-------------------------------------------------------|-------------|------|-----------|
| <b><u>SW846 6010C</u></b>              |           |           |       |         |                                                       |               |                                                       |             |      |           |
| <b>Batch 1803456 - SW846 3005A</b>     |           |           |       |         |                                                       |               |                                                       |             |      |           |
| <b><u>LCS Dup (1803456-BSD1)</u></b>   |           |           |       |         | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |               |                                                       |             |      |           |
| Sodium                                 | 5.80      | B         | mg/l  | 0.250   | 6.25                                                  |               | 93                                                    | 85-115      | 2    | 20        |
| Manganese                              | 1.29      |           | mg/l  | 0.0020  | 1.25                                                  |               | 103                                                   | 85-115      | 2    | 20        |
| Iron                                   | 1.33      |           | mg/l  | 0.0150  | 1.25                                                  |               | 106                                                   | 85-115      | 1    | 20        |
| Potassium                              | 11.9      |           | mg/l  | 0.500   | 12.5                                                  |               | 95                                                    | 85-115      | 2    | 20        |
| Antimony                               | 1.18      |           | mg/l  | 0.0060  | 1.25                                                  |               | 94                                                    | 85-115      | 2    | 20        |
| Copper                                 | 1.26      |           | mg/l  | 0.0050  | 1.25                                                  |               | 101                                                   | 85-115      | 2    | 20        |
| Arsenic                                | 1.200     |           | mg/l  | 0.00400 | 1.25                                                  |               | 96                                                    | 85-115      | 2    | 20        |
| Barium                                 | 1.28      |           | mg/l  | 0.0050  | 1.25                                                  |               | 102                                                   | 85-115      | 2    | 20        |
| Silver                                 | 1.20      |           | mg/l  | 0.0050  | 1.25                                                  |               | 96                                                    | 85-115      | 2    | 20        |
| Beryllium                              | 1.40      |           | mg/l  | 0.0020  | 1.25                                                  |               | 112                                                   | 85-115      | 2    | 20        |
| Calcium                                | 6.40      |           | mg/l  | 0.100   | 6.25                                                  |               | 102                                                   | 85-115      | 2    | 20        |
| Cadmium                                | 1.24      |           | mg/l  | 0.0025  | 1.25                                                  |               | 99                                                    | 85-115      | 2    | 20        |
| Thallium                               | 1.24      |           | mg/l  | 0.0050  | 1.25                                                  |               | 99                                                    | 85-115      | 2    | 20        |
| Chromium                               | 1.29      |           | mg/l  | 0.0050  | 1.25                                                  |               | 103                                                   | 85-115      | 2    | 20        |
| Zinc                                   | 1.26      |           | mg/l  | 0.0050  | 1.25                                                  |               | 101                                                   | 85-115      | 2    | 20        |
| Magnesium                              | 1.28      |           | mg/l  | 0.0100  | 1.25                                                  |               | 103                                                   | 85-115      | 2    | 20        |
| Nickel                                 | 1.23      |           | mg/l  | 0.0050  | 1.25                                                  |               | 98                                                    | 85-115      | 2    | 20        |
| Lead                                   | 1.26      |           | mg/l  | 0.0075  | 1.25                                                  |               | 101                                                   | 85-115      | 2    | 20        |
| Aluminum                               | 1.21      |           | mg/l  | 0.0250  | 1.25                                                  |               | 97                                                    | 85-115      | 3    | 20        |
| Selenium                               | 1.22      |           | mg/l  | 0.0150  | 1.25                                                  |               | 98                                                    | 85-115      | 2    | 20        |
| Vanadium                               | 1.22      |           | mg/l  | 0.0050  | 1.25                                                  |               | 97                                                    | 85-115      | 2    | 20        |
| Cobalt                                 | 1.22      |           | mg/l  | 0.0050  | 1.25                                                  |               | 97                                                    | 85-115      | 2    | 20        |
| <b><u>LCS Dup (1803456-BSD2)</u></b>   |           |           |       |         | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |               |                                                       |             |      |           |
| Antimony                               | 1.29      |           | mg/l  | 0.0060  | 1.25                                                  |               | 103                                                   | 85-115      | 0.3  | 20        |
| <b><u>Duplicate (1803456-DUP1)</u></b> |           |           |       |         | <b><u>Source: SC44537-01</u></b>                      |               | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |             |      |           |
| Iron                                   | 7.16      |           | mg/l  | 0.0150  |                                                       | 7.15          |                                                       |             | 0.07 | 20        |
| Potassium                              | 15.1      |           | mg/l  | 0.500   |                                                       | 15.0          |                                                       |             | 0.4  | 20        |
| Manganese                              | 0.370     |           | mg/l  | 0.0020  |                                                       | 0.370         |                                                       |             | 0.1  | 20        |
| Antimony                               | < 0.0060  | U         | mg/l  | 0.0060  |                                                       | BRL           |                                                       |             |      | 20        |
| Lead                                   | < 0.0075  | U         | mg/l  | 0.0075  |                                                       | BRL           |                                                       |             |      | 20        |
| Nickel                                 | 0.0014    | J         | mg/l  | 0.0050  |                                                       | 0.0012        |                                                       |             | 16   | 20        |
| Magnesium                              | 48.0      |           | mg/l  | 0.0100  |                                                       | 47.7          |                                                       |             | 0.7  | 20        |
| Zinc                                   | 0.0048    | J         | mg/l  | 0.0050  |                                                       | 0.0046        |                                                       |             | 4    | 20        |
| Vanadium                               | < 0.0050  | U         | mg/l  | 0.0050  |                                                       | BRL           |                                                       |             |      | 20        |
| Selenium                               | < 0.0150  | U         | mg/l  | 0.0150  |                                                       | BRL           |                                                       |             |      | 20        |
| Chromium                               | 0.0010    | J         | mg/l  | 0.0050  |                                                       | 0.0010        |                                                       |             | 5    | 20        |
| Copper                                 | < 0.0050  | U         | mg/l  | 0.0050  |                                                       | BRL           |                                                       |             |      | 20        |
| Cobalt                                 | < 0.0050  | U         | mg/l  | 0.0050  |                                                       | BRL           |                                                       |             |      | 20        |
| Cadmium                                | < 0.0025  | U         | mg/l  | 0.0025  |                                                       | BRL           |                                                       |             |      | 20        |
| Calcium                                | 143       |           | mg/l  | 0.100   |                                                       | 142           |                                                       |             | 1    | 20        |
| Beryllium                              | < 0.0020  | U         | mg/l  | 0.0020  |                                                       | BRL           |                                                       |             |      | 20        |
| Barium                                 | 0.0190    |           | mg/l  | 0.0050  |                                                       | 0.0178        |                                                       |             | 7    | 20        |
| Arsenic                                | < 0.00400 | U         | mg/l  | 0.00400 |                                                       | BRL           |                                                       |             |      | 20        |
| Aluminum                               | 0.0219    | J         | mg/l  | 0.0250  |                                                       | 0.0200        |                                                       |             | 9    | 20        |
| Silver                                 | < 0.0050  | U         | mg/l  | 0.0050  |                                                       | BRL           |                                                       |             |      | 20        |
| Thallium                               | < 0.0050  | U         | mg/l  | 0.0050  |                                                       | BRL           |                                                       |             |      | 20        |
| <b><u>Duplicate (1803456-DUP2)</u></b> |           |           |       |         | <b><u>Source: SC44537-01</u></b>                      |               | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |             |      |           |
| Sodium                                 | 318       | GS1, D, B | mg/l  | 2.50    |                                                       | 319           |                                                       |             | 0.4  | 20        |
| Antimony                               | < 0.0060  | U         | mg/l  | 0.0060  |                                                       | BRL           |                                                       |             |      | 20        |

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# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                                    | Result | Flag      | Units | *RDL                             | Spike Level | Source Result                                         | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|--------|-----------|-------|----------------------------------|-------------|-------------------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>                     |        |           |       |                                  |             |                                                       |      |             |     |           |
| <b>Batch 1803456 - SW846 3005A</b>            |        |           |       |                                  |             |                                                       |      |             |     |           |
| <b><u>Matrix Spike (1803456-MS1)</u></b>      |        |           |       | <b><u>Source: SC44537-01</u></b> |             | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Potassium                                     | 27.0   |           | mg/l  | 0.500                            | 12.5        | 15.0                                                  | 95   | 75-125      |     |           |
| Manganese                                     | 1.58   |           | mg/l  | 0.0020                           | 1.25        | 0.370                                                 | 97   | 75-125      |     |           |
| Iron                                          | 8.27   |           | mg/l  | 0.0150                           | 1.25        | 7.15                                                  | 90   | 75-125      |     |           |
| Aluminum                                      | 1.30   |           | mg/l  | 0.0250                           | 1.25        | 0.0200                                                | 102  | 75-125      |     |           |
| Magnesium                                     | 49.3   | QM2       | mg/l  | 0.0100                           | 1.25        | 47.7                                                  | 130  | 75-125      |     |           |
| Zinc                                          | 1.18   |           | mg/l  | 0.0050                           | 1.25        | 0.0046                                                | 94   | 75-125      |     |           |
| Vanadium                                      | 1.20   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 96   | 70-130      |     |           |
| Thallium                                      | 1.18   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 94   | 75-125      |     |           |
| Selenium                                      | 1.25   |           | mg/l  | 0.0150                           | 1.25        | BRL                                                   | 100  | 75-125      |     |           |
| Antimony                                      | 1.21   |           | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 97   | 75-125      |     |           |
| Lead                                          | 1.17   |           | mg/l  | 0.0075                           | 1.25        | BRL                                                   | 93   | 75-125      |     |           |
| Nickel                                        | 1.14   |           | mg/l  | 0.0050                           | 1.25        | 0.0012                                                | 91   | 75-125      |     |           |
| Silver                                        | 1.27   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 101  | 75-125      |     |           |
| Copper                                        | 1.27   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 102  | 75-125      |     |           |
| Chromium                                      | 1.23   |           | mg/l  | 0.0050                           | 1.25        | 0.0010                                                | 98   | 75-125      |     |           |
| Cobalt                                        | 1.14   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 91   | 75-125      |     |           |
| Cadmium                                       | 1.16   |           | mg/l  | 0.0025                           | 1.25        | BRL                                                   | 93   | 75-125      |     |           |
| Calcium                                       | 147    |           | mg/l  | 0.100                            | 6.25        | 142                                                   | 89   | 75-125      |     |           |
| Beryllium                                     | 1.38   |           | mg/l  | 0.0020                           | 1.25        | BRL                                                   | 110  | 75-125      |     |           |
| Barium                                        | 1.27   |           | mg/l  | 0.0050                           | 1.25        | 0.0178                                                | 101  | 75-125      |     |           |
| Arsenic                                       | 1.246  |           | mg/l  | 0.00400                          | 1.25        | BRL                                                   | 100  | 75-125      |     |           |
| <b><u>Matrix Spike (1803456-MS2)</u></b>      |        |           |       | <b><u>Source: SC44537-01</u></b> |             | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Sodium                                        | 327    | D, B      | mg/l  | 2.50                             | 6.25        | 319                                                   | 122  | 75-125      |     |           |
| Antimony                                      | 1.35   |           | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 108  | 75-125      |     |           |
| <b><u>Matrix Spike Dup (1803456-MSD1)</u></b> |        |           |       | <b><u>Source: SC44537-01</u></b> |             | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Manganese                                     | 1.59   |           | mg/l  | 0.0020                           | 1.25        | 0.370                                                 | 98   | 75-125      | 0.6 | 20        |
| Iron                                          | 8.34   |           | mg/l  | 0.0150                           | 1.25        | 7.15                                                  | 95   | 75-125      | 0.8 | 20        |
| Potassium                                     | 27.1   |           | mg/l  | 0.500                            | 12.5        | 15.0                                                  | 97   | 75-125      | 0.6 | 20        |
| Antimony                                      | 1.22   |           | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 98   | 75-125      | 0.6 | 20        |
| Vanadium                                      | 1.21   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 97   | 70-130      | 0.7 | 20        |
| Nickel                                        | 1.14   |           | mg/l  | 0.0050                           | 1.25        | 0.0012                                                | 91   | 75-125      | 0.6 | 20        |
| Silver                                        | 1.28   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 102  | 75-125      | 0.8 | 20        |
| Zinc                                          | 1.19   |           | mg/l  | 0.0050                           | 1.25        | 0.0046                                                | 95   | 75-125      | 0.8 | 20        |
| Thallium                                      | 1.19   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 95   | 75-125      | 1   | 20        |
| Selenium                                      | 1.27   |           | mg/l  | 0.0150                           | 1.25        | BRL                                                   | 101  | 75-125      | 1   | 20        |
| Lead                                          | 1.18   |           | mg/l  | 0.0075                           | 1.25        | BRL                                                   | 94   | 75-125      | 0.6 | 20        |
| Magnesium                                     | 48.6   |           | mg/l  | 0.0100                           | 1.25        | 47.7                                                  | 75   | 75-125      | 1   | 20        |
| Copper                                        | 1.28   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 103  | 75-125      | 0.7 | 20        |
| Chromium                                      | 1.24   |           | mg/l  | 0.0050                           | 1.25        | 0.0010                                                | 99   | 75-125      | 0.7 | 20        |
| Cobalt                                        | 1.15   |           | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 92   | 75-125      | 0.7 | 20        |
| Cadmium                                       | 1.17   |           | mg/l  | 0.0025                           | 1.25        | BRL                                                   | 93   | 75-125      | 0.8 | 20        |
| Calcium                                       | 147    |           | mg/l  | 0.100                            | 6.25        | 142                                                   | 84   | 75-125      | 0.2 | 20        |
| Beryllium                                     | 1.39   |           | mg/l  | 0.0020                           | 1.25        | BRL                                                   | 111  | 75-125      | 0.7 | 20        |
| Arsenic                                       | 1.258  |           | mg/l  | 0.00400                          | 1.25        | BRL                                                   | 101  | 75-125      | 1   | 20        |
| Barium                                        | 1.29   |           | mg/l  | 0.0050                           | 1.25        | 0.0178                                                | 101  | 75-125      | 0.9 | 20        |
| Aluminum                                      | 1.31   |           | mg/l  | 0.0250                           | 1.25        | 0.0200                                                | 103  | 75-125      | 0.7 | 20        |
| <b><u>Matrix Spike Dup (1803456-MSD2)</u></b> |        |           |       | <b><u>Source: SC44537-01</u></b> |             | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Sodium                                        | 327    | QM2, D, B | mg/l  | 2.50                             | 6.25        | 319                                                   | 133  | 75-125      | 0.2 | 20        |
| Antimony                                      | 1.35   |           | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 108  | 75-125      | 0.4 | 20        |

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# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                            | Result   | Flag      | Units | *RDL                      | Spike Level | Source Result                                  | %REC | %REC Limits | RPD | RPD Limit |
|---------------------------------------|----------|-----------|-------|---------------------------|-------------|------------------------------------------------|------|-------------|-----|-----------|
| <b>SW846 6010C</b>                    |          |           |       |                           |             |                                                |      |             |     |           |
| <b>Batch 1803456 - SW846 3005A</b>    |          |           |       |                           |             |                                                |      |             |     |           |
| <b>Post Spike (1803456-PS1)</b>       |          |           |       | <b>Source: SC44537-01</b> |             | <b>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</b> |      |             |     |           |
| Manganese                             | 1.61     |           | mg/l  | 0.0020                    | 1.25        | 0.370                                          | 99   | 80-120      |     |           |
| Iron                                  | 8.38     |           | mg/l  | 0.0150                    | 1.25        | 7.15                                           | 99   | 80-120      |     |           |
| Potassium                             | 27.2     |           | mg/l  | 0.500                     | 12.5        | 15.0                                           | 97   | 80-120      |     |           |
| Zinc                                  | 1.21     |           | mg/l  | 0.0050                    | 1.25        | 0.0046                                         | 96   | 80-120      |     |           |
| Nickel                                | 1.16     |           | mg/l  | 0.0050                    | 1.25        | 0.0012                                         | 93   | 80-120      |     |           |
| Lead                                  | 1.20     |           | mg/l  | 0.0075                    | 1.25        | BRL                                            | 96   | 80-120      |     |           |
| Antimony                              | 1.24     |           | mg/l  | 0.0060                    | 1.25        | BRL                                            | 99   | 80-120      |     |           |
| Selenium                              | 1.29     |           | mg/l  | 0.0150                    | 1.25        | BRL                                            | 103  | 80-120      |     |           |
| Vanadium                              | 1.23     |           | mg/l  | 0.0050                    | 1.25        | BRL                                            | 98   | 80-120      |     |           |
| Beryllium                             | 1.42     |           | mg/l  | 0.0020                    | 1.25        | BRL                                            | 114  | 80-120      |     |           |
| Thallium                              | 1.21     |           | mg/l  | 0.0050                    | 1.25        | BRL                                            | 97   | 80-120      |     |           |
| Aluminum                              | 1.32     |           | mg/l  | 0.0250                    | 1.25        | 0.0200                                         | 104  | 80-120      |     |           |
| Cadmium                               | 1.19     |           | mg/l  | 0.0025                    | 1.25        | BRL                                            | 95   | 80-120      |     |           |
| Silver                                | 1.30     |           | mg/l  | 0.0050                    | 1.25        | BRL                                            | 104  | 80-120      |     |           |
| Magnesium                             | 48.7     |           | mg/l  | 0.0100                    | 1.25        | 47.7                                           | 80   | 80-120      |     |           |
| Arsenic                               | 1.279    |           | mg/l  | 0.00400                   | 1.25        | BRL                                            | 102  | 80-120      |     |           |
| Barium                                | 1.30     |           | mg/l  | 0.0050                    | 1.25        | 0.0178                                         | 102  | 80-120      |     |           |
| Calcium                               | 147      |           | mg/l  | 0.100                     | 6.25        | 142                                            | 90   | 80-120      |     |           |
| Cobalt                                | 1.16     |           | mg/l  | 0.0050                    | 1.25        | BRL                                            | 93   | 80-120      |     |           |
| Chromium                              | 1.26     |           | mg/l  | 0.0050                    | 1.25        | 0.0010                                         | 101  | 80-120      |     |           |
| Copper                                | 1.31     |           | mg/l  | 0.0050                    | 1.25        | BRL                                            | 105  | 80-120      |     |           |
| <b>Post Spike (1803456-PS2)</b>       |          |           |       | <b>Source: SC44537-01</b> |             | <b>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</b> |      |             |     |           |
| Sodium                                | 315      | QM2, D, B | mg/l  | 2.50                      | 6.25        | 319                                            | -59  | 80-120      |     |           |
| Antimony                              | 1.35     |           | mg/l  | 0.0060                    | 1.25        | BRL                                            | 108  | 80-120      |     |           |
| <b>Batch S817773 - 1803456</b>        |          |           |       |                           |             |                                                |      |             |     |           |
| <b>Serial Dilution (S817773-SRD1)</b> |          |           |       | <b>Source: SC44537-01</b> |             | <b>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</b> |      |             |     |           |
| Iron                                  | 7.62     |           | mg/l  | 0.0750                    |             | 7.15                                           |      |             | 6   | 10        |
| Potassium                             | 15.2     |           | mg/l  | 2.50                      |             | 15.0                                           |      |             | 0.8 | 10        |
| Manganese                             | 0.391    |           | mg/l  | 0.0100                    |             | 0.370                                          |      |             | 6   | 10        |
| Sodium                                | 288      |           | mg/l  | 1.25                      |             | 319                                            |      |             | 10  | 10        |
| Copper                                | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Silver                                | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Zinc                                  | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Vanadium                              | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Thallium                              | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Selenium                              | < 0.0750 | U         | mg/l  | 0.0750                    |             | BRL                                            |      |             |     | 10        |
| Lead                                  | < 0.0375 | U         | mg/l  | 0.0375                    |             | BRL                                            |      |             |     | 10        |
| Magnesium                             | 50.8     |           | mg/l  | 0.0500                    |             | 47.7                                           |      |             | 6   | 10        |
| Chromium                              | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Cobalt                                | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| Cadmium                               | < 0.0125 | U         | mg/l  | 0.0125                    |             | BRL                                            |      |             |     | 10        |
| Calcium                               | 152      |           | mg/l  | 0.500                     |             | 142                                            |      |             | 7   | 10        |
| Beryllium                             | < 0.0100 | U         | mg/l  | 0.0100                    |             | BRL                                            |      |             |     | 10        |
| Barium                                | 0.0185   |           | mg/l  | 0.0250                    |             | 0.0178                                         |      |             | 4   | 10        |
| Arsenic                               | 0.0070   |           | mg/l  | 0.02000                   |             | BRL                                            |      |             |     | 10        |
| Aluminum                              | < 0.125  | U         | mg/l  | 0.125                     |             | BRL                                            |      |             |     | 10        |
| Nickel                                | < 0.0250 | U         | mg/l  | 0.0250                    |             | BRL                                            |      |             |     | 10        |
| <b>Batch S817774 - 1803456</b>        |          |           |       |                           |             |                                                |      |             |     |           |
| <b>Serial Dilution (S817774-SRD1)</b> |          |           |       | <b>Source: SC44537-01</b> |             | <b>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</b> |      |             |     |           |

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# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                                   | Result   | Flag | Units                            | *RDL   | Spike Level | Source Result                                         | %REC | %REC Limits | RPD | RPD Limit |
|----------------------------------------------|----------|------|----------------------------------|--------|-------------|-------------------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>                    |          |      |                                  |        |             |                                                       |      |             |     |           |
| <b>Batch S817774 - 1803456</b>               |          |      |                                  |        |             |                                                       |      |             |     |           |
| <b><u>Serial Dilution (S817774-SRD1)</u></b> |          |      | <b><u>Source: SC44537-01</u></b> |        |             | <b><u>Prepared: 14-Mar-18 Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Antimony                                     | < 0.0300 | U    | mg/l                             | 0.0300 |             | BRL                                                   |      |             |     | 10        |

# **Total Metals by EPA 200 Series Methods - Quality Control**

| Analyte(s)                                    | Result                                                            | Flag | Units | *RDL    | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|-------------------------------------------------------------------|------|-------|---------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>EPA 245.1/7470A</u></b>                 |                                                                   |      |       |         |             |               |      |             |     |           |
| <b>Batch 1803457 - EPA200/SW7000 Series</b>   |                                                                   |      |       |         |             |               |      |             |     |           |
| <b><u>Blank (1803457-BLK1)</u></b>            | <u>Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u>                    |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00020                                                         | U    | mg/l  | 0.00020 |             |               |      |             |     |           |
| <b><u>LCS (1803457-BS1)</u></b>               | <u>Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u>                    |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00468</b>                                                    |      | mg/l  | 0.00020 | 0.00500     |               | 94   | 85-115      |     |           |
| <b><u>Duplicate (1803457-DUP1)</u></b>        | <u>Source: SC44537-02 Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00020                                                         | U    | mg/l  | 0.00020 |             | BRL           |      |             |     | 20        |
| <b><u>Matrix Spike (1803457-MS1)</u></b>      | <u>Source: SC44537-02 Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00483</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 97   | 80-120      |     |           |
| <b><u>Matrix Spike Dup (1803457-MSD1)</u></b> | <u>Source: SC44537-02 Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00499</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 100  | 80-120      | 3   | 20        |
| <b><u>Post Spike (1803457-PS1)</u></b>        | <u>Source: SC44537-02 Prepared: 14-Mar-18 Analyzed: 15-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00529</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 106  | 85-115      |     |           |



# General Chemistry Parameters - Quality Control

| Analyte(s)                                     | Result                                                              | Flag   | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|------------------------------------------------|---------------------------------------------------------------------|--------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SM5310B (00, 11)</u></b>                 |                                                                     |        |       |      |             |               |      |             |     |           |
| <b>Batch 1803431 - General Preparation</b>     |                                                                     |        |       |      |             |               |      |             |     |           |
| <b><u>Blank (1803431-BLK1)</u></b>             | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.241                                                               | J      | mg/l  | 1.00 |             |               |      |             |     |           |
| <b><u>LCS (1803431-BS1)</u></b>                | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 16.3                                                                |        | mg/l  | 1.00 | 15.0        |               | 108  | 85-115      |     |           |
| <b><u>Calibration Blank (1803431-CCB1)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.227                                                               |        | mg/l  |      |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803431-CCB2)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.219                                                               |        | mg/l  |      |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803431-CCB3)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.186                                                               |        | mg/l  |      |             |               |      |             |     |           |
| <b><u>Calibration Check (1803431-CCV1)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 16.4                                                                |        | mg/l  | 1.00 | 15.0        |               | 110  | 85-115      |     |           |
| <b><u>Calibration Check (1803431-CCV2)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 16.1                                                                |        | mg/l  | 1.00 | 15.0        |               | 107  | 85-115      |     |           |
| <b><u>Calibration Check (1803431-CCV3)</u></b> | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 16.1                                                                |        | mg/l  | 1.00 | 15.0        |               | 107  | 85-115      |     |           |
| <b><u>Duplicate (1803431-DUP1)</u></b>         | <u>Source: SC44537-06</u> <u>Prepared &amp; Analyzed: 13-Mar-18</u> |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.429                                                               | QR4, J | mg/l  | 1.00 |             | 0.671         |      |             | 44  | 20        |
| <b><u>Matrix Spike (1803431-MS1)</u></b>       | <u>Source: SC44537-06</u> <u>Prepared &amp; Analyzed: 13-Mar-18</u> |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 5.36                                                                |        | mg/l  | 1.00 | 5.00        | 0.671         | 94   | 70-130      |     |           |
| <b><u>Matrix Spike Dup (1803431-MSD1)</u></b>  | <u>Source: SC44537-06</u> <u>Prepared &amp; Analyzed: 13-Mar-18</u> |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 5.24                                                                |        | mg/l  | 1.00 | 5.00        | 0.671         | 91   | 70-130      | 2   | 30        |
| <b><u>Reference (1803431-SRM1)</u></b>         | <u>Prepared &amp; Analyzed: 13-Mar-18</u>                           |        |       |      |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.8                                                                |        | mg/l  | 1.00 | 15.0        |               | 105  | 85-115      |     |           |

## Dissolved Gas Analysis - Quality Control

| Analyte(s)                              | Result     | Flag | Units | *RDL                             | Spike Level                               | Source Result                             | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------|------------|------|-------|----------------------------------|-------------------------------------------|-------------------------------------------|------|-------------|-----|-----------|
| <b><u>RSK-175</u></b>                   |            |      |       |                                  |                                           |                                           |      |             |     |           |
| <b>Batch 1803634 - General Air Prep</b> |            |      |       |                                  |                                           |                                           |      |             |     |           |
| <b><u>Blank (1803634-BLK1)</u></b>      |            |      |       |                                  | <u>Prepared &amp; Analyzed: 15-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | < 2.20     | U    | µg/l  | 2.20                             |                                           |                                           |      |             |     |           |
| Ethane                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| Ethene                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| <b><u>LCS (1803634-BS1)</u></b>         |            |      |       |                                  | <u>Prepared &amp; Analyzed: 15-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | <b>431</b> |      | mg/l  |                                  | 500                                       |                                           | 86   | 70-130      |     |           |
| Ethane                                  | <b>487</b> |      | mg/l  |                                  | 500                                       |                                           | 97   | 70-130      |     |           |
| Ethene                                  | <b>480</b> |      | mg/l  |                                  | 500                                       |                                           | 96   | 70-130      |     |           |
| <b><u>Duplicate (1803634-DUP1)</u></b>  |            |      |       | <b><u>Source: SC44537-03</u></b> |                                           | <u>Prepared &amp; Analyzed: 15-Mar-18</u> |      |             |     |           |
| Methane                                 | <b>138</b> |      | µg/l  | 2.20                             |                                           | 121                                       |      |             | 13  | 30        |
| Ethane                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           | BRL                                       |      |             |     | 30        |
| Ethene                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           | BRL                                       |      |             |     | 30        |
| <b>Batch 1803637 - General Air Prep</b> |            |      |       |                                  |                                           |                                           |      |             |     |           |
| <b><u>Blank (1803637-BLK1)</u></b>      |            |      |       |                                  | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | < 2.20     | U    | µg/l  | 2.20                             |                                           |                                           |      |             |     |           |
| Ethane                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| Ethene                                  | < 5.00     | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| <b><u>LCS (1803637-BS1)</u></b>         |            |      |       |                                  | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | <b>444</b> |      | mg/l  |                                  | 500                                       |                                           | 89   | 70-130      |     |           |
| Ethane                                  | <b>539</b> |      | mg/l  |                                  | 500                                       |                                           | 108  | 70-130      |     |           |
| Ethene                                  | <b>523</b> |      | mg/l  |                                  | 500                                       |                                           | 105  | 70-130      |     |           |

## Subcontracted Analyses - Quality Control

| Analyte(s)                       | Result | Flag | Units | *RDL | Spike Level                                                      | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|----------------------------------|--------|------|-------|------|------------------------------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SM4500S-D-00,-11</u></b>   |        |      |       |      |                                                                  |               |      |             |     |           |
| Batch 422315A - 422315-SM4500S-D |        |      |       |      |                                                                  |               |      |             |     |           |
| <b><u>BLK (BZ99402-BLK)</u></b>  |        |      |       |      | <u>Prepared &amp; Analyzed: 09-Mar-18</u>                        |               |      |             |     |           |
| Sulfide                          | < 0.05 |      | mg/l  | 0.05 |                                                                  |               |      | -           |     |           |
| <b><u>DUP (BZ99402-DUP)</u></b>  |        |      |       |      | <u>Source: BZ99402</u> <u>Prepared &amp; Analyzed: 09-Mar-18</u> |               |      |             |     |           |
| Sulfide                          | < 0.05 |      | mg/l  | 0.05 |                                                                  |               |      | -           | NC  | 20        |
| <b><u>LCS (BZ99402-LCS)</u></b>  |        |      |       |      | <u>Prepared &amp; Analyzed: 09-Mar-18</u>                        |               |      |             |     |           |
| Sulfide                          | 0.2132 |      | mg/l  | 0.05 | 0.2                                                              |               | 107  | 90-110      |     | 20        |
| <b><u>MS (BZ99402-MS)</u></b>    |        |      |       |      | <u>Source: BZ99402</u> <u>Prepared &amp; Analyzed: 09-Mar-18</u> |               |      |             |     |           |
| Sulfide                          | 0.2237 |      | mg/l  | 0.05 | 0.2                                                              |               | 112  | 75-125      |     | 20        |

## Notes and Definitions

|     |                                                                                                                                                                                                   |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B   | Analyte is found in the associated blank as well as in the sample (CLP B-flag).                                                                                                                   |
| D   | Data reported from a dilution                                                                                                                                                                     |
| GS1 | Sample dilution required for high concentration of target analytes to be within the instrument calibration range.                                                                                 |
| J   | Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).                                                            |
| QB1 | The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.               |
| QM2 | The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.                                         |
| QM9 | The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits. |
| QR4 | Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results                                         |
| R01 | The Reporting Limit has been raised to account for matrix interference.                                                                                                                           |
| U   | Analyte included in the analysis, but not detected at or above the MDL.                                                                                                                           |
| dry | Sample results reported on a dry weight basis                                                                                                                                                     |
| NR  | Not Reported                                                                                                                                                                                      |
| RPD | Relative Percent Difference                                                                                                                                                                       |

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.



Spectrum Analytical

## CHAIN OF CUSTODY RECORD

Page 1 of 1

## Special Handling:

☒ Standard TAT - 7 to 10 business days☐ Rush TAT - Date Needed: \_\_\_\_\_All TATs subject to laboratory approval  
Min. 24-hr notification needed for rushes

Samples disposed after 30 days unless otherwise instructed.

Report To: Megan Miller  
6712 Brooklawn Plwy Ste 104  
Syracuse, NY 13214Invoice To: SameProject No: 1490709Site Name: NYSDEC Metal EtchingLocation: Freeport State: NYSampler(s): Megan Miller + Stephen SchulerTelephone #: 315-565-6557Project Mgr: Megan MillerP.O. No.: 1490709 Quote #: 0002F=Field Filtered 1=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=Ascorbic Acid  
7=CH<sub>3</sub>OH 8=NaHSO<sub>4</sub> 9=Deionized Water 10=H<sub>3</sub>PO<sub>4</sub> 11=Zn(CH<sub>3</sub>COO)<sub>2</sub> 12=ICE

## List Preservative Code below:

2 4 5 7 12 10

## QA/QC Reporting Notes:

\* additional charges may apply

MA DEP MCP CAM Report? ☐ Yes ☐ NoCT DPH RCP Report? ☐ Yes ☐ No☐ Standard ☐ No QC☐ DQA\*☐ ASP A\* ☒ ASP B\*☐ NJ Reduced\* ☐ NJ Full\*☐ Tier II\* ☐ Tier IV\*☒ Other: NYSDEC EQUIS  
State-specific reporting standards:

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water

O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= X2= X3=

G=Grab

C=Composite

| Lab ID:  | Sample ID:                    | Date:             | Time:             | Type | Matrix | # of VOA Vials | # of Amber Glass | # of Clear Glass | # of Plastic | Analysis                                                                                                                                      | Check if chlorinated     |
|----------|-------------------------------|-------------------|-------------------|------|--------|----------------|------------------|------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| SC44537a | 130110-MW-04                  | 3/6/18            | 11:25             | G    | GW     | 3              | 0                | 0                | 3            | VOCS <u>130110</u><br>Metals <u>130110</u><br>Sulfide <u>130110</u><br>Chloride <u>130110</u><br>Dissolved <u>130110</u><br>TOC <u>130110</u> | <input type="checkbox"/> |
| 02       | 130110-MW-05R                 | 3/6/18            | 11:00             |      |        | 5              | 0                | 0                | 3            | X X X X X                                                                                                                                     | <input type="checkbox"/> |
| 03       | 130110-MW-05                  | 3/6/18            | 12:40             |      |        | 5              | 0                | 0                | 3            | X X X X X                                                                                                                                     | <input type="checkbox"/> |
| 04       | 130110-MW-10M                 | 3/6/18            | 13:50             |      |        | 8              | 0                | 0                | 3            | X X X X X X                                                                                                                                   | <input type="checkbox"/> |
| 05       | 130110-MW-04                  | 3/6/18            | 12:10             |      |        | 5              | 0                | 0                | 3            | X X X X X                                                                                                                                     | <input type="checkbox"/> |
| 06       | 130110-MW-10D                 | 3/6/18            | 13:35             |      |        | 8              | 0                | 0                | 3            | X X X X X X                                                                                                                                   | <input type="checkbox"/> |
|          | <del>130110-FB-03/06/18</del> | <del>3/6/18</del> | <del>14:10M</del> |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |
|          |                               |                   |                   |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |
|          |                               |                   |                   |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |
|          |                               |                   |                   |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |
|          |                               |                   |                   |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |
|          |                               |                   |                   |      |        |                |                  |                  |              |                                                                                                                                               | <input type="checkbox"/> |

Relinquished by:

Received by:

Date:

Time:

Temp °C

☐ EDD format: NYSDEC EQUIS☐ E-mail to: \_\_\_\_\_Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen



## UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

## 3. GETTING YOUR SHIPMENT TO UPS

**Customers with a Daily Pickup**

Your driver will pickup your shipment(s) as usual.

**Customers without a Daily Pickup**

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations. Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages. Hand the package to any UPS driver in your area.

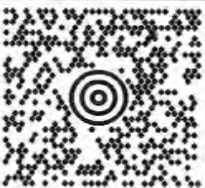
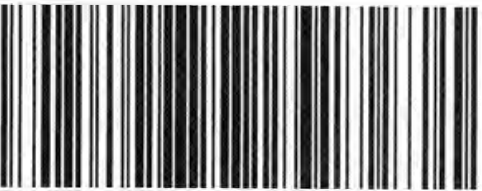
UPS Access Point™  
CITGO RUNAWAY FOOD MART  
452 GRANT BLVD  
SYRACUSE, NY 13206

UPS Access Point™  
PHONE EXPRESS  
800 BUTTERNUT ST  
SYRACUSE, NY 13208

UPS Access Point™  
FAVETTES SUPER MARKET  
1325 E FAVETTE ST  
SYRACUSE, NY 13210

2.3

FOLD HERE

|                                                                                                                                                                                                           |                                                                                                  |                                                                                    |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------|
| DAWN LAWLER<br>315-431-4610<br>EA SYRACUSE<br>6712 BROOKLAWN PKWY, STE 104<br>SYRACUSE NY 132112158                                                                                                       |                                                                                                  | 40 LBS                                                                             | 2 OF 4 |
| SHIP TO:<br>EUROFINS SPECTRUM ANALYTICAL<br>11 ALMGREN DRIVE<br>AGAWAM MA 01001-3831                                                                                                                      |                                                                                                  |                                                                                    |        |
|                                                                                                                          | MA 011 9-06<br> |                                                                                    |        |
| UPS NEXT DAY AIR                                                                                                                                                                                          |                                                                                                  | 1                                                                                  |        |
| TRACKING #: 1Z F02 748 01 9415 6869                                                                                                                                                                       |                                                                                                  |  |        |
| BILLING: P/P                                                                                                                                                                                              |                                                                                                  |                                                                                    |        |
| Department Code: 2152<br>Project Phase AND Task: 1490709 0003 ****<br><small>CS 20.0.32 WNTNVS0 97.0A 01/2018</small>  |                                                                                                  |                                                                                    |        |

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2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

### 3. GETTING YOUR SHIPMENT TO UPS

#### Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

#### Customers without a Daily Pickup

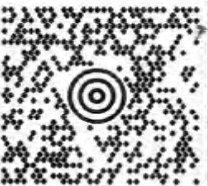
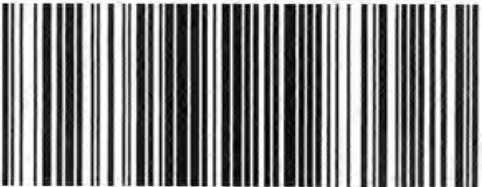
Take your package to any location of The UPS Store®, UPS Access Point™ location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations. Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages. Hand the package to any UPS driver in your area.

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1325 E FAYETTE ST  
SYRACUSE, NY 13210

FOLD HERE

|                                                                                                                                                                                                             |                                                                                                  |        |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|--------|
| DAWN LAWLER<br>315-431-4610<br>BA SYRACUSE<br>6712 BROOKLAWN PKWY, STE 104<br>SYRACUSE, NY 132112158                                                                                                        |                                                                                                  | 40 LBS | 1 OF 4 |
| SHIP TO:<br>EUROFINS SPECTRUM ANALYTICAL<br>11 ALMGREN DRIVE<br>AGAWAM MA 01001-3831                                                                                                                        |                                                                                                  |        |        |
|                                                                                                                            | MA 011 9-06<br> |        |        |
| UPS NEXT DAY AIR                                                                                                                                                                                            |                                                                                                  | 1      |        |
| TRACKING #: 1Z F02 748 01 9109 7456                                                                                                                                                                         |                                                                                                  |        |        |
|                                                                                                                           |                                                                                                  |        |        |
| BILLING: P/P                                                                                                                                                                                                |                                                                                                  |        |        |
| Department Code: 2152<br>Project Phase AND Task: 1490709 0003 *****<br><small>CS 20.0.32 WNTNVS09 97 0A 01/2018</small>  |                                                                                                  |        |        |



## Batch Summary

### **1803225**

#### **Volatile Organic Compounds**

1803225-BLK1  
1803225-BS1  
1803225-BSD1  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)  
SC44537-06 (130110-MW-10D)

### **1803265**

#### **Total Metals by EPA 200/6000 Series Methods**

SC44537-01 (130110-MW-06)  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)  
SC44537-06 (130110-MW-10D)

### **1803431**

#### **General Chemistry Parameters**

1803431-BLK1  
1803431-BS1  
1803431-CCB1  
1803431-CCB2  
1803431-CCB3  
1803431-CCV1  
1803431-CCV2  
1803431-CCV3  
1803431-DUP1  
1803431-MS1  
1803431-MSD1  
1803431-SRM1  
SC44537-01 (130110-MW-06)  
SC44537-04 (130110-MW-10M)  
SC44537-06 (130110-MW-10D)

### **1803456**

#### **Total Metals by EPA 6000/7000 Series Methods**

1803456-BLK1  
1803456-BLK2  
1803456-BS1  
1803456-BS2  
1803456-BSD1  
1803456-BSD2  
1803456-DUP1  
1803456-DUP2  
1803456-MS1  
1803456-MS2  
1803456-MSD1  
1803456-MSD2

1803456-PS1  
1803456-PS2  
SC44537-01 (130110-MW-06)  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)  
SC44537-06 (130110-MW-10D)

### **1803457**

#### **Total Metals by EPA 200 Series Methods**

1803457-BLK1  
1803457-BS1  
1803457-DUP1  
1803457-MS1  
1803457-MSD1  
1803457-PS1  
SC44537-01 (130110-MW-06)  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)  
SC44537-06 (130110-MW-10D)

### **1803634**

#### **Dissolved Gas Analysis**

1803634-BLK1  
1803634-BS1  
1803634-DUP1  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)

### **1803637**

#### **Dissolved Gas Analysis**

1803637-BLK1  
1803637-BS1  
SC44537-06 (130110-MW-10D)

**422315A****Subcontracted Analyses**

BZ99402-BLK  
BZ99402-DUP  
BZ99402-LCS  
BZ99402-MS  
SC44537-01 (130110-MW-06)  
SC44537-02 (130110-MW-05R)  
SC44537-03 (130110-MW-10S)  
SC44537-04 (130110-MW-10M)  
SC44537-05 (130110-MW-04)  
SC44537-06 (130110-MW-10D)

**S815681****General Chemistry Parameters**

S815681-CAL1  
S815681-CAL2  
S815681-CAL3  
S815681-CAL4  
S815681-CAL5  
S815681-CAL6  
S815681-CAL7  
S815681-ICB1  
S815681-ICV1

**S816041****Dissolved Gas Analysis**

S816041-CAL1  
S816041-CAL2  
S816041-CAL3  
S816041-CAL4  
S816041-CAL5  
S816041-CAL6  
S816041-CAL7  
S816041-ICV1  
S816041-LCV1  
S816041-LCV2

**S817144****Volatile Organic Compounds**

S817144-CAL1  
S817144-CAL2  
S817144-CAL3  
S817144-CAL4  
S817144-CAL5  
S817144-CAL6  
S817144-CAL7  
S817144-CAL8  
S817144-CAL9  
S817144-ICV1  
S817144-LCV1  
S817144-TUN1

**S817447****Volatile Organic Compounds**

S817447-CCV1  
S817447-TUN1

**S817735****Dissolved Gas Analysis**

S817735-CCV1  
S817735-CCV2

**S817773****Total Metals by EPA 6000/7000 Series Methods**

S817773-SRD1

**S817774****Total Metals by EPA 6000/7000 Series Methods**

S817774-SRD1

**S817930****Dissolved Gas Analysis**

S817930-CCV1  
S817930-CCV2

**DATA USABILITY SUMMARY REPORT  
METAL ETCHING, FREEPORT, LONG ISLAND, NEW YORK**

Client: EA Engineering, Science & Technology, Inc., Syracuse, New York  
SDG: SC44621  
Laboratory: Eurofins Spectrum Analytical, Agawam, Massachusetts  
Site: Metal Etching, Freeport, Long Island, New York  
Date: June 4, 2018

| VOC    |                     |                      |        |
|--------|---------------------|----------------------|--------|
| EDS ID | Client Sample ID    | Laboratory Sample ID | Matrix |
| 1      | 130110-MW-08SR      | SC44621-01           | Water  |
| 2      | 130110-MW-08DR      | SC44621-02           | Water  |
| 2MS    | 130110-MW-08DRMS    | SC44621-02MS         | Water  |
| 2MSD   | 130110-MW-08DRMSD   | SC44621-02MSD        | Water  |
| 2RE    | 130110-MW-08DRRE    | SC44621-02RE         | Water  |
| 2REMS  | 130110-MW-08DRREMS  | SC44621-02REMS       | Water  |
| 2REMSD | 130110-MW-08DRREMSD | SC44621-02REMSD      | Water  |
| 3      | 130110-MW-09SR      | SC44621-03           | Water  |
| 4      | 130110-MW-09DR      | SC44621-04           | Water  |
| 4RE    | 130110-MW-09DRRE    | SC44621-04RE         | Water  |
| 5      | TRIP BLANK          | SC44621-05           | Water  |

A Data Usability Summary Review was performed on the analytical data for four water samples and one aqueous trip blank sample collected on March 8, 2018 by EA Engineering at the Metal Etching site in Freeport, Long Island, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *“Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions”*.

Specific method references are as follows:

Analysis  
VOCs

Method References  
USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 0, July 2015: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

## ***Organics***

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

### **Data Usability Assessment**

There was no rejection of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- Four compounds were qualified as estimated in five samples due to high continuing calibration %D values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

### **Data Completeness**

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

### **Volatile Organic Compounds (VOC)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

### Initial Calibration

- All %RSD and/or correlation coefficients and mean RRF criteria were met.

### Continuing Calibration

- The following table presents compounds that exceeded percent deviation (%D) criteria and/or RRF values <0.05 (0.01 for poor performers) in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

| CCAL Date | Compound                    | %D/RRF | Qualifier | Affected Samples |
|-----------|-----------------------------|--------|-----------|------------------|
| 3/12/18   | 2,2-Dichloropropane         | 20.5%  | J/UJ      | 1-3              |
| 3/14/18   | Chloroethane                | 41.2%  | J/UJ      | 2RE, 4-5         |
|           | Trichlorofluoromethane      | 30.2%  |           |                  |
|           | Tetrahydrofuran             | 21.4%  |           |                  |
|           | trans-1,4-Dichloro-2-butene | 30.9%  |           |                  |
| 3/16/18   | Chloroethane                | 48.3%  | J/UJ      | 4RE              |
|           | Tetrahydrofuran             | 20.4%  |           |                  |
|           | trans-1,4-Dichloro-2-butene | 25%    |           |                  |

### Method Blank

- The method blanks exhibited the following contamination.

| Blank ID     | Compound | Conc.<br>ug/L | Qualifier | Affected Samples     |
|--------------|----------|---------------|-----------|----------------------|
| 1803567-BLK1 | Acetone  | 1.94          | None      | Associated Sample ND |

### Field Blank

- Field QC results are summarized below.

| VOCs       |           |               |           |                  |
|------------|-----------|---------------|-----------|------------------|
| Blank ID   | Compound  | Conc.<br>ug/L | Qualifier | Affected Samples |
| TRIP BLANK | None - ND | -             | -         |                  |

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

| MS/MSD Sample ID | Compound                | MS %R/MSD %R/ RPD | Qualifier | Affected Samples |
|------------------|-------------------------|-------------------|-----------|------------------|
| 2                | Dichlorodifluoromethane | 69%/OK/OK         | UJ        | 2                |
| 2RE              | Bromomethane            | 55%/OK/OK         | UJ        | 2RE              |
|                  | Chloromethane           | 57%/60%/OK        |           |                  |
|                  | Dichlorodifluoromethane | 50%/55%/OK        |           |                  |

### Laboratory Control Samples

- The following table presents LCS samples that exhibited percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J). Results are valid and usable, however possibly biased.

| LCS ID      | Compound     | %R   | Qualifier | Affected Samples  |
|-------------|--------------|------|-----------|-------------------|
| 1803567-BS1 | Chloroethane | 148% | None      | All Associated ND |
| 1803478-BS1 | Bromomethane | 132% | None      | All Associated ND |

### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

### Target Compound Identification

- All mass spectra and quantitation criteria were met.

### Compound Quantitation

- EDS Sample ID #2 exhibited a high concentration of tetrachloroethene and was flagged (E) by the laboratory indicating the calibration range was exceeded. The laboratory reanalyzed the sample at a 20X dilution. Use dilution results for reporting purposes.
- EDS Sample ID # exhibited a high concentration of cis-1,2-dichloroethene and was flagged (E) by the laboratory indicating the calibration range was exceeded. The laboratory reanalyzed the sample at a 5X dilution. Use dilution results for reporting purposes.

### Tentatively Identified Compounds (TICs)

- TICs were not reported.

### Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:

Nancy Weaver  
Nancy Weaver  
Senior Chemist

Dated: 6/5/18

### Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.





# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08SR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-01 File ID: 4462101.D  
 Sampled: 03/08/18 11:40 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 02:50  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon12)          | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.53          | 0.33 | 1.00 |   |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08SR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-01 File ID: 4462101.D  
 Sampled: 03/08/18 11:40 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 02:50  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 2.01          | 0.50 | 1.00 |   |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621 2  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-02 File ID: 4462102.D  
 Sampled: 03/08/18 12:24 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 03:17  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 5

| CAS NO.    | COMPOUND                                   | RESULT (µg/l)                             | MDL  | MRL  | Q                                  |
|------------|--------------------------------------------|-------------------------------------------|------|------|------------------------------------|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 5.00                                      | 2.66 | 5.00 | U                                  |
| 67-64-1    | Acetone                                    | 50.0                                      | 4.02 | 50.0 | U                                  |
| 107-13-1   | Acrylonitrile                              | 2.50                                      | 2.33 | 2.50 | U                                  |
| 71-43-2    | Benzene                                    | 5.00                                      | 1.42 | 5.00 | U                                  |
| 108-86-1   | Bromobenzene                               | 5.00                                      | 1.66 | 5.00 | U                                  |
| 74-97-5    | Bromochloromethane                         | 5.00                                      | 1.69 | 5.00 | U                                  |
| 75-27-4    | Bromodichloromethane                       | 2.50                                      | 2.08 | 2.50 | U                                  |
| 75-25-2    | Bromoform                                  | 5.00                                      | 2.12 | 5.00 | U                                  |
| 74-83-9    | Bromomethane                               | 10.0                                      | 4.48 | 10.0 | U                                  |
| 78-93-3    | 2-Butanone (MEK)                           | 10.0                                      | 5.35 | 10.0 | U                                  |
| 104-51-8   | n-Butylbenzene                             | 5.00                                      | 2.06 | 5.00 | U                                  |
| 135-98-8   | sec-Butylbenzene                           | 5.00                                      | 1.63 | 5.00 | U                                  |
| 98-06-6    | tert-Butylbenzene                          | 5.00                                      | 1.58 | 5.00 | U                                  |
| 75-15-0    | Carbon disulfide                           | 10.0                                      | 2.06 | 10.0 | U                                  |
| 56-23-5    | Carbon tetrachloride                       | 5.00                                      | 2.18 | 5.00 | U                                  |
| 108-90-7   | Chlorobenzene                              | 5.00                                      | 1.24 | 5.00 | U                                  |
| 75-00-3    | Chloroethane                               | 10.0                                      | 2.94 | 10.0 | U                                  |
| 67-66-3    | Chloroform                                 | 5.00                                      | 1.63 | 5.00 | U                                  |
| 74-87-3    | Chloromethane                              | 10.0                                      | 1.84 | 10.0 | U                                  |
| 95-49-8    | 2-Chlorotoluene                            | 5.00                                      | 1.58 | 5.00 | U                                  |
| 106-43-4   | 4-Chlorotoluene                            | 5.00                                      | 1.58 | 5.00 | U                                  |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 10.0                                      | 4.32 | 10.0 | U                                  |
| 124-48-1   | Dibromochloromethane                       | 2.50                                      | 1.58 | 2.50 | U                                  |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 2.50                                      | 1.01 | 2.50 | U                                  |
| 74-95-3    | Dibromomethane                             | 5.00                                      | 1.54 | 5.00 | U                                  |
| 95-50-1    | 1,2-Dichlorobenzene                        | 5.00                                      | 1.38 | 5.00 | U                                  |
| 541-73-1   | 1,3-Dichlorobenzene                        | 5.00                                      | 1.57 | 5.00 | U                                  |
| 106-46-7   | 1,4-Dichlorobenzene                        | 5.00                                      | 1.36 | 5.00 | U                                  |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 10.0 <span style="color: red;">u J</span> | 2.92 | 10.0 | <span style="color: red;">X</span> |
| 75-34-3    | 1,1-Dichloroethane                         | 5.00                                      | 1.62 | 5.00 | U                                  |
| 107-06-2   | 1,2-Dichloroethane                         | 5.00                                      | 1.38 | 5.00 | U                                  |
| 75-35-4    | 1,1-Dichloroethene                         | 5.00                                      | 3.46 | 5.00 | U                                  |
| 156-59-2   | cis-1,2-Dichloroethene                     | 5.25                                      | 1.64 | 5.00 |                                    |
| 156-60-5   | trans-1,2-Dichloroethene                   | 5.00                                      | 1.88 | 5.00 | U                                  |
| 78-87-5    | 1,2-Dichloropropane                        | 5.00                                      | 1.46 | 5.00 | U                                  |
| 142-28-9   | 1,3-Dichloropropane                        | 5.00                                      | 1.07 | 5.00 | U                                  |
| 594-20-7   | 2,2-Dichloropropane                        | 5.00 <span style="color: red;">u J</span> | 2.09 | 5.00 | <span style="color: red;">X</span> |
| 563-58-6   | 1,1-Dichloropropene                        | 5.00                                      | 2.89 | 5.00 | U                                  |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 2.50                                      | 1.80 | 2.50 | U                                  |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-02 File ID: 4462102.D  
 Sampled: 03/08/18 12:24 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 03:17  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 5

| CAS NO.     | COMPOUND                          | RESULT (µg/l)               | MDL  | MRL  | Q |
|-------------|-----------------------------------|-----------------------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 2.50                        | 1.74 | 2.50 | U |
| 100-41-4    | Ethylbenzene                      | 5.00                        | 1.64 | 5.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 2.50                        | 2.35 | 2.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 10.0                        | 2.64 | 10.0 | U |
| 98-82-8     | Isopropylbenzene                  | 5.00                        | 1.80 | 5.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 5.00                        | 1.40 | 5.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 5.00                        | 1.18 | 5.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 10.0                        | 2.58 | 10.0 | U |
| 75-09-2     | Methylene chloride                | 10.0                        | 3.30 | 10.0 | U |
| 91-20-3     | Naphthalene                       | 5.00                        | 1.76 | 5.00 | U |
| 103-65-1    | n-Propylbenzene                   | 5.00                        | 1.72 | 5.00 | U |
| 100-42-5    | Styrene                           | 5.00                        | 2.02 | 5.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 5.00                        | 1.89 | 5.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 2.50                        | 1.65 | 2.50 | U |
| 127-18-4    | Tetrachloroethene                 | 690 725 11.4 2.85 20.0 5.00 |      |      | E |
| 108-88-3    | Toluene                           | 5.00                        | 1.50 | 5.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 5.00                        | 1.88 | 5.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 5.00                        | 1.89 | 5.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 5.00                        | 2.54 | 5.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 5.00                        | 1.48 | 5.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 5.00                        | 1.65 | 5.00 | U |
| 79-01-6     | Trichloroethene                   | 5.20                        | 2.48 | 5.00 |   |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 5.00                        | 2.44 | 5.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 5.00                        | 1.46 | 5.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 5.00                        | 1.78 | 5.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 5.00                        | 2.16 | 5.00 | U |
| 75-01-4     | Vinyl chloride                    | 5.00                        | 2.36 | 5.00 | U |
| 179601-23-1 | m,p-Xylene                        | 10.0                        | 1.90 | 10.0 | U |
| 95-47-6     | o-Xylene                          | 5.00                        | 1.42 | 5.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 10.0                        | 5.30 | 10.0 | U |
| 60-29-7     | Ethyl ether                       | 5.00                        | 1.87 | 5.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 5.00                        | 2.46 | 5.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 5.00                        | 1.66 | 5.00 | U |
| 108-20-3    | Di-isopropyl ether                | 5.00                        | 1.43 | 5.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 50.0                        | 29.5 | 50.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 25.0                        | 4.10 | 25.0 | U |
| 123-91-1    | 1,4-Dioxane                       | 100                         | 57.0 | 100  | U |
| 64-17-5     | Ethanol                           | 1000                        | 154  | 1000 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-02RE1 File ID: 4462102RE1.D  
 Sampled: 03/08/18 12:24 Prepared: 03/14/18 09:09 Analyzed: 03/14/18 14:05  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 20

2RE

use  
original  
results

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q  |
|------------|--------------------------------------------|---------------|------|------|----|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 20.0          | 10.6 | 20.0 | UD |
| 67-64-1    | Acetone                                    | 200           | 16.1 | 200  | UD |
| 107-13-1   | Acrylonitrile                              | 10.0          | 9.32 | 10.0 | UD |
| 71-43-2    | Benzene                                    | 20.0          | 5.68 | 20.0 | UD |
| 108-86-1   | Bromobenzene                               | 20.0          | 6.64 | 20.0 | UD |
| 74-97-5    | Bromochloromethane                         | 20.0          | 6.76 | 20.0 | UD |
| 75-27-4    | Bromodichloromethane                       | 10.0          | 8.34 | 10.0 | UD |
| 75-25-2    | Bromoform                                  | 20.0          | 8.50 | 20.0 | UD |
| 74-83-9    | Bromomethane                               | 40.0 uJ       | 17.9 | 40.0 | UD |
| 78-93-3    | 2-Butanone (MEK)                           | 40.0          | 21.4 | 40.0 | UD |
| 104-51-8   | n-Butylbenzene                             | 20.0          | 8.24 | 20.0 | UD |
| 135-98-8   | sec-Butylbenzene                           | 20.0          | 6.52 | 20.0 | UD |
| 98-06-6    | tert-Butylbenzene                          | 20.0          | 6.30 | 20.0 | UD |
| 75-15-0    | Carbon disulfide                           | 40.0          | 8.24 | 40.0 | UD |
| 56-23-5    | Carbon tetrachloride                       | 20.0          | 8.74 | 20.0 | UD |
| 108-90-7   | Chlorobenzene                              | 20.0          | 4.98 | 20.0 | UD |
| 75-00-3    | Chloroethane                               | 40.0 uJ       | 11.8 | 40.0 | UD |
| 67-66-3    | Chloroform                                 | 20.0          | 6.52 | 20.0 | UD |
| 74-87-3    | Chloromethane                              | 40.0 uJ       | 7.36 | 40.0 | UD |
| 95-49-8    | 2-Chlorotoluene                            | 20.0          | 6.32 | 20.0 | UD |
| 106-43-4   | 4-Chlorotoluene                            | 20.0          | 6.32 | 20.0 | UD |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 40.0          | 17.3 | 40.0 | UD |
| 124-48-1   | Dibromochloromethane                       | 10.0          | 6.34 | 10.0 | UD |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 10.0          | 4.04 | 10.0 | UD |
| 74-95-3    | Dibromomethane                             | 20.0          | 6.18 | 20.0 | UD |
| 95-50-1    | 1,2-Dichlorobenzene                        | 20.0          | 5.54 | 20.0 | UD |
| 541-73-1   | 1,3-Dichlorobenzene                        | 20.0          | 6.28 | 20.0 | UD |
| 106-46-7   | 1,4-Dichlorobenzene                        | 20.0          | 5.44 | 20.0 | UD |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 40.0 uJ       | 11.7 | 40.0 | UD |
| 75-34-3    | 1,1-Dichloroethane                         | 20.0          | 6.46 | 20.0 | UD |
| 107-06-2   | 1,2-Dichloroethane                         | 20.0          | 5.54 | 20.0 | UD |
| 75-35-4    | 1,1-Dichloroethene                         | 20.0          | 13.9 | 20.0 | UD |
| 156-59-2   | cis-1,2-Dichloroethene                     | 20.0          | 6.54 | 20.0 | UD |
| 156-60-5   | trans-1,2-Dichloroethene                   | 20.0          | 7.54 | 20.0 | UD |
| 78-87-5    | 1,2-Dichloropropane                        | 20.0          | 5.84 | 20.0 | UD |
| 142-28-9   | 1,3-Dichloropropane                        | 20.0          | 4.28 | 20.0 | UD |
| 594-20-7   | 2,2-Dichloropropane                        | 20.0          | 8.36 | 20.0 | UD |
| 563-58-6   | 1,1-Dichloropropene                        | 20.0          | 11.6 | 20.0 | UD |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 10.0          | 7.18 | 10.0 | UD |

new 6/4/18



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-08DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-02RE1 File ID: 4462102RE1.D  
 Sampled: 03/08/18 12:24 Prepared: 03/14/18 09:09 Analyzed: 03/14/18 14:05  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 20

2RE

Use original results

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q  |
|-------------|-----------------------------------|---------------|------|------|----|
| 10061-02-6  | trans-1,3-Dichloropropene         | 10.0          | 6.94 | 10.0 | UD |
| 100-41-4    | Ethylbenzene                      | 20.0          | 6.58 | 20.0 | UD |
| 87-68-3     | Hexachlorobutadiene               | 10.0          | 9.40 | 10.0 | UD |
| 591-78-6    | 2-Hexanone (MBK)                  | 40.0          | 10.6 | 40.0 | UD |
| 98-82-8     | Isopropylbenzene                  | 20.0          | 7.20 | 20.0 | UD |
| 99-87-6     | 4-Isopropyltoluene                | 20.0          | 5.58 | 20.0 | UD |
| 1634-04-4   | Methyl tert-butyl ether           | 20.0          | 4.74 | 20.0 | UD |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 40.0          | 10.3 | 40.0 | UD |
| 75-09-2     | Methylene chloride                | 40.0          | 13.2 | 40.0 | UD |
| 91-20-3     | Naphthalene                       | 20.0          | 7.02 | 20.0 | UD |
| 103-65-1    | n-Propylbenzene                   | 20.0          | 6.88 | 20.0 | UD |
| 100-42-5    | Styrene                           | 20.0          | 8.10 | 20.0 | UD |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 20.0          | 7.56 | 20.0 | UD |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 10.0          | 6.60 | 10.0 | UD |
| 127-18-4    | Tetrachloroethene                 | 690           | 11.4 | 20.0 | UD |
| 108-88-3    | Toluene                           | 20.0          | 5.98 | 20.0 | UD |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 20.0          | 7.54 | 20.0 | UD |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 20.0          | 7.56 | 20.0 | UD |
| 71-55-6     | 1,1,1-Trichloroethane             | 20.0          | 10.2 | 20.0 | UD |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 20.0          | 5.92 | 20.0 | UD |
| 79-00-5     | 1,1,2-Trichloroethane             | 20.0          | 6.60 | 20.0 | UD |
| 79-01-6     | Trichloroethene                   | 20.0          | 9.94 | 20.0 | UD |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 20.0 NJ       | 9.74 | 20.0 | UD |
| 96-18-4     | 1,2,3-Trichloropropane            | 20.0          | 5.84 | 20.0 | UD |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 20.0          | 7.10 | 20.0 | UD |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 20.0          | 8.62 | 20.0 | UD |
| 75-01-4     | Vinyl chloride                    | 20.0          | 9.44 | 20.0 | UD |
| 179601-23-1 | m,p-Xylene                        | 40.0          | 7.60 | 40.0 | UD |
| 95-47-6     | o-Xylene                          | 20.0          | 5.66 | 20.0 | UD |
| 109-99-9    | Tetrahydrofuran                   | 40.0 NJ       | 21.2 | 40.0 | UD |
| 60-29-7     | Ethyl ether                       | 20.0          | 7.48 | 20.0 | UD |
| 994-05-8    | Tert-amyl methyl ether            | 20.0          | 9.86 | 20.0 | UD |
| 637-92-3    | Ethyl tert-butyl ether            | 20.0          | 6.64 | 20.0 | UD |
| 108-20-3    | Di-isopropyl ether                | 20.0          | 5.72 | 20.0 | UD |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 200           | 118  | 200  | UD |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 100 NJ        | 16.4 | 100  | UD |
| 123-91-1    | 1,4-Dioxane                       | 400           | 228  | 400  | UD |
| 64-17-5     | Ethanol                           | 4000          | 618  | 4000 | UD |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09SR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621 3  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-03 File ID: 4462103.D  
 Sampled: 03/08/18 11:37 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 03:44  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 9.09          | 0.80 | 10.0 | J |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 1.47          | 1.07 | 2.00 | J |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 0.77          | 0.41 | 2.00 | J |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09SR

3

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-03 File ID: 4462103.D  
 Sampled: 03/08/18 11:37 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 03:44  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 0.53          | 0.40 | 1.00 | J |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 847           | 30.9 | 200  |   |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-04 File ID: 4462104.D  
 Sampled: 03/08/18 12:20 Prepared: 03/14/18 09:09 Analyzed: 03/14/18 14:33  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l)   | MDL              | MRL              | Q         |
|------------|--------------------------------------------|-----------------|------------------|------------------|-----------|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00            | 0.53             | 1.00             | U         |
| 67-64-1    | Acetone                                    | 7.41            | 0.80             | 10.0             | J         |
| 107-13-1   | Acrylonitrile                              | 0.50            | 0.47             | 0.50             | U         |
| 71-43-2    | Benzene                                    | 1.00            | 0.28             | 1.00             | U         |
| 108-86-1   | Bromobenzene                               | 1.00            | 0.33             | 1.00             | U         |
| 74-97-5    | Bromochloromethane                         | 1.00            | 0.34             | 1.00             | U         |
| 75-27-4    | Bromodichloromethane                       | 0.50            | 0.42             | 0.50             | U         |
| 75-25-2    | Bromoform                                  | 1.00            | 0.42             | 1.00             | U         |
| 74-83-9    | Bromomethane                               | 2.00            | 0.90             | 2.00             | U         |
| 78-93-3    | 2-Butanone (MEK)                           | 1.07            | 1.07             | 2.00             | J         |
| 104-51-8   | n-Butylbenzene                             | 1.00            | 0.41             | 1.00             | U         |
| 135-98-8   | sec-Butylbenzene                           | 1.00            | 0.33             | 1.00             | U         |
| 98-06-6    | tert-Butylbenzene                          | 1.00            | 0.32             | 1.00             | U         |
| 75-15-0    | Carbon disulfide                           | 2.00            | 0.41             | 2.00             | U         |
| 56-23-5    | Carbon tetrachloride                       | 1.00            | 0.44             | 1.00             | U         |
| 108-90-7   | Chlorobenzene                              | 1.00            | 0.25             | 1.00             | U         |
| 75-00-3    | Chloroethane                               | 2.00 <i>uJ</i>  | 0.59             | 2.00             | <i>uJ</i> |
| 67-66-3    | Chloroform                                 | 1.00            | 0.33             | 1.00             | U         |
| 74-87-3    | Chloromethane                              | 2.00            | 0.37             | 2.00             | U         |
| 95-49-8    | 2-Chlorotoluene                            | 1.00            | 0.32             | 1.00             | U         |
| 106-43-4   | 4-Chlorotoluene                            | 1.00            | 0.32             | 1.00             | U         |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00            | 0.86             | 2.00             | U         |
| 124-48-1   | Dibromochloromethane                       | 0.50            | 0.32             | 0.50             | U         |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50            | 0.20             | 0.50             | U         |
| 74-95-3    | Dibromomethane                             | 1.00            | 0.31             | 1.00             | U         |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00            | 0.28             | 1.00             | U         |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00            | 0.31             | 1.00             | U         |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00            | 0.27             | 1.00             | U         |
| 75-71-8    | Dichlorodifluoromethane (Freon12)          | 2.00            | 0.58             | 2.00             | U         |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00            | 0.32             | 1.00             | U         |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00            | 0.28             | 1.00             | U         |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00            | 0.69             | 1.00             | U         |
| 156-59-2   | cis-1,2-Dichloroethene                     | 84.2 <i>112</i> | 1.64 <i>0.33</i> | 5.00 <i>1.00</i> | <i>uJ</i> |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00            | 0.38             | 1.00             | U         |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00            | 0.29             | 1.00             | U         |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00            | 0.21             | 1.00             | U         |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00            | 0.42             | 1.00             | U         |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00            | 0.58             | 1.00             | U         |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50            | 0.36             | 0.50             | U         |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-04 File ID: 4462104.D  
 Sampled: 03/08/18 12:20 Prepared: 03/14/18 09:09 Analyzed: 03/14/18 14:33  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 4.23          | 0.57 | 1.00 |   |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 12.4          | 0.50 | 1.00 |   |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00 NJ       | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 21.5          | 0.47 | 1.00 |   |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00 NJ       | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00 NJ       | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 682           | 30.9 | 200  |   |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-04RE1 File ID: 4462104RE1.D  
 Sampled: 03/08/18 12:20 Prepared: 03/15/18 11:05 Analyzed: 03/16/18 10:46  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803567 Sequence: S817675 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 5

4RE  
 use original results

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q  |
|------------|--------------------------------------------|---------------|------|------|----|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 5.00          | 2.66 | 5.00 | UD |
| 67-64-1    | Acetone                                    | 50.0          | 4.02 | 50.0 | UD |
| 107-13-1   | Acrylonitrile                              | 2.50          | 2.33 | 2.50 | UD |
| 71-43-2    | Benzene                                    | 5.00          | 1.42 | 5.00 | UD |
| 108-86-1   | Bromobenzene                               | 5.00          | 1.66 | 5.00 | UD |
| 74-97-5    | Bromochloromethane                         | 5.00          | 1.69 | 5.00 | UD |
| 75-27-4    | Bromodichloromethane                       | 2.50          | 2.08 | 2.50 | UD |
| 75-25-2    | Bromoform                                  | 5.00          | 2.12 | 5.00 | UD |
| 74-83-9    | Bromomethane                               | 10.0          | 4.48 | 10.0 | UD |
| 78-93-3    | 2-Butanone (MEK)                           | 10.0          | 5.35 | 10.0 | UD |
| 104-51-8   | n-Butylbenzene                             | 5.00          | 2.06 | 5.00 | UD |
| 135-98-8   | sec-Butylbenzene                           | 5.00          | 1.63 | 5.00 | UD |
| 98-06-6    | tert-Butylbenzene                          | 5.00          | 1.58 | 5.00 | UD |
| 75-15-0    | Carbon disulfide                           | 10.0          | 2.06 | 10.0 | UD |
| 56-23-5    | Carbon tetrachloride                       | 5.00          | 2.18 | 5.00 | UD |
| 108-90-7   | Chlorobenzene                              | 5.00          | 1.24 | 5.00 | UD |
| 75-00-3    | Chloroethane                               | 10.0 NJ       | 2.94 | 10.0 | UD |
| 67-66-3    | Chloroform                                 | 5.00          | 1.63 | 5.00 | UD |
| 74-87-3    | Chloromethane                              | 10.0          | 1.84 | 10.0 | UD |
| 95-49-8    | 2-Chlorotoluene                            | 5.00          | 1.58 | 5.00 | UD |
| 106-43-4   | 4-Chlorotoluene                            | 5.00          | 1.58 | 5.00 | UD |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 10.0          | 4.32 | 10.0 | UD |
| 124-48-1   | Dibromochloromethane                       | 2.50          | 1.58 | 2.50 | UD |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 2.50          | 1.01 | 2.50 | UD |
| 74-95-3    | Dibromomethane                             | 5.00          | 1.54 | 5.00 | UD |
| 95-50-1    | 1,2-Dichlorobenzene                        | 5.00          | 1.38 | 5.00 | UD |
| 541-73-1   | 1,3-Dichlorobenzene                        | 5.00          | 1.57 | 5.00 | UD |
| 106-46-7   | 1,4-Dichlorobenzene                        | 5.00          | 1.36 | 5.00 | UD |
| 75-71-8    | Dichlorodifluoromethane (Freon12)          | 10.0          | 2.92 | 10.0 | UD |
| 75-34-3    | 1,1-Dichloroethane                         | 5.00          | 1.62 | 5.00 | UD |
| 107-06-2   | 1,2-Dichloroethane                         | 5.00          | 1.38 | 5.00 | UD |
| 75-35-4    | 1,1-Dichloroethene                         | 5.00          | 3.46 | 5.00 | UD |
| 156-59-2   | cis-1,2-Dichloroethene                     | 84.2          | 1.64 | 5.00 | D  |
| 156-60-5   | trans-1,2-Dichloroethene                   | 5.00          | 1.88 | 5.00 | UD |
| 78-87-5    | 1,2-Dichloropropane                        | 5.00          | 1.46 | 5.00 | UD |
| 142-28-9   | 1,3-Dichloropropane                        | 5.00          | 1.07 | 5.00 | UD |
| 594-20-7   | 2,2-Dichloropropane                        | 5.00          | 2.09 | 5.00 | UD |
| 563-58-6   | 1,1-Dichloropropene                        | 5.00          | 2.89 | 5.00 | UD |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 2.50          | 1.80 | 2.50 | UD |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-09DR

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Ground Water Laboratory ID: SC44621-04RE1 File ID: 4462104RE1.D  
 Sampled: 03/08/18 12:20 Prepared: 03/15/18 11:05 Analyzed: 03/16/18 10:46  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803567 Sequence: S817675 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 5

422

use original results

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q  |
|-------------|-----------------------------------|---------------|------|------|----|
| 10061-02-6  | trans-1,3-Dichloropropene         | 2.50          | 1.74 | 2.50 | UD |
| 100-41-4    | Ethylbenzene                      | 5.00          | 1.64 | 5.00 | UD |
| 87-68-3     | Hexachlorobutadiene               | 2.50          | 2.35 | 2.50 | UD |
| 591-78-6    | 2-Hexanone (MBK)                  | 10.0          | 2.64 | 10.0 | UD |
| 98-82-8     | Isopropylbenzene                  | 5.00          | 1.80 | 5.00 | UD |
| 99-87-6     | 4-Isopropyltoluene                | 5.00          | 1.40 | 5.00 | UD |
| 1634-04-4   | Methyl tert-butyl ether           | 5.00          | 1.18 | 5.00 | UD |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 10.0          | 2.58 | 10.0 | UD |
| 75-09-2     | Methylene chloride                | 10.0          | 3.30 | 10.0 | UD |
| 91-20-3     | Naphthalene                       | 5.00          | 1.76 | 5.00 | UD |
| 103-65-1    | n-Propylbenzene                   | 5.00          | 1.72 | 5.00 | UD |
| 100-42-5    | Styrene                           | 5.00          | 2.02 | 5.00 | UD |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 5.00          | 1.89 | 5.00 | UD |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 2.50          | 1.65 | 2.50 | UD |
| 127-18-4    | Tetrachloroethene                 | 3.40          | 2.85 | 5.00 | JD |
| 108-88-3    | Toluene                           | 5.00          | 1.50 | 5.00 | UD |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 5.00          | 1.88 | 5.00 | UD |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 5.00          | 1.89 | 5.00 | UD |
| 71-55-6     | 1,1,1-Trichloroethane             | 5.00          | 2.54 | 5.00 | UD |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 5.00          | 1.48 | 5.00 | UD |
| 79-00-5     | 1,1,2-Trichloroethane             | 5.00          | 1.65 | 5.00 | UD |
| 79-01-6     | Trichloroethene                   | 9.15          | 2.48 | 5.00 | UD |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 5.00          | 2.44 | 5.00 | UD |
| 96-18-4     | 1,2,3-Trichloropropane            | 5.00          | 1.46 | 5.00 | UD |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 5.00          | 1.78 | 5.00 | UD |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 5.00          | 2.16 | 5.00 | UD |
| 75-01-4     | Vinyl chloride                    | 15.8          | 2.36 | 5.00 | UD |
| 179601-23-1 | m,p-Xylene                        | 10.0          | 1.90 | 10.0 | UD |
| 95-47-6     | o-Xylene                          | 5.00          | 1.42 | 5.00 | UD |
| 109-99-9    | Tetrahydrofuran                   | 10.0          | 5.30 | 10.0 | UD |
| 60-29-7     | Ethyl ether                       | 5.00          | 1.87 | 5.00 | UD |
| 994-05-8    | Tert-amyl methyl ether            | 5.00          | 2.46 | 5.00 | UD |
| 637-92-3    | Ethyl tert-butyl ether            | 5.00          | 1.66 | 5.00 | UD |
| 108-20-3    | Di-isopropyl ether                | 5.00          | 1.43 | 5.00 | UD |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 50.0          | 29.5 | 50.0 | UD |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 25.0          | 4.10 | 25.0 | UD |
| 123-91-1    | 1,4-Dioxane                       | 100           | 57.0 | 100  | UD |
| 64-17-5     | Ethanol                           | 572           | 154  | 1000 | JD |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

Trip Blank

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Aqueous Laboratory ID: SC44621-05 File ID: 4462105RE1.D  
 Sampled: 03/08/18 00:00 Prepared: 03/14/18 09:19 Analyzed: 03/14/18 15:54  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l)  | MDL  | MRL  | Q        |
|------------|--------------------------------------------|----------------|------|------|----------|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00           | 0.53 | 1.00 | U        |
| 67-64-1    | Acetone                                    | 10.0           | 0.80 | 10.0 | U        |
| 107-13-1   | Acrylonitrile                              | 0.50           | 0.47 | 0.50 | U        |
| 71-43-2    | Benzene                                    | 1.00           | 0.28 | 1.00 | U        |
| 108-86-1   | Bromobenzene                               | 1.00           | 0.33 | 1.00 | U        |
| 74-97-5    | Bromochloromethane                         | 1.00           | 0.34 | 1.00 | U        |
| 75-27-4    | Bromodichloromethane                       | 0.50           | 0.42 | 0.50 | U        |
| 75-25-2    | Bromoform                                  | 1.00           | 0.42 | 1.00 | U        |
| 74-83-9    | Bromomethane                               | 2.00           | 0.90 | 2.00 | U        |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00           | 1.07 | 2.00 | U        |
| 104-51-8   | n-Butylbenzene                             | 1.00           | 0.41 | 1.00 | U        |
| 135-98-8   | sec-Butylbenzene                           | 1.00           | 0.33 | 1.00 | U        |
| 98-06-6    | tert-Butylbenzene                          | 1.00           | 0.32 | 1.00 | U        |
| 75-15-0    | Carbon disulfide                           | 2.00           | 0.41 | 2.00 | U        |
| 56-23-5    | Carbon tetrachloride                       | 1.00           | 0.44 | 1.00 | U        |
| 108-90-7   | Chlorobenzene                              | 1.00           | 0.25 | 1.00 | U        |
| 75-00-3    | Chloroethane                               | 2.00 <i>uJ</i> | 0.59 | 2.00 | <i>U</i> |
| 67-66-3    | Chloroform                                 | 1.00           | 0.33 | 1.00 | U        |
| 74-87-3    | Chloromethane                              | 2.00           | 0.37 | 2.00 | U        |
| 95-49-8    | 2-Chlorotoluene                            | 1.00           | 0.32 | 1.00 | U        |
| 106-43-4   | 4-Chlorotoluene                            | 1.00           | 0.32 | 1.00 | U        |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00           | 0.86 | 2.00 | U        |
| 124-48-1   | Dibromochloromethane                       | 0.50           | 0.32 | 0.50 | U        |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50           | 0.20 | 0.50 | U        |
| 74-95-3    | Dibromomethane                             | 1.00           | 0.31 | 1.00 | U        |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00           | 0.28 | 1.00 | U        |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00           | 0.31 | 1.00 | U        |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00           | 0.27 | 1.00 | U        |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00           | 0.58 | 2.00 | U        |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00           | 0.32 | 1.00 | U        |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00           | 0.28 | 1.00 | U        |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00           | 0.69 | 1.00 | U        |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00           | 0.33 | 1.00 | U        |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00           | 0.38 | 1.00 | U        |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00           | 0.29 | 1.00 | U        |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00           | 0.21 | 1.00 | U        |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00           | 0.42 | 1.00 | U        |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00           | 0.58 | 1.00 | U        |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50           | 0.36 | 0.50 | U        |

*new 6/4/18*



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

Trip Blank

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44621  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:45  
 Matrix: Aqueous Laboratory ID: SC44621-05 File ID: 4462105RE1.D  
 Sampled: 03/08/18 00:00 Prepared: 03/14/18 09:19 Analyzed: 03/14/18 15:54  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803478 Sequence: S817616 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l)  | MDL  | MRL  | Q        |
|-------------|-----------------------------------|----------------|------|------|----------|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50           | 0.35 | 0.50 | U        |
| 100-41-4    | Ethylbenzene                      | 1.00           | 0.33 | 1.00 | U        |
| 87-68-3     | Hexachlorobutadiene               | 0.50           | 0.47 | 0.50 | U        |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00           | 0.53 | 2.00 | U        |
| 98-82-8     | Isopropylbenzene                  | 1.00           | 0.36 | 1.00 | U        |
| 99-87-6     | 4-Isopropyltoluene                | 1.00           | 0.28 | 1.00 | U        |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00           | 0.24 | 1.00 | U        |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00           | 0.52 | 2.00 | U        |
| 75-09-2     | Methylene chloride                | 2.00           | 0.66 | 2.00 | U        |
| 91-20-3     | Naphthalene                       | 1.00           | 0.35 | 1.00 | U        |
| 103-65-1    | n-Propylbenzene                   | 1.00           | 0.34 | 1.00 | U        |
| 100-42-5    | Styrene                           | 1.00           | 0.40 | 1.00 | U        |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00           | 0.38 | 1.00 | U        |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50           | 0.33 | 0.50 | U        |
| 127-18-4    | Tetrachloroethene                 | 1.00           | 0.57 | 1.00 | U        |
| 108-88-3    | Toluene                           | 1.00           | 0.30 | 1.00 | U        |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00           | 0.38 | 1.00 | U        |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00           | 0.38 | 1.00 | U        |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00           | 0.51 | 1.00 | U        |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00           | 0.30 | 1.00 | U        |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00           | 0.33 | 1.00 | U        |
| 79-01-6     | Trichloroethene                   | 1.00           | 0.50 | 1.00 | U        |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00 <i>uJ</i> | 0.49 | 1.00 | <i>X</i> |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00           | 0.29 | 1.00 | U        |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00           | 0.36 | 1.00 | U        |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00           | 0.43 | 1.00 | U        |
| 75-01-4     | Vinyl chloride                    | 1.00           | 0.47 | 1.00 | U        |
| 179601-23-1 | m,p-Xylene                        | 2.00           | 0.38 | 2.00 | U        |
| 95-47-6     | o-Xylene                          | 1.00           | 0.28 | 1.00 | U        |
| 109-99-9    | Tetrahydrofuran                   | 2.00 <i>uJ</i> | 1.06 | 2.00 | <i>X</i> |
| 60-29-7     | Ethyl ether                       | 1.00           | 0.37 | 1.00 | U        |
| 994-05-8    | Tert-amyl methyl ether            | 1.00           | 0.49 | 1.00 | U        |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00           | 0.33 | 1.00 | U        |
| 108-20-3    | Di-isopropyl ether                | 1.00           | 0.29 | 1.00 | U        |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0           | 5.90 | 10.0 | U        |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00 <i>uJ</i> | 0.82 | 5.00 | <i>X</i> |
| 123-91-1    | 1,4-Dioxane                       | 20.0           | 11.4 | 20.0 | U        |
| 64-17-5     | Ethanol                           | 200            | 30.9 | 200  | U        |

## Laboratory Report SC44621

EA Engineering, Science, & Technology  
6712 Brooklawn Parkway Suite 104  
Syracuse, NY 13211  
Attn: Megan Miller

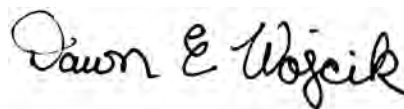
Project: Metal Etching - Freeport, NY  
Project #: 1490709

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87936  
Maine # MA138  
New Hampshire # 2972/2538  
New Jersey # MA011  
New York # 11393  
Pennsylvania # 68-04426/68-02924  
Rhode Island # LAO00348  
USDA # P330-15-00375  
Vermont # VT-11393



Authorized by:  
Dawn Wojcik  
Laboratory Director



Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 64 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

*Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*



## Sample Summary

**Work Order:** SC44621  
**Project:** Metal Etching - Freeport, NY  
**Project Number:** 1490709

| <u>Laboratory ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Date Sampled</u> | <u>Date Received</u> |
|----------------------|-------------------------|---------------|---------------------|----------------------|
| SC44621-01           | 130110-MW-08SR          | Ground Water  | 08-Mar-18 11:40     | 09-Mar-18 10:45      |
| SC44621-02           | 130110-MW-08DR          | Ground Water  | 08-Mar-18 12:24     | 09-Mar-18 10:45      |
| SC44621-03           | 130110-MW-09SR          | Ground Water  | 08-Mar-18 11:37     | 09-Mar-18 10:45      |
| SC44621-04           | 130110-MW-09DR          | Ground Water  | 08-Mar-18 12:20     | 09-Mar-18 10:45      |
| SC44621-05           | Trip Blank              | Aqueous       | 08-Mar-18 00:00     | 09-Mar-18 10:45      |

## CASE NARRATIVE:

Data has been reported to the MDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 0.7 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

### **E300.0**

#### **Samples:**

SC44621-01                      130110-MW-08SR

---

Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Nitrate as Nitrogen

### **SM4500S-D-00,-11**

#### **Samples:**

SC44621-01                      130110-MW-08SR

---

Analyte included in the analysis, but not detected at or above the MDL.

Sulfide

SC44621-02                      130110-MW-08DR

---

Analyte included in the analysis, but not detected at or above the MDL.

Sulfide

SC44621-03                      130110-MW-09SR

---

Analyte included in the analysis, but not detected at or above the MDL.

Sulfide

### **SM5310B (00, 11)**

#### **Samples:**

SC44621-03                      130110-MW-09SR

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Total Organic Carbon

SC44621-04                      130110-MW-09DR

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Total Organic Carbon

### **SW846 6010C**

#### **Spikes:**

## **SW846 6010C**

### **Spikes:**

1803493-MS1      *Source: SC44621-02*

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Magnesium

1803493-PS1      *Source: SC44621-02*

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Magnesium

### **Duplicates:**

1803493-DUP1      *Source: SC44621-02*

---

The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.

Zinc

## **SW846 8260C**

### **Calibration:**

1802088

---

Analyte quantified by quadratic equation type calibration.

Bromoform

Carbon tetrachloride

**Calibration:**

1802088

---

This affected the following samples:

130110-MW-08DR  
130110-MW-08SR  
130110-MW-09DR  
130110-MW-09SR  
1803373-BLK1  
1803373-BS1  
1803373-BSD1  
1803373-MS1  
1803373-MSD1  
1803478-BLK1  
1803478-BS1  
1803478-BSD1  
1803478-MS1  
1803478-MSD1  
1803567-BLK1  
1803567-BS1  
1803567-BSD1  
S817144-ICV1  
S817557-CCV1  
S817616-CCV1  
S817675-CCV1  
Trip Blank

**Laboratory Control Samples:**

1803373 BS/BSD

---

2,2-Dichloropropane percent recoveries (73/69) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

130110-MW-08DR  
130110-MW-08SR  
130110-MW-09SR

Dichlorodifluoromethane (Freon12) percent recoveries (72/69) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

130110-MW-08DR  
130110-MW-08SR  
130110-MW-09SR

1803478 BS/BSD

---

Bromomethane percent recoveries (132/129) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-08DR  
130110-MW-09DR  
Trip Blank

1803567 BS/BSD

---

Chloroethane percent recoveries (148/139) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-09DR

## **SW846 8260C**

### **Laboratory Control Samples:**

1803567 BS/BSD

---

Trichlorofluoromethane (Freon 11) percent recoveries (125/136) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-09DR

### **Spikes:**

1803373-MS1      *Source: SC44621-02*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Dichlorodifluoromethane (Freon12)

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

Tetrachloroethene

1803373-MSD1      *Source: SC44621-02*

---

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

Tetrachloroethene

1803478-MS1      *Source: SC44621-02RE1*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Bromomethane

Chloromethane

Dichlorodifluoromethane (Freon12)

1803478-MSD1      *Source: SC44621-02RE1*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Chloromethane

Dichlorodifluoromethane (Freon12)

### **Samples:**

S817557-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,2-Dichloropropane (-20.5%)

Bromomethane (21.6%)

Dichlorodifluoromethane (Freon12) (-25.2%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,4-Dioxane (-20.8%)

Chloroethane (20.3%)

Chloromethane (-25.0%)

## **SW846 8260C**

### **Samples:**

S817557-CCV1

---

This affected the following samples:

130110-MW-08DR  
130110-MW-08SR  
130110-MW-09SR  
1803373-BLK1  
1803373-BS1  
1803373-BSD1  
1803373-MS1  
1803373-MSD1

S817616-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Bromomethane (28.5%)  
Tetrahydrofuran (-21.4%)  
trans-1,4-Dichloro-2-butene (30.9%)  
Trichlorofluoromethane (Freon 11) (30.2%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,4-Dioxane (-22.8%)  
Chloroethane (41.2%)

This affected the following samples:

130110-MW-08DR  
130110-MW-09DR  
1803478-BLK1  
1803478-BS1  
1803478-BSD1  
1803478-MS1  
1803478-MSD1  
Trip Blank

S817675-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-20.4%)  
trans-1,4-Dichloro-2-butene (25.0%)  
Trichlorofluoromethane (Freon 11) (25.3%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Chloroethane (48.3%)  
Chloromethane (-20.4%)

This affected the following samples:

130110-MW-09DR  
1803567-BLK1  
1803567-BS1  
1803567-BSD1

SC44621-02      *130110-MW-08DR*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC44621-02RE1      *130110-MW-08DR*

---

**SW846 8260C**

**Samples:**

SC44621-02RE1      *130110-MW-08DR*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC44621-04RE1      *130110-MW-09DR*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

## Sample Acceptance Check Form

Client: EA Engineering, Science, & Technology - Syracuse  
Project: Metal Etching - Freeport, NY / 1490709  
Work Order: SC44621  
Sample(s) received on: 3/9/2018

*The following outlines the condition of samples for the attached Chain of Custody upon receipt.*

|                                                                                                                                                                                                                                                                                      | <u>Yes</u>                          | <u>No</u>                           | <u>N/A</u>                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Were custody seals present?                                                                                                                                                                                                                                                          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Were custody seals intact?                                                                                                                                                                                                                                                           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were samples received at a temperature of $\leq 6^{\circ}\text{C}$ ?                                                                                                                                                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples cooled on ice upon transfer to laboratory representative?                                                                                                                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were sample containers received intact?                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples accompanied by a Chain of Custody document?                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Did sample container labels agree with Chain of Custody document?                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples received within method-specific holding times?                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |



## Summary of Hits

**Lab ID:** SC44621-01

**Client ID:** 130110-MW-08SR

| Parameter              | Result  | Flag | Reporting Limit | Units | Analytical Method |
|------------------------|---------|------|-----------------|-------|-------------------|
| Chloride               | 130     |      | 6.0             | mg/L  | E300.0            |
| Nitrate as Nitrogen    | 0.02    | J1   | 0.05            | mg/L  | E300.0            |
| Sulfate                | 22.5    |      | 3.0             | mg/L  | E300.0            |
| Total Organic Carbon   | 12.2    |      | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum               | 0.0203  | J    | 0.0250          | mg/l  | SW846 6010C       |
| Antimony               | 0.0028  | J    | 0.0060          | mg/l  | SW846 6010C       |
| Arsenic                | 0.00270 | J    | 0.00400         | mg/l  | SW846 6010C       |
| Barium                 | 0.128   |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium                | 0.0004  | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium                | 61.6    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium               | 0.0016  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper                 | 0.0134  |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                   | 0.0716  |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium              | 10.5    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese              | 0.122   |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel                 | 0.0106  |      | 0.0050          | mg/l  | SW846 6010C       |
| Potassium              | 5.16    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium                 | 65.1    |      | 0.250           | mg/l  | SW846 6010C       |
| Vanadium               | 0.0044  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                   | 0.0038  | J    | 0.0050          | mg/l  | SW846 6010C       |
| cis-1,2-Dichloroethene | 1.53    |      | 1.00            | µg/l  | SW846 8260C       |
| Trichloroethene        | 2.01    |      | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44621-02**Client ID:** 130110-MW-08DR

| Parameter              | Result  | Flag | Reporting Limit | Units | Analytical Method |
|------------------------|---------|------|-----------------|-------|-------------------|
| Chloride               | 249     |      | 15.0            | mg/L  | E300.0            |
| Nitrate as Nitrogen    | 1.02    |      | 0.05            | mg/L  | E300.0            |
| Sulfate                | 54.8    |      | 3.0             | mg/L  | E300.0            |
| Total Organic Carbon   | 4.21    |      | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum               | 0.0364  |      | 0.0250          | mg/l  | SW846 6010C       |
| Arsenic                | 0.00175 | J    | 0.00400         | mg/l  | SW846 6010C       |
| Barium                 | 0.0158  |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium                | 0.0011  | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium                | 46.1    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium               | 0.0014  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Cobalt                 | 0.0010  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper                 | 0.0098  |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                   | 2.81    |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium              | 11.9    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese              | 0.329   |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel                 | 0.0046  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Potassium              | 6.95    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium                 | 161     |      | 0.250           | mg/l  | SW846 6010C       |
| Zinc                   | 0.0034  | J    | 0.0050          | mg/l  | SW846 6010C       |
| cis-1,2-Dichloroethene | 5.25    | D    | 5.00            | µg/l  | SW846 8260C       |
| Tetrachloroethene      | 725     | D, E | 5.00            | µg/l  | SW846 8260C       |
| Trichloroethene        | 5.20    | D    | 5.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44621-02RE1**Client ID:** 130110-MW-08DR

| Parameter         | Result | Flag | Reporting Limit | Units | Analytical Method |
|-------------------|--------|------|-----------------|-------|-------------------|
| Tetrachloroethene | 690    | D    | 20.0            | µg/l  | SW846 8260C       |

Lab ID: SC44621-03

Client ID: 130110-MW-09SR

| Parameter            | Result  | Flag | Reporting Limit | Units | Analytical Method |
|----------------------|---------|------|-----------------|-------|-------------------|
| Chloride             | 23.6    |      | 3.0             | mg/L  | E300.0            |
| Nitrate as Nitrogen  | 0.34    |      | 0.05            | mg/L  | E300.0            |
| Sulfate              | 4.4     |      | 3.0             | mg/L  | E300.0            |
| Total Organic Carbon | 343     |      | GS1, D50.0      | mg/l  | SM5310B (00, 11)  |
| Aluminum             | 1.16    |      | 0.0250          | mg/l  | SW846 6010C       |
| Antimony             | 0.0056  | J    | 0.0060          | mg/l  | SW846 6010C       |
| Arsenic              | 0.01440 |      | 0.00400         | mg/l  | SW846 6010C       |
| Barium               | 0.822   |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium              | 0.0006  | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium              | 3.22    |      | 0.100           | mg/l  | SW846 6010C       |
| Chromium             | 0.0114  |      | 0.0050          | mg/l  | SW846 6010C       |
| Cobalt               | 0.0018  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Copper               | 1.00    |      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                 | 1.79    |      | 0.0150          | mg/l  | SW846 6010C       |
| Lead                 | 0.0104  |      | 0.0075          | mg/l  | SW846 6010C       |
| Magnesium            | 2.17    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese            | 0.0260  |      | 0.0020          | mg/l  | SW846 6010C       |
| Nickel               | 0.0038  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Potassium            | 3.86    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium               | 17.0    |      | 0.250           | mg/l  | SW846 6010C       |
| Vanadium             | 0.0114  |      | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                 | 0.626   |      | 0.0050          | mg/l  | SW846 6010C       |
| 2-Butanone (MEK)     | 1.47    | J    | 2.00            | µg/l  | SW846 8260C       |
| Acetone              | 9.09    | J    | 10.0            | µg/l  | SW846 8260C       |
| Carbon disulfide     | 0.77    | J    | 2.00            | µg/l  | SW846 8260C       |
| Ethanol              | 847     |      | 200             | µg/l  | SW846 8260C       |
| Styrene              | 0.53    | J    | 1.00            | µg/l  | SW846 8260C       |

Lab ID: SC44621-04

Client ID: 130110-MW-09DR

| Parameter              | Result  | Flag       | Reporting Limit | Units | Analytical Method |
|------------------------|---------|------------|-----------------|-------|-------------------|
| Chloride               | 35.5    |            | 3.0             | mg/L  | E300.0            |
| Nitrate as Nitrogen    | 0.22    |            | 0.05            | mg/L  | E300.0            |
| Sulfate                | 4.3     |            | 3.0             | mg/L  | E300.0            |
| Sulfide                | 0.07    |            | 0.05            | mg/L  | SM4500S-D-00,-11  |
| Total Organic Carbon   | 230     | GS1, D50.0 |                 | mg/l  | SM5310B (00, 11)  |
| Aluminum               | 1.77    |            | 0.0250          | mg/l  | SW846 6010C       |
| Antimony               | 0.0016  | J          | 0.0060          | mg/l  | SW846 6010C       |
| Arsenic                | 0.01600 |            | 0.00400         | mg/l  | SW846 6010C       |
| Barium                 | 0.458   |            | 0.0050          | mg/l  | SW846 6010C       |
| Beryllium              | 0.0003  | J          | 0.0020          | mg/l  | SW846 6010C       |
| Cadmium                | 0.0009  | J          | 0.0025          | mg/l  | SW846 6010C       |
| Calcium                | 10.9    |            | 0.100           | mg/l  | SW846 6010C       |
| Chromium               | 0.0177  |            | 0.0050          | mg/l  | SW846 6010C       |
| Cobalt                 | 0.0038  | J          | 0.0050          | mg/l  | SW846 6010C       |
| Copper                 | 1.35    |            | 0.0050          | mg/l  | SW846 6010C       |
| Iron                   | 6.00    |            | 0.0150          | mg/l  | SW846 6010C       |
| Lead                   | 0.0134  |            | 0.0075          | mg/l  | SW846 6010C       |
| Magnesium              | 3.55    |            | 0.0100          | mg/l  | SW846 6010C       |
| Manganese              | 0.113   |            | 0.0020          | mg/l  | SW846 6010C       |
| Nickel                 | 0.0081  |            | 0.0050          | mg/l  | SW846 6010C       |
| Potassium              | 3.59    |            | 0.500           | mg/l  | SW846 6010C       |
| Sodium                 | 24.8    |            | 0.250           | mg/l  | SW846 6010C       |
| Vanadium               | 0.0067  |            | 0.0050          | mg/l  | SW846 6010C       |
| Zinc                   | 0.640   |            | 0.0050          | mg/l  | SW846 6010C       |
| 2-Butanone (MEK)       | 1.07    | J          | 2.00            | µg/l  | SW846 8260C       |
| Acetone                | 7.41    | J          | 10.0            | µg/l  | SW846 8260C       |
| cis-1,2-Dichloroethene | 112     | E          | 1.00            | µg/l  | SW846 8260C       |
| Ethanol                | 682     |            | 200             | µg/l  | SW846 8260C       |
| Tetrachloroethene      | 4.23    |            | 1.00            | µg/l  | SW846 8260C       |
| Trichloroethene        | 12.4    |            | 1.00            | µg/l  | SW846 8260C       |
| Vinyl chloride         | 21.5    |            | 1.00            | µg/l  | SW846 8260C       |

Lab ID: SC44621-04RE1

Client ID: 130110-MW-09DR

| Parameter              | Result | Flag | Reporting Limit | Units | Analytical Method |
|------------------------|--------|------|-----------------|-------|-------------------|
| cis-1,2-Dichloroethene | 84.2   | D    | 5.00            | µg/l  | SW846 8260C       |
| Ethanol                | 572    | J, D | 1000            | µg/l  | SW846 8260C       |
| Tetrachloroethene      | 3.40   | J, D | 5.00            | µg/l  | SW846 8260C       |
| Trichloroethene        | 9.15   | D    | 5.00            | µg/l  | SW846 8260C       |
| Vinyl chloride         | 15.8   | D    | 5.00            | µg/l  | SW846 8260C       |

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

130110-MW-08SR

SC44621-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:40

Received

09-Mar-18

| <u>CAS No.</u>                           | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>        |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Volatile Organic Compounds by SW846 8260 |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Prepared by method SW846 5030 Water MS   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                  | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 67-64-1                                  | Acetone                                    | < 0.80        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                 | Acrylonitrile                              | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                  | Benzene                                    | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                 | Bromobenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                  | Bromochloromethane                         | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                  | Bromodichloromethane                       | < 0.42        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                  | Bromoform                                  | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                  | Bromomethane                               | < 0.90        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                  | 2-Butanone (MEK)                           | < 1.07        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                 | n-Butylbenzene                             | < 0.41        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                 | sec-Butylbenzene                           | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                  | tert-Butylbenzene                          | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                  | Carbon disulfide                           | < 0.41        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                  | Carbon tetrachloride                       | < 0.44        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                 | Chlorobenzene                              | < 0.25        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                  | Chloroethane                               | < 0.59        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                  | Chloroform                                 | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                  | Chloromethane                              | < 0.37        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                  | 2-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                 | 4-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                  | 1,2-Dibromo-3-chloropropane                | < 0.86        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                 | Dibromochloromethane                       | < 0.32        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                 | 1,2-Dibromoethane (EDB)                    | < 0.20        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                  | Dibromomethane                             | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                  | 1,2-Dichlorobenzene                        | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                 | 1,3-Dichlorobenzene                        | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                 | 1,4-Dichlorobenzene                        | < 0.27        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                  | Dichlorodifluoromethane (Freon12)          | < 0.58        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                  | 1,1-Dichloroethane                         | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                 | 1,2-Dichloroethane                         | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                  | 1,1-Dichloroethene                         | < 0.69        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                 | cis-1,2-Dichloroethene                     | 1.53          |             | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                 | trans-1,2-Dichloroethene                   | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                  | 1,2-Dichloropropane                        | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                 | 1,3-Dichloropropane                        | < 0.21        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                 | 2,2-Dichloropropane                        | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                 | 1,1-Dichloropropene                        | < 0.58        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                               | cis-1,3-Dichloropropene                    | < 0.36        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                               | trans-1,3-Dichloropropene                  | < 0.35        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                 | Ethylbenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                  | Hexachlorobutadiene                        | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                 | 2-Hexanone (MBK)                           | < 0.53        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-08SR

SC44621-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:40

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 0.24        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 0.52        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 0.66        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 0.35        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 0.40        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.33        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 0.57        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 0.51        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | 2.01          |             | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 0.43        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 0.47        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 0.38        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 1.06        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 0.37        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 5.90        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 11.4        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 0.82        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 30.9        | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |    |  |          |   |   |   |   |   |
|------------|-----------------------|----|--|----------|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 96 |  | 70-130 % | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 93 |  | 70-130 % | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 85 |  | 70-130 % | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 89 |  | 70-130 % | " | " | " | " | " |

Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Sample Identification

130110-MW-08SR

SC44621-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:40

Received

09-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

09-Mar-18

JS

1803317

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |         |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|---------|---------|---|
| 7440-22-4 | Silver    | < 0.0006 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 16-Mar-18 | 16-Mar-18 | SJR/TBC | 1803493 | X |
| 7429-90-5 | Aluminum  | 0.0203   | J | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "       | "       | X |
| 7440-38-2 | Arsenic   | 0.00270  | J | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "       | "       | X |
| 7440-39-3 | Barium    | 0.128    |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "       | "       | X |
| 7440-41-7 | Beryllium | < 0.0003 | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "       | "       | X |
| 7440-70-2 | Calcium   | 61.6     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "       | "       | X |
| 7440-43-9 | Cadmium   | 0.0004   | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "       | "       | X |
| 7440-48-4 | Cobalt    | < 0.0008 | U | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "       | "       | X |
| 7440-47-3 | Chromium  | 0.0016   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7440-50-8 | Copper    | 0.0134   |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "       | "       | X |
| 7439-89-6 | Iron      | 0.0716   |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "       | "       | X |
| 7440-09-7 | Potassium | 5.16     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "       | "       | X |
| 7439-95-4 | Magnesium | 10.5     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "       | "       | X |
| 7439-96-5 | Manganese | 0.122    |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "       | "       | X |
| 7440-23-5 | Sodium    | 65.1     |   | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "       | "       | X |
| 7440-02-0 | Nickel    | 0.0106   |   | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7439-92-1 | Lead      | < 0.0062 | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "       | "       | X |
| 7440-36-0 | Antimony  | 0.0028   | J | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |
| 7782-49-2 | Selenium  | < 0.0042 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "       | "       | X |
| 7440-28-0 | Thallium  | < 0.0021 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "       | "       | X |
| 7440-62-2 | Vanadium  | 0.0044   | J | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "       | "       | X |
| 7440-66-6 | Zinc      | 0.0038   | J | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00013 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 16-Mar-18 | ABW | 1803494 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

Total Organic Carbon

12.2

mg/l

1.00

0.238

1

SM5310B (00,  
11)

20-Mar-18

20-Mar-18

RLT

1803769

X

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.16 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 16-Mar-18 | 16-Mar-18 | SAD | 1803637 |  |
| 74-84-0 | Ethane  | < 3.48 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 4.58 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Subcontracted AnalysesPrepared by method 422554

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |                     |      |    |      |      |      |   |        |                    |                    |       |         |  |
|------------|---------------------|------|----|------|------|------|---|--------|--------------------|--------------------|-------|---------|--|
| 14797-55-8 | Nitrate as Nitrogen | 0.02 | J1 | mg/L | 0.05 | 0.01 | 1 | E300.0 | 08-Mar-18<br>11:40 | 09-Mar-18<br>22:03 | CT007 | 422554A |  |
| 14808-79-8 | Sulfate             | 22.5 |    | mg/L | 3.0  | 3    | 1 | "      | "                  | "                  | "     | "       |  |
| 16887-00-6 | Chloride            | 130  |    | mg/L | 6.0  | 6    | 2 | "      | "                  | 10-Mar-18<br>02:01 | "     | "       |  |

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Sample Identification**130110-MW-08SR**

SC44621-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:40

Received

09-Mar-18

| <i>CAS No.</i> | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Subcontracted Analyses**Prepared by method 422729-SM4500S-D*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |         |        |    |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 | U1 | mg/L | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 14-Mar-18 | 14-Mar-18<br>12:37 | CT007 | 422729A |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|



Sample Identification

130110-MW-08DR

SC44621-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:24

Received

09-Mar-18

| CAS No.                                  | Analyte(s)                                 | Result | Flag | Units | *RDL | MDL  | Dilution | Method Ref. | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|------------------------------------------|--------------------------------------------|--------|------|-------|------|------|----------|-------------|-----------|-----------|---------|---------|-------|
| Volatile Organic Compounds               |                                            |        |      |       |      |      |          |             |           |           |         |         |       |
| Volatile Organic Compounds by SW846 8260 |                                            |        | GS1  |       |      |      |          |             |           |           |         |         |       |
| Prepared by method SW846 5030 Water MS   |                                            |        |      |       |      |      |          |             |           |           |         |         |       |
| 76-13-1                                  | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 2.66 | U, D | µg/l  | 5.00 | 2.66 | 5        | SW846 8260C | 12-Mar-18 | 13-Mar-18 | GMA     | 1803373 | X     |
| 67-64-1                                  | Acetone                                    | < 4.02 | U, D | µg/l  | 50.0 | 4.02 | 5        | "           | "         | "         | "       | "       | X     |
| 107-13-1                                 | Acrylonitrile                              | < 2.33 | U, D | µg/l  | 2.50 | 2.33 | 5        | "           | "         | "         | "       | "       | X     |
| 71-43-2                                  | Benzene                                    | < 1.42 | U, D | µg/l  | 5.00 | 1.42 | 5        | "           | "         | "         | "       | "       | X     |
| 108-86-1                                 | Bromobenzene                               | < 1.66 | U, D | µg/l  | 5.00 | 1.66 | 5        | "           | "         | "         | "       | "       | X     |
| 74-97-5                                  | Bromochloromethane                         | < 1.69 | U, D | µg/l  | 5.00 | 1.69 | 5        | "           | "         | "         | "       | "       | X     |
| 75-27-4                                  | Bromodichloromethane                       | < 2.08 | U, D | µg/l  | 2.50 | 2.08 | 5        | "           | "         | "         | "       | "       | X     |
| 75-25-2                                  | Bromoform                                  | < 2.12 | U, D | µg/l  | 5.00 | 2.12 | 5        | "           | "         | "         | "       | "       | X     |
| 74-83-9                                  | Bromomethane                               | < 4.48 | U, D | µg/l  | 10.0 | 4.48 | 5        | "           | "         | "         | "       | "       | X     |
| 78-93-3                                  | 2-Butanone (MEK)                           | < 5.35 | U, D | µg/l  | 10.0 | 5.35 | 5        | "           | "         | "         | "       | "       | X     |
| 104-51-8                                 | n-Butylbenzene                             | < 2.06 | U, D | µg/l  | 5.00 | 2.06 | 5        | "           | "         | "         | "       | "       | X     |
| 135-98-8                                 | sec-Butylbenzene                           | < 1.63 | U, D | µg/l  | 5.00 | 1.63 | 5        | "           | "         | "         | "       | "       | X     |
| 98-06-6                                  | tert-Butylbenzene                          | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 75-15-0                                  | Carbon disulfide                           | < 2.06 | U, D | µg/l  | 10.0 | 2.06 | 5        | "           | "         | "         | "       | "       | X     |
| 56-23-5                                  | Carbon tetrachloride                       | < 2.18 | U, D | µg/l  | 5.00 | 2.18 | 5        | "           | "         | "         | "       | "       | X     |
| 108-90-7                                 | Chlorobenzene                              | < 1.24 | U, D | µg/l  | 5.00 | 1.24 | 5        | "           | "         | "         | "       | "       | X     |
| 75-00-3                                  | Chloroethane                               | < 2.94 | U, D | µg/l  | 10.0 | 2.94 | 5        | "           | "         | "         | "       | "       | X     |
| 67-66-3                                  | Chloroform                                 | < 1.63 | U, D | µg/l  | 5.00 | 1.63 | 5        | "           | "         | "         | "       | "       | X     |
| 74-87-3                                  | Chloromethane                              | < 1.84 | U, D | µg/l  | 10.0 | 1.84 | 5        | "           | "         | "         | "       | "       | X     |
| 95-49-8                                  | 2-Chlorotoluene                            | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 106-43-4                                 | 4-Chlorotoluene                            | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 96-12-8                                  | 1,2-Dibromo-3-chloropropane                | < 4.32 | U, D | µg/l  | 10.0 | 4.32 | 5        | "           | "         | "         | "       | "       | X     |
| 124-48-1                                 | Dibromochloromethane                       | < 1.58 | U, D | µg/l  | 2.50 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 106-93-4                                 | 1,2-Dibromoethane (EDB)                    | < 1.01 | U, D | µg/l  | 2.50 | 1.01 | 5        | "           | "         | "         | "       | "       | X     |
| 74-95-3                                  | Dibromomethane                             | < 1.54 | U, D | µg/l  | 5.00 | 1.54 | 5        | "           | "         | "         | "       | "       | X     |
| 95-50-1                                  | 1,2-Dichlorobenzene                        | < 1.38 | U, D | µg/l  | 5.00 | 1.38 | 5        | "           | "         | "         | "       | "       | X     |
| 541-73-1                                 | 1,3-Dichlorobenzene                        | < 1.57 | U, D | µg/l  | 5.00 | 1.57 | 5        | "           | "         | "         | "       | "       | X     |
| 106-46-7                                 | 1,4-Dichlorobenzene                        | < 1.36 | U, D | µg/l  | 5.00 | 1.36 | 5        | "           | "         | "         | "       | "       | X     |
| 75-71-8                                  | Dichlorodifluoromethane (Freon12)          | < 2.92 | U, D | µg/l  | 10.0 | 2.92 | 5        | "           | "         | "         | "       | "       | X     |
| 75-34-3                                  | 1,1-Dichloroethane                         | < 1.62 | U, D | µg/l  | 5.00 | 1.62 | 5        | "           | "         | "         | "       | "       | X     |
| 107-06-2                                 | 1,2-Dichloroethane                         | < 1.38 | U, D | µg/l  | 5.00 | 1.38 | 5        | "           | "         | "         | "       | "       | X     |
| 75-35-4                                  | 1,1-Dichloroethene                         | < 3.46 | U, D | µg/l  | 5.00 | 3.46 | 5        | "           | "         | "         | "       | "       | X     |
| 156-59-2                                 | cis-1,2-Dichloroethene                     | 5.25   | D    | µg/l  | 5.00 | 1.64 | 5        | "           | "         | "         | "       | "       | X     |
| 156-60-5                                 | trans-1,2-Dichloroethene                   | < 1.88 | U, D | µg/l  | 5.00 | 1.88 | 5        | "           | "         | "         | "       | "       | X     |
| 78-87-5                                  | 1,2-Dichloropropane                        | < 1.46 | U, D | µg/l  | 5.00 | 1.46 | 5        | "           | "         | "         | "       | "       | X     |
| 142-28-9                                 | 1,3-Dichloropropane                        | < 1.07 | U, D | µg/l  | 5.00 | 1.07 | 5        | "           | "         | "         | "       | "       | X     |
| 594-20-7                                 | 2,2-Dichloropropane                        | < 2.09 | U, D | µg/l  | 5.00 | 2.09 | 5        | "           | "         | "         | "       | "       | X     |
| 563-58-6                                 | 1,1-Dichloropropene                        | < 2.89 | U, D | µg/l  | 5.00 | 2.89 | 5        | "           | "         | "         | "       | "       | X     |
| 10061-01-5                               | cis-1,3-Dichloropropene                    | < 1.80 | U, D | µg/l  | 2.50 | 1.80 | 5        | "           | "         | "         | "       | "       | X     |
| 10061-02-6                               | trans-1,3-Dichloropropene                  | < 1.74 | U, D | µg/l  | 2.50 | 1.74 | 5        | "           | "         | "         | "       | "       | X     |
| 100-41-4                                 | Ethylbenzene                               | < 1.64 | U, D | µg/l  | 5.00 | 1.64 | 5        | "           | "         | "         | "       | "       | X     |
| 87-68-3                                  | Hexachlorobutadiene                        | < 2.35 | U, D | µg/l  | 2.50 | 2.35 | 5        | "           | "         | "         | "       | "       | X     |
| 591-78-6                                 | 2-Hexanone (MBK)                           | < 2.64 | U, D | µg/l  | 10.0 | 2.64 | 5        | "           | "         | "         | "       | "       | X     |

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Sample Identification

130110-MW-08DR

SC44621-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:24

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                   |               |             | GS1          |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.80        | U, D        | µg/l         | 5.00        | 1.80       | 5               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.40        | U, D        | µg/l         | 5.00        | 1.40       | 5               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.18        | U, D        | µg/l         | 5.00        | 1.18       | 5               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.58        | U, D        | µg/l         | 10.0        | 2.58       | 5               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 3.30        | U, D        | µg/l         | 10.0        | 3.30       | 5               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.76        | U, D        | µg/l         | 5.00        | 1.76       | 5               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.72        | U, D        | µg/l         | 5.00        | 1.72       | 5               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 2.02        | U, D        | µg/l         | 5.00        | 2.02       | 5               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.89        | U, D        | µg/l         | 5.00        | 1.89       | 5               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 1.65        | U, D        | µg/l         | 2.50        | 1.65       | 5               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | 725           | D, E        | µg/l         | 5.00        | 2.85       | 5               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.50        | U, D        | µg/l         | 5.00        | 1.50       | 5               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.88        | U, D        | µg/l         | 5.00        | 1.88       | 5               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.89        | U, D        | µg/l         | 5.00        | 1.89       | 5               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.48        | U, D        | µg/l         | 5.00        | 1.48       | 5               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 2.54        | U, D        | µg/l         | 5.00        | 2.54       | 5               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.65        | U, D        | µg/l         | 5.00        | 1.65       | 5               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | 5.20          | D           | µg/l         | 5.00        | 2.48       | 5               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 2.44        | U, D        | µg/l         | 5.00        | 2.44       | 5               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.46        | U, D        | µg/l         | 5.00        | 1.46       | 5               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.78        | U, D        | µg/l         | 5.00        | 1.78       | 5               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 2.16        | U, D        | µg/l         | 5.00        | 2.16       | 5               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 2.36        | U, D        | µg/l         | 5.00        | 2.36       | 5               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 1.90        | U, D        | µg/l         | 10.0        | 1.90       | 5               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.42        | U, D        | µg/l         | 5.00        | 1.42       | 5               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 5.30        | U, D        | µg/l         | 10.0        | 5.30       | 5               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.87        | U, D        | µg/l         | 5.00        | 1.87       | 5               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 2.46        | U, D        | µg/l         | 5.00        | 2.46       | 5               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.66        | U, D        | µg/l         | 5.00        | 1.66       | 5               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.43        | U, D        | µg/l         | 5.00        | 1.43       | 5               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 29.5        | U, D        | µg/l         | 50.0        | 29.5       | 5               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 57.0        | U, D        | µg/l         | 100         | 57.0       | 5               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 4.10        | U, D        | µg/l         | 25.0        | 4.10       | 5               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 154         | U, D        | µg/l         | 1000        | 154        | 5               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |    |  |          |   |   |   |   |   |   |
|------------|-----------------------|----|--|----------|---|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 95 |  | 70-130 % | " | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 93 |  | 70-130 % | " | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 85 |  | 70-130 % | " | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 89 |  | 70-130 % | " | " | " | " | " | " |

Re-analysis of Volatile Organic Compounds  
by SW846 8260

GS1

Prepared by method SW846 5030 Water MS

|         |                                                |        |      |      |      |      |    |             |           |           |     |         |   |
|---------|------------------------------------------------|--------|------|------|------|------|----|-------------|-----------|-----------|-----|---------|---|
| 76-13-1 | 1,1,2-Trichlorotrifluoroetha<br>ne (Freon 113) | < 10.6 | U, D | µg/l | 20.0 | 10.6 | 20 | SW846 8260C | 14-Mar-18 | 14-Mar-18 | GMA | 1803478 | X |
|---------|------------------------------------------------|--------|------|------|------|------|----|-------------|-----------|-----------|-----|---------|---|

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-08DR

SC44621-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:24

Received

09-Mar-18

| CAS No.                                                 | Analyte(s)                           | Result | Flag | Units | *RDL | MDL  | Dilution | Method Ref. | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|---------------------------------------------------------|--------------------------------------|--------|------|-------|------|------|----------|-------------|-----------|-----------|---------|---------|-------|
| Volatile Organic Compounds                              |                                      |        |      |       |      |      |          |             |           |           |         |         |       |
| Re-analysis of Volatile Organic Compounds by SW846 8260 |                                      |        | GS1  |       |      |      |          |             |           |           |         |         |       |
| 67-64-1                                                 | Acetone                              | < 16.1 | U, D | µg/l  | 200  | 16.1 | 20       | SW846 8260C | 14-Mar-18 | 14-Mar-18 | GMA     | 1803478 | X     |
| 107-13-1                                                | Acrylonitrile                        | < 9.32 | U, D | µg/l  | 10.0 | 9.32 | 20       | "           | "         | "         | "       | "       | X     |
| 71-43-2                                                 | Benzene                              | < 5.68 | U, D | µg/l  | 20.0 | 5.68 | 20       | "           | "         | "         | "       | "       | X     |
| 108-86-1                                                | Bromobenzene                         | < 6.64 | U, D | µg/l  | 20.0 | 6.64 | 20       | "           | "         | "         | "       | "       | X     |
| 74-97-5                                                 | Bromochloromethane                   | < 6.76 | U, D | µg/l  | 20.0 | 6.76 | 20       | "           | "         | "         | "       | "       | X     |
| 75-27-4                                                 | Bromodichloromethane                 | < 8.34 | U, D | µg/l  | 10.0 | 8.34 | 20       | "           | "         | "         | "       | "       | X     |
| 75-25-2                                                 | Bromoform                            | < 8.50 | U, D | µg/l  | 20.0 | 8.50 | 20       | "           | "         | "         | "       | "       | X     |
| 74-83-9                                                 | Bromomethane                         | < 17.9 | U, D | µg/l  | 40.0 | 17.9 | 20       | "           | "         | "         | "       | "       | X     |
| 78-93-3                                                 | 2-Butanone (MEK)                     | < 21.4 | U, D | µg/l  | 40.0 | 21.4 | 20       | "           | "         | "         | "       | "       | X     |
| 104-51-8                                                | n-Butylbenzene                       | < 8.24 | U, D | µg/l  | 20.0 | 8.24 | 20       | "           | "         | "         | "       | "       | X     |
| 135-98-8                                                | sec-Butylbenzene                     | < 6.52 | U, D | µg/l  | 20.0 | 6.52 | 20       | "           | "         | "         | "       | "       | X     |
| 98-06-6                                                 | tert-Butylbenzene                    | < 6.30 | U, D | µg/l  | 20.0 | 6.30 | 20       | "           | "         | "         | "       | "       | X     |
| 75-15-0                                                 | Carbon disulfide                     | < 8.24 | U, D | µg/l  | 40.0 | 8.24 | 20       | "           | "         | "         | "       | "       | X     |
| 56-23-5                                                 | Carbon tetrachloride                 | < 8.74 | U, D | µg/l  | 20.0 | 8.74 | 20       | "           | "         | "         | "       | "       | X     |
| 108-90-7                                                | Chlorobenzene                        | < 4.98 | U, D | µg/l  | 20.0 | 4.98 | 20       | "           | "         | "         | "       | "       | X     |
| 75-00-3                                                 | Chloroethane                         | < 11.8 | U, D | µg/l  | 40.0 | 11.8 | 20       | "           | "         | "         | "       | "       | X     |
| 67-66-3                                                 | Chloroform                           | < 6.52 | U, D | µg/l  | 20.0 | 6.52 | 20       | "           | "         | "         | "       | "       | X     |
| 74-87-3                                                 | Chloromethane                        | < 7.36 | U, D | µg/l  | 40.0 | 7.36 | 20       | "           | "         | "         | "       | "       | X     |
| 95-49-8                                                 | 2-Chlorotoluene                      | < 6.32 | U, D | µg/l  | 20.0 | 6.32 | 20       | "           | "         | "         | "       | "       | X     |
| 106-43-4                                                | 4-Chlorotoluene                      | < 6.32 | U, D | µg/l  | 20.0 | 6.32 | 20       | "           | "         | "         | "       | "       | X     |
| 96-12-8                                                 | 1,2-Dibromo-3-chloroprop<br>ane      | < 17.3 | U, D | µg/l  | 40.0 | 17.3 | 20       | "           | "         | "         | "       | "       | X     |
| 124-48-1                                                | Dibromochloromethane                 | < 6.34 | U, D | µg/l  | 10.0 | 6.34 | 20       | "           | "         | "         | "       | "       | X     |
| 106-93-4                                                | 1,2-Dibromoethane (EDB)              | < 4.04 | U, D | µg/l  | 10.0 | 4.04 | 20       | "           | "         | "         | "       | "       | X     |
| 74-95-3                                                 | Dibromomethane                       | < 6.18 | U, D | µg/l  | 20.0 | 6.18 | 20       | "           | "         | "         | "       | "       | X     |
| 95-50-1                                                 | 1,2-Dichlorobenzene                  | < 5.54 | U, D | µg/l  | 20.0 | 5.54 | 20       | "           | "         | "         | "       | "       | X     |
| 541-73-1                                                | 1,3-Dichlorobenzene                  | < 6.28 | U, D | µg/l  | 20.0 | 6.28 | 20       | "           | "         | "         | "       | "       | X     |
| 106-46-7                                                | 1,4-Dichlorobenzene                  | < 5.44 | U, D | µg/l  | 20.0 | 5.44 | 20       | "           | "         | "         | "       | "       | X     |
| 75-71-8                                                 | Dichlorodifluoromethane<br>(Freon12) | < 11.7 | U, D | µg/l  | 40.0 | 11.7 | 20       | "           | "         | "         | "       | "       | X     |
| 75-34-3                                                 | 1,1-Dichloroethane                   | < 6.46 | U, D | µg/l  | 20.0 | 6.46 | 20       | "           | "         | "         | "       | "       | X     |
| 107-06-2                                                | 1,2-Dichloroethane                   | < 5.54 | U, D | µg/l  | 20.0 | 5.54 | 20       | "           | "         | "         | "       | "       | X     |
| 75-35-4                                                 | 1,1-Dichloroethene                   | < 13.9 | U, D | µg/l  | 20.0 | 13.9 | 20       | "           | "         | "         | "       | "       | X     |
| 156-59-2                                                | cis-1,2-Dichloroethene               | < 6.54 | U, D | µg/l  | 20.0 | 6.54 | 20       | "           | "         | "         | "       | "       | X     |
| 156-60-5                                                | trans-1,2-Dichloroethene             | < 7.54 | U, D | µg/l  | 20.0 | 7.54 | 20       | "           | "         | "         | "       | "       | X     |
| 78-87-5                                                 | 1,2-Dichloropropane                  | < 5.84 | U, D | µg/l  | 20.0 | 5.84 | 20       | "           | "         | "         | "       | "       | X     |
| 142-28-9                                                | 1,3-Dichloropropane                  | < 4.28 | U, D | µg/l  | 20.0 | 4.28 | 20       | "           | "         | "         | "       | "       | X     |
| 594-20-7                                                | 2,2-Dichloropropane                  | < 8.36 | U, D | µg/l  | 20.0 | 8.36 | 20       | "           | "         | "         | "       | "       | X     |
| 563-58-6                                                | 1,1-Dichloropropene                  | < 11.6 | U, D | µg/l  | 20.0 | 11.6 | 20       | "           | "         | "         | "       | "       | X     |
| 10061-01-5                                              | cis-1,3-Dichloropropene              | < 7.18 | U, D | µg/l  | 10.0 | 7.18 | 20       | "           | "         | "         | "       | "       | X     |
| 10061-02-6                                              | trans-1,3-Dichloropropene            | < 6.94 | U, D | µg/l  | 10.0 | 6.94 | 20       | "           | "         | "         | "       | "       | X     |
| 100-41-4                                                | Ethylbenzene                         | < 6.58 | U, D | µg/l  | 20.0 | 6.58 | 20       | "           | "         | "         | "       | "       | X     |
| 87-68-3                                                 | Hexachlorobutadiene                  | < 9.40 | U, D | µg/l  | 10.0 | 9.40 | 20       | "           | "         | "         | "       | "       | X     |
| 591-78-6                                                | 2-Hexanone (MBK)                     | < 10.6 | U, D | µg/l  | 40.0 | 10.6 | 20       | "           | "         | "         | "       | "       | X     |
| 98-82-8                                                 | Isopropylbenzene                     | < 7.20 | U, D | µg/l  | 20.0 | 7.20 | 20       | "           | "         | "         | "       | "       | X     |

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## Sample Identification

130110-MW-08DR

SC44621-02

## Client Project #

1490709

## Matrix

Ground Water

## Collection Date/Time

08-Mar-18 12:24

## Received

09-Mar-18

| CAS No.                                                 | Analyte(s)                        | Result | Flag | Units | *RDL | MDL  | Dilution | Method Ref. | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|---------------------------------------------------------|-----------------------------------|--------|------|-------|------|------|----------|-------------|-----------|-----------|---------|---------|-------|
| Volatile Organic Compounds                              |                                   |        |      |       |      |      |          |             |           |           |         |         |       |
| Re-analysis of Volatile Organic Compounds by SW846 8260 |                                   |        | GS1  |       |      |      |          |             |           |           |         |         |       |
| 99-87-6                                                 | 4-Isopropyltoluene                | < 5.58 | U, D | µg/l  | 20.0 | 5.58 | 20       | SW846 8260C | 14-Mar-18 | 14-Mar-18 | GMA     | 1803478 | X     |
| 1634-04-4                                               | Methyl tert-butyl ether           | < 4.74 | U, D | µg/l  | 20.0 | 4.74 | 20       | "           | "         | "         | "       | "       | X     |
| 108-10-1                                                | 4-Methyl-2-pentanone (MIBK)       | < 10.3 | U, D | µg/l  | 40.0 | 10.3 | 20       | "           | "         | "         | "       | "       | X     |
| 75-09-2                                                 | Methylene chloride                | < 13.2 | U, D | µg/l  | 40.0 | 13.2 | 20       | "           | "         | "         | "       | "       | X     |
| 91-20-3                                                 | Naphthalene                       | < 7.02 | U, D | µg/l  | 20.0 | 7.02 | 20       | "           | "         | "         | "       | "       | X     |
| 103-65-1                                                | n-Propylbenzene                   | < 6.88 | U, D | µg/l  | 20.0 | 6.88 | 20       | "           | "         | "         | "       | "       | X     |
| 100-42-5                                                | Styrene                           | < 8.10 | U, D | µg/l  | 20.0 | 8.10 | 20       | "           | "         | "         | "       | "       | X     |
| 630-20-6                                                | 1,1,1,2-Tetrachloroethane         | < 7.56 | U, D | µg/l  | 20.0 | 7.56 | 20       | "           | "         | "         | "       | "       | X     |
| 79-34-5                                                 | 1,1,2,2-Tetrachloroethane         | < 6.60 | U, D | µg/l  | 10.0 | 6.60 | 20       | "           | "         | "         | "       | "       | X     |
| 127-18-4                                                | Tetrachloroethene                 | 690    | D    | µg/l  | 20.0 | 11.4 | 20       | "           | "         | "         | "       | "       | X     |
| 108-88-3                                                | Toluene                           | < 5.98 | U, D | µg/l  | 20.0 | 5.98 | 20       | "           | "         | "         | "       | "       | X     |
| 87-61-6                                                 | 1,2,3-Trichlorobenzene            | < 7.54 | U, D | µg/l  | 20.0 | 7.54 | 20       | "           | "         | "         | "       | "       | X     |
| 120-82-1                                                | 1,2,4-Trichlorobenzene            | < 7.56 | U, D | µg/l  | 20.0 | 7.56 | 20       | "           | "         | "         | "       | "       | X     |
| 108-70-3                                                | 1,3,5-Trichlorobenzene            | < 5.92 | U, D | µg/l  | 20.0 | 5.92 | 20       | "           | "         | "         | "       | "       |       |
| 71-55-6                                                 | 1,1,1-Trichloroethane             | < 10.2 | U, D | µg/l  | 20.0 | 10.2 | 20       | "           | "         | "         | "       | "       | X     |
| 79-00-5                                                 | 1,1,2-Trichloroethane             | < 6.60 | U, D | µg/l  | 20.0 | 6.60 | 20       | "           | "         | "         | "       | "       | X     |
| 79-01-6                                                 | Trichloroethene                   | < 9.94 | U, D | µg/l  | 20.0 | 9.94 | 20       | "           | "         | "         | "       | "       | X     |
| 75-69-4                                                 | Trichlorofluoromethane (Freon 11) | < 9.74 | U, D | µg/l  | 20.0 | 9.74 | 20       | "           | "         | "         | "       | "       | X     |
| 96-18-4                                                 | 1,2,3-Trichloropropane            | < 5.84 | U, D | µg/l  | 20.0 | 5.84 | 20       | "           | "         | "         | "       | "       | X     |
| 95-63-6                                                 | 1,2,4-Trimethylbenzene            | < 7.10 | U, D | µg/l  | 20.0 | 7.10 | 20       | "           | "         | "         | "       | "       | X     |
| 108-67-8                                                | 1,3,5-Trimethylbenzene            | < 8.62 | U, D | µg/l  | 20.0 | 8.62 | 20       | "           | "         | "         | "       | "       | X     |
| 75-01-4                                                 | Vinyl chloride                    | < 9.44 | U, D | µg/l  | 20.0 | 9.44 | 20       | "           | "         | "         | "       | "       | X     |
| 179601-23-1                                             | m,p-Xylene                        | < 7.60 | U, D | µg/l  | 40.0 | 7.60 | 20       | "           | "         | "         | "       | "       | X     |
| 95-47-6                                                 | o-Xylene                          | < 5.66 | U, D | µg/l  | 20.0 | 5.66 | 20       | "           | "         | "         | "       | "       | X     |
| 109-99-9                                                | Tetrahydrofuran                   | < 21.2 | U, D | µg/l  | 40.0 | 21.2 | 20       | "           | "         | "         | "       | "       |       |
| 60-29-7                                                 | Ethyl ether                       | < 7.48 | U, D | µg/l  | 20.0 | 7.48 | 20       | "           | "         | "         | "       | "       | X     |
| 994-05-8                                                | Tert-amyl methyl ether            | < 9.86 | U, D | µg/l  | 20.0 | 9.86 | 20       | "           | "         | "         | "       | "       | X     |
| 637-92-3                                                | Ethyl tert-butyl ether            | < 6.64 | U, D | µg/l  | 20.0 | 6.64 | 20       | "           | "         | "         | "       | "       | X     |
| 108-20-3                                                | Di-isopropyl ether                | < 5.72 | U, D | µg/l  | 20.0 | 5.72 | 20       | "           | "         | "         | "       | "       | X     |
| 75-65-0                                                 | Tert-Butanol / butyl alcohol      | < 118  | U, D | µg/l  | 200  | 118  | 20       | "           | "         | "         | "       | "       | X     |
| 123-91-1                                                | 1,4-Dioxane                       | < 228  | U, D | µg/l  | 400  | 228  | 20       | "           | "         | "         | "       | "       | X     |
| 110-57-6                                                | trans-1,4-Dichloro-2-buten e      | < 16.4 | U, D | µg/l  | 100  | 16.4 | 20       | "           | "         | "         | "       | "       | X     |
| 64-17-5                                                 | Ethanol                           | < 618  | U, D | µg/l  | 4000 | 618  | 20       | "           | "         | "         | "       | "       | X     |

## Surrogate recoveries:

|            |                       |     |  |          |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 93  |  | 70-130 % | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 98  |  | 70-130 % | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 113 |  | 70-130 % | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 97  |  | 70-130 % | " | " | " | " | " |

## Total Metals by EPA 200/6000 Series Methods

## Prepared by method General Prep-Metal

|              |                                 |     |   |                      |           |    |         |
|--------------|---------------------------------|-----|---|----------------------|-----------|----|---------|
| Preservation | Field Preserved; pH<2 confirmed | N/A | 1 | EPA 200/6000 methods | 09-Mar-18 | JS | 1803317 |
|--------------|---------------------------------|-----|---|----------------------|-----------|----|---------|

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Sample Identification

130110-MW-08DR

SC44621-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:24

Received

09-Mar-18

| <i>CAS No.</i> | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |         |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|---------|---------|---|
| 7440-22-4 | Silver    | < 0.0006 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 16-Mar-18 | 16-Mar-18 | SJR/TBC | 1803493 | X |
| 7429-90-5 | Aluminum  | 0.0364   |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "       | "       | X |
| 7440-38-2 | Arsenic   | 0.00175  | J | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "       | "       | X |
| 7440-39-3 | Barium    | 0.0158   |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "       | "       | X |
| 7440-41-7 | Beryllium | < 0.0003 | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "       | "       | X |
| 7440-70-2 | Calcium   | 46.1     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "       | "       | X |
| 7440-43-9 | Cadmium   | 0.0011   | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "       | "       | X |
| 7440-48-4 | Cobalt    | 0.0010   | J | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "       | "       | X |
| 7440-47-3 | Chromium  | 0.0014   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7440-50-8 | Copper    | 0.0098   |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "       | "       | X |
| 7439-89-6 | Iron      | 2.81     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "       | "       | X |
| 7440-09-7 | Potassium | 6.95     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "       | "       | X |
| 7439-95-4 | Magnesium | 11.9     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "       | "       | X |
| 7439-96-5 | Manganese | 0.329    |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "       | "       | X |
| 7440-23-5 | Sodium    | 161      |   | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "       | "       | X |
| 7440-02-0 | Nickel    | 0.0046   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7439-92-1 | Lead      | < 0.0062 | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "       | "       | X |
| 7440-36-0 | Antimony  | < 0.0016 | U | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |
| 7782-49-2 | Selenium  | < 0.0042 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "       | "       | X |
| 7440-28-0 | Thallium  | < 0.0021 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "       | "       | X |
| 7440-62-2 | Vanadium  | < 0.0011 | U | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "       | "       | X |
| 7440-66-6 | Zinc      | 0.0034   | J | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00013 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 16-Mar-18 | ABW | 1803494 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|                      |      |  |  |      |      |       |   |                     |           |           |     |         |   |
|----------------------|------|--|--|------|------|-------|---|---------------------|-----------|-----------|-----|---------|---|
| Total Organic Carbon | 4.21 |  |  | mg/l | 1.00 | 0.238 | 1 | SM5310B (00,<br>11) | 20-Mar-18 | 20-Mar-18 | RLT | 1803769 | X |
|----------------------|------|--|--|------|------|-------|---|---------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.16 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 16-Mar-18 | 16-Mar-18 | SAD | 1803637 |  |
| 74-84-0 | Ethane  | < 3.48 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 4.58 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Subcontracted AnalysesPrepared by method 422554*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |                     |      |  |      |      |      |   |        |                    |                    |       |         |  |
|------------|---------------------|------|--|------|------|------|---|--------|--------------------|--------------------|-------|---------|--|
| 14797-55-8 | Nitrate as Nitrogen | 1.02 |  | mg/L | 0.05 | 0.01 | 1 | E300.0 | 08-Mar-18<br>12:24 | 09-Mar-18<br>22:14 | CT007 | 422554A |  |
| 14808-79-8 | Sulfate             | 54.8 |  | mg/L | 3.0  | 3    | 1 | "      | "                  | "                  | "     | "       |  |
| 16887-00-6 | Chloride            | 249  |  | mg/L | 15.0 | 15   | 5 | "      | "                  | 10-Mar-18<br>02:33 | "     | "       |  |

Prepared by method 422729-SM4500S-D*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |         |        |    |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 | U1 | mg/L | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 14-Mar-18 | 14-Mar-18<br>12:38 | CT007 | 422729A |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

*This laboratory report is not valid without an authorized signature on the cover page.*

## Sample Identification

130110-MW-09SR

SC44621-03

## Client Project #

1490709

## Matrix

Ground Water

## Collection Date/Time

08-Mar-18 11:37

## Received

09-Mar-18

| CAS No.                                  | Analyte(s)                                 | Result | Flag | Units | *RDL | MDL  | Dilution | Method Ref. | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|------------------------------------------|--------------------------------------------|--------|------|-------|------|------|----------|-------------|-----------|-----------|---------|---------|-------|
| <b>Volatile Organic Compounds</b>        |                                            |        |      |       |      |      |          |             |           |           |         |         |       |
| Volatile Organic Compounds by SW846 8260 |                                            |        |      |       |      |      |          |             |           |           |         |         |       |
| Prepared by method SW846 5030 Water MS   |                                            |        |      |       |      |      |          |             |           |           |         |         |       |
| 76-13-1                                  | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53 | U    | µg/l  | 1.00 | 0.53 | 1        | SW846 8260C | 12-Mar-18 | 13-Mar-18 | GMA     | 1803373 | X     |
| 67-64-1                                  | Acetone                                    | 9.09   | J    | µg/l  | 10.0 | 0.80 | 1        | "           | "         | "         | "       | "       | X     |
| 107-13-1                                 | Acrylonitrile                              | < 0.47 | U    | µg/l  | 0.50 | 0.47 | 1        | "           | "         | "         | "       | "       | X     |
| 71-43-2                                  | Benzene                                    | < 0.28 | U    | µg/l  | 1.00 | 0.28 | 1        | "           | "         | "         | "       | "       | X     |
| 108-86-1                                 | Bromobenzene                               | < 0.33 | U    | µg/l  | 1.00 | 0.33 | 1        | "           | "         | "         | "       | "       | X     |
| 74-97-5                                  | Bromochloromethane                         | < 0.34 | U    | µg/l  | 1.00 | 0.34 | 1        | "           | "         | "         | "       | "       | X     |
| 75-27-4                                  | Bromodichloromethane                       | < 0.42 | U    | µg/l  | 0.50 | 0.42 | 1        | "           | "         | "         | "       | "       | X     |
| 75-25-2                                  | Bromoform                                  | < 0.42 | U    | µg/l  | 1.00 | 0.42 | 1        | "           | "         | "         | "       | "       | X     |
| 74-83-9                                  | Bromomethane                               | < 0.90 | U    | µg/l  | 2.00 | 0.90 | 1        | "           | "         | "         | "       | "       | X     |
| 78-93-3                                  | 2-Butanone (MEK)                           | 1.47   | J    | µg/l  | 2.00 | 1.07 | 1        | "           | "         | "         | "       | "       | X     |
| 104-51-8                                 | n-Butylbenzene                             | < 0.41 | U    | µg/l  | 1.00 | 0.41 | 1        | "           | "         | "         | "       | "       | X     |
| 135-98-8                                 | sec-Butylbenzene                           | < 0.33 | U    | µg/l  | 1.00 | 0.33 | 1        | "           | "         | "         | "       | "       | X     |
| 98-06-6                                  | tert-Butylbenzene                          | < 0.32 | U    | µg/l  | 1.00 | 0.32 | 1        | "           | "         | "         | "       | "       | X     |
| 75-15-0                                  | Carbon disulfide                           | 0.77   | J    | µg/l  | 2.00 | 0.41 | 1        | "           | "         | "         | "       | "       | X     |
| 56-23-5                                  | Carbon tetrachloride                       | < 0.44 | U    | µg/l  | 1.00 | 0.44 | 1        | "           | "         | "         | "       | "       | X     |
| 108-90-7                                 | Chlorobenzene                              | < 0.25 | U    | µg/l  | 1.00 | 0.25 | 1        | "           | "         | "         | "       | "       | X     |
| 75-00-3                                  | Chloroethane                               | < 0.59 | U    | µg/l  | 2.00 | 0.59 | 1        | "           | "         | "         | "       | "       | X     |
| 67-66-3                                  | Chloroform                                 | < 0.33 | U    | µg/l  | 1.00 | 0.33 | 1        | "           | "         | "         | "       | "       | X     |
| 74-87-3                                  | Chloromethane                              | < 0.37 | U    | µg/l  | 2.00 | 0.37 | 1        | "           | "         | "         | "       | "       | X     |
| 95-49-8                                  | 2-Chlorotoluene                            | < 0.32 | U    | µg/l  | 1.00 | 0.32 | 1        | "           | "         | "         | "       | "       | X     |
| 106-43-4                                 | 4-Chlorotoluene                            | < 0.32 | U    | µg/l  | 1.00 | 0.32 | 1        | "           | "         | "         | "       | "       | X     |
| 96-12-8                                  | 1,2-Dibromo-3-chloropropane                | < 0.86 | U    | µg/l  | 2.00 | 0.86 | 1        | "           | "         | "         | "       | "       | X     |
| 124-48-1                                 | Dibromochloromethane                       | < 0.32 | U    | µg/l  | 0.50 | 0.32 | 1        | "           | "         | "         | "       | "       | X     |
| 106-93-4                                 | 1,2-Dibromoethane (EDB)                    | < 0.20 | U    | µg/l  | 0.50 | 0.20 | 1        | "           | "         | "         | "       | "       | X     |
| 74-95-3                                  | Dibromomethane                             | < 0.31 | U    | µg/l  | 1.00 | 0.31 | 1        | "           | "         | "         | "       | "       | X     |
| 95-50-1                                  | 1,2-Dichlorobenzene                        | < 0.28 | U    | µg/l  | 1.00 | 0.28 | 1        | "           | "         | "         | "       | "       | X     |
| 541-73-1                                 | 1,3-Dichlorobenzene                        | < 0.31 | U    | µg/l  | 1.00 | 0.31 | 1        | "           | "         | "         | "       | "       | X     |
| 106-46-7                                 | 1,4-Dichlorobenzene                        | < 0.27 | U    | µg/l  | 1.00 | 0.27 | 1        | "           | "         | "         | "       | "       | X     |
| 75-71-8                                  | Dichlorodifluoromethane (Freon12)          | < 0.58 | U    | µg/l  | 2.00 | 0.58 | 1        | "           | "         | "         | "       | "       | X     |
| 75-34-3                                  | 1,1-Dichloroethane                         | < 0.32 | U    | µg/l  | 1.00 | 0.32 | 1        | "           | "         | "         | "       | "       | X     |
| 107-06-2                                 | 1,2-Dichloroethane                         | < 0.28 | U    | µg/l  | 1.00 | 0.28 | 1        | "           | "         | "         | "       | "       | X     |
| 75-35-4                                  | 1,1-Dichloroethene                         | < 0.69 | U    | µg/l  | 1.00 | 0.69 | 1        | "           | "         | "         | "       | "       | X     |
| 156-59-2                                 | cis-1,2-Dichloroethene                     | < 0.33 | U    | µg/l  | 1.00 | 0.33 | 1        | "           | "         | "         | "       | "       | X     |
| 156-60-5                                 | trans-1,2-Dichloroethene                   | < 0.38 | U    | µg/l  | 1.00 | 0.38 | 1        | "           | "         | "         | "       | "       | X     |
| 78-87-5                                  | 1,2-Dichloropropane                        | < 0.29 | U    | µg/l  | 1.00 | 0.29 | 1        | "           | "         | "         | "       | "       | X     |
| 142-28-9                                 | 1,3-Dichloropropane                        | < 0.21 | U    | µg/l  | 1.00 | 0.21 | 1        | "           | "         | "         | "       | "       | X     |
| 594-20-7                                 | 2,2-Dichloropropane                        | < 0.42 | U    | µg/l  | 1.00 | 0.42 | 1        | "           | "         | "         | "       | "       | X     |
| 563-58-6                                 | 1,1-Dichloropropene                        | < 0.58 | U    | µg/l  | 1.00 | 0.58 | 1        | "           | "         | "         | "       | "       | X     |
| 10061-01-5                               | cis-1,3-Dichloropropene                    | < 0.36 | U    | µg/l  | 0.50 | 0.36 | 1        | "           | "         | "         | "       | "       | X     |
| 10061-02-6                               | trans-1,3-Dichloropropene                  | < 0.35 | U    | µg/l  | 0.50 | 0.35 | 1        | "           | "         | "         | "       | "       | X     |
| 100-41-4                                 | Ethylbenzene                               | < 0.33 | U    | µg/l  | 1.00 | 0.33 | 1        | "           | "         | "         | "       | "       | X     |
| 87-68-3                                  | Hexachlorobutadiene                        | < 0.47 | U    | µg/l  | 0.50 | 0.47 | 1        | "           | "         | "         | "       | "       | X     |
| 591-78-6                                 | 2-Hexanone (MBK)                           | < 0.53 | U    | µg/l  | 2.00 | 0.53 | 1        | "           | "         | "         | "       | "       | X     |

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

130110-MW-09SR

SC44621-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:37

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 0.24        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 0.52        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 0.66        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 0.35        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | 0.53          | J           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.33        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 0.57        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 0.51        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 0.50        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 0.43        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 0.47        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 0.38        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 1.06        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 0.37        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 5.90        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 11.4        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 0.82        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | 847           |             | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |    |          |   |   |   |   |   |
|------------|-----------------------|----|----------|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 95 | 70-130 % | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 93 | 70-130 % | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 87 | 70-130 % | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 89 | 70-130 % | " | " | " | " | " |

Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Sample Identification

130110-MW-09SR

SC44621-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:37

Received

09-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

Preservation

Field  
Preserved;  
pH<2  
confirmed

N/A

1

EPA 200/6000  
methods

09-Mar-18

JS

1803317

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |         |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|---------|---------|---|
| 7440-22-4 | Silver    | < 0.0006 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 16-Mar-18 | 16-Mar-18 | SJR/TBC | 1803493 | X |
| 7429-90-5 | Aluminum  | 1.16     |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "       | "       | X |
| 7440-38-2 | Arsenic   | 0.01440  |   | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "       | "       | X |
| 7440-39-3 | Barium    | 0.822    |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "       | "       | X |
| 7440-41-7 | Beryllium | < 0.0003 | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "       | "       | X |
| 7440-70-2 | Calcium   | 3.22     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "       | "       | X |
| 7440-43-9 | Cadmium   | 0.0006   | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "       | "       | X |
| 7440-48-4 | Cobalt    | 0.0018   | J | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "       | "       | X |
| 7440-47-3 | Chromium  | 0.0114   |   | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7440-50-8 | Copper    | 1.00     |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "       | "       | X |
| 7439-89-6 | Iron      | 1.79     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "       | "       | X |
| 7440-09-7 | Potassium | 3.86     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "       | "       | X |
| 7439-95-4 | Magnesium | 2.17     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "       | "       | X |
| 7439-96-5 | Manganese | 0.0260   |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "       | "       | X |
| 7440-23-5 | Sodium    | 17.0     |   | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "       | "       | X |
| 7440-02-0 | Nickel    | 0.0038   | J | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7439-92-1 | Lead      | 0.0104   |   | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "       | "       | X |
| 7440-36-0 | Antimony  | 0.0056   | J | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |
| 7782-49-2 | Selenium  | < 0.0042 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "       | "       | X |
| 7440-28-0 | Thallium  | < 0.0021 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "       | "       | X |
| 7440-62-2 | Vanadium  | 0.0114   |   | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "       | "       | X |
| 7440-66-6 | Zinc      | 0.626    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00013 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 16-Mar-18 | ABW | 1803494 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|                      |     |        |      |      |      |    |                     |           |           |     |         |   |
|----------------------|-----|--------|------|------|------|----|---------------------|-----------|-----------|-----|---------|---|
| Total Organic Carbon | 343 | GS1, D | mg/l | 50.0 | 11.9 | 50 | SM5310B (00,<br>11) | 21-Mar-18 | 21-Mar-18 | RLT | 1803825 | X |
|----------------------|-----|--------|------|------|------|----|---------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.16 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 19-Mar-18 | 19-Mar-18 | SAD | 1803813 |  |
| 74-84-0 | Ethane  | < 3.48 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 4.58 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Subcontracted AnalysesPrepared by method 422554

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |                     |      |  |      |      |      |   |        |                    |                    |       |         |  |
|------------|---------------------|------|--|------|------|------|---|--------|--------------------|--------------------|-------|---------|--|
| 16887-00-6 | Chloride            | 23.6 |  | mg/L | 3.0  | 3    | 1 | E300.0 | 08-Mar-18<br>11:37 | 09-Mar-18<br>22:24 | CT007 | 422554A |  |
| 14797-55-8 | Nitrate as Nitrogen | 0.34 |  | mg/L | 0.05 | 0.01 | 1 | "      | "                  | "                  | "     | "       |  |
| 14808-79-8 | Sulfate             | 4.4  |  | mg/L | 3.0  | 3    | 1 | "      | "                  | "                  | "     | "       |  |

Prepared by method 422729-SM4500S-D

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Sample Identification**130110-MW-09SR**

SC44621-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 11:37

Received

09-Mar-18

| <i>CAS No.</i> | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Subcontracted Analyses**Prepared by method 422729-SM4500S-D*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |         |        |    |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 | U1 | mg/L | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 14-Mar-18 | 14-Mar-18<br>12:39 | CT007 | 422729A |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

Sample Identification

130110-MW-09DR

SC44621-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:20

Received

09-Mar-18

| <u>CAS No.</u>                           | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>        |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Volatile Organic Compounds by SW846 8260 |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Prepared by method SW846 5030 Water MS   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                  | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 14-Mar-18       | 14-Mar-18       | GMA            | 1803478      | X            |
| 67-64-1                                  | Acetone                                    | 7.41          | J           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                 | Acrylonitrile                              | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                  | Benzene                                    | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                 | Bromobenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                  | Bromochloromethane                         | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                  | Bromodichloromethane                       | < 0.42        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                  | Bromoform                                  | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                  | Bromomethane                               | < 0.90        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                  | 2-Butanone (MEK)                           | 1.07          | J           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                 | n-Butylbenzene                             | < 0.41        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                 | sec-Butylbenzene                           | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                  | tert-Butylbenzene                          | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                  | Carbon disulfide                           | < 0.41        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                  | Carbon tetrachloride                       | < 0.44        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                 | Chlorobenzene                              | < 0.25        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                  | Chloroethane                               | < 0.59        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                  | Chloroform                                 | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                  | Chloromethane                              | < 0.37        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                  | 2-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                 | 4-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                  | 1,2-Dibromo-3-chloropropane                | < 0.86        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                 | Dibromochloromethane                       | < 0.32        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                 | 1,2-Dibromoethane (EDB)                    | < 0.20        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                  | Dibromomethane                             | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                  | 1,2-Dichlorobenzene                        | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                 | 1,3-Dichlorobenzene                        | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                 | 1,4-Dichlorobenzene                        | < 0.27        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                  | Dichlorodifluoromethane (Freon12)          | < 0.58        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                  | 1,1-Dichloroethane                         | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                 | 1,2-Dichloroethane                         | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                  | 1,1-Dichloroethene                         | < 0.69        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                 | cis-1,2-Dichloroethene                     | 112           | E           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                 | trans-1,2-Dichloroethene                   | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                  | 1,2-Dichloropropane                        | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                 | 1,3-Dichloropropane                        | < 0.21        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                 | 2,2-Dichloropropane                        | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                 | 1,1-Dichloropropene                        | < 0.58        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                               | cis-1,3-Dichloropropene                    | < 0.36        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                               | trans-1,3-Dichloropropene                  | < 0.35        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                 | Ethylbenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                  | Hexachlorobutadiene                        | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                 | 2-Hexanone (MBK)                           | < 0.53        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

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Sample Identification

130110-MW-09DR

SC44621-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:20

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 14-Mar-18       | 14-Mar-18       | GMA            | 1803478      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 0.24        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 0.52        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 0.66        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 0.35        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 0.40        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.33        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | 4.23          |             | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 0.51        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | 12.4          |             | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 0.43        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | 21.5          |             | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 0.38        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 1.06        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 0.37        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 5.90        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 11.4        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 0.82        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | 682           |             | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |  |          |  |   |   |   |   |   |   |  |
|------------|-----------------------|-----|--|--|----------|--|---|---|---|---|---|---|--|
| 460-00-4   | 4-Bromofluorobenzene  | 92  |  |  | 70-130 % |  | " | " | " | " | " | " |  |
| 2037-26-5  | Toluene-d8            | 98  |  |  | 70-130 % |  | " | " | " | " | " | " |  |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 113 |  |  | 70-130 % |  | " | " | " | " | " | " |  |
| 1868-53-7  | Dibromofluoromethane  | 99  |  |  | 70-130 % |  | " | " | " | " | " | " |  |

Re-analysis of Volatile Organic Compounds  
by SW846 8260

GS1

Prepared by method SW846 5030 Water MS

|         |                                                |        |      |      |      |      |   |             |           |           |     |         |   |
|---------|------------------------------------------------|--------|------|------|------|------|---|-------------|-----------|-----------|-----|---------|---|
| 76-13-1 | 1,1,2-Trichlorotrifluoroetha<br>ne (Freon 113) | < 2.66 | U, D | µg/l | 5.00 | 2.66 | 5 | SW846 8260C | 15-Mar-18 | 16-Mar-18 | GMA | 1803567 | X |
|---------|------------------------------------------------|--------|------|------|------|------|---|-------------|-----------|-----------|-----|---------|---|

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## Sample Identification

130110-MW-09DR

SC44621-04

## Client Project #

1490709

## Matrix

Ground Water

## Collection Date/Time

08-Mar-18 12:20

## Received

09-Mar-18

| CAS No.                                                 | Analyte(s)                           | Result | Flag | Units | *RDL | MDL  | Dilution | Method Ref. | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|---------------------------------------------------------|--------------------------------------|--------|------|-------|------|------|----------|-------------|-----------|-----------|---------|---------|-------|
| Volatile Organic Compounds                              |                                      |        |      |       |      |      |          |             |           |           |         |         |       |
| Re-analysis of Volatile Organic Compounds by SW846 8260 |                                      |        | GS1  |       |      |      |          |             |           |           |         |         |       |
| 67-64-1                                                 | Acetone                              | < 4.02 | U, D | µg/l  | 50.0 | 4.02 | 5        | SW846 8260C | 15-Mar-18 | 16-Mar-18 | GMA     | 1803567 | X     |
| 107-13-1                                                | Acrylonitrile                        | < 2.33 | U, D | µg/l  | 2.50 | 2.33 | 5        | "           | "         | "         | "       | "       | X     |
| 71-43-2                                                 | Benzene                              | < 1.42 | U, D | µg/l  | 5.00 | 1.42 | 5        | "           | "         | "         | "       | "       | X     |
| 108-86-1                                                | Bromobenzene                         | < 1.66 | U, D | µg/l  | 5.00 | 1.66 | 5        | "           | "         | "         | "       | "       | X     |
| 74-97-5                                                 | Bromochloromethane                   | < 1.69 | U, D | µg/l  | 5.00 | 1.69 | 5        | "           | "         | "         | "       | "       | X     |
| 75-27-4                                                 | Bromodichloromethane                 | < 2.08 | U, D | µg/l  | 2.50 | 2.08 | 5        | "           | "         | "         | "       | "       | X     |
| 75-25-2                                                 | Bromoform                            | < 2.12 | U, D | µg/l  | 5.00 | 2.12 | 5        | "           | "         | "         | "       | "       | X     |
| 74-83-9                                                 | Bromomethane                         | < 4.48 | U, D | µg/l  | 10.0 | 4.48 | 5        | "           | "         | "         | "       | "       | X     |
| 78-93-3                                                 | 2-Butanone (MEK)                     | < 5.35 | U, D | µg/l  | 10.0 | 5.35 | 5        | "           | "         | "         | "       | "       | X     |
| 104-51-8                                                | n-Butylbenzene                       | < 2.06 | U, D | µg/l  | 5.00 | 2.06 | 5        | "           | "         | "         | "       | "       | X     |
| 135-98-8                                                | sec-Butylbenzene                     | < 1.63 | U, D | µg/l  | 5.00 | 1.63 | 5        | "           | "         | "         | "       | "       | X     |
| 98-06-6                                                 | tert-Butylbenzene                    | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 75-15-0                                                 | Carbon disulfide                     | < 2.06 | U, D | µg/l  | 10.0 | 2.06 | 5        | "           | "         | "         | "       | "       | X     |
| 56-23-5                                                 | Carbon tetrachloride                 | < 2.18 | U, D | µg/l  | 5.00 | 2.18 | 5        | "           | "         | "         | "       | "       | X     |
| 108-90-7                                                | Chlorobenzene                        | < 1.24 | U, D | µg/l  | 5.00 | 1.24 | 5        | "           | "         | "         | "       | "       | X     |
| 75-00-3                                                 | Chloroethane                         | < 2.94 | U, D | µg/l  | 10.0 | 2.94 | 5        | "           | "         | "         | "       | "       | X     |
| 67-66-3                                                 | Chloroform                           | < 1.63 | U, D | µg/l  | 5.00 | 1.63 | 5        | "           | "         | "         | "       | "       | X     |
| 74-87-3                                                 | Chloromethane                        | < 1.84 | U, D | µg/l  | 10.0 | 1.84 | 5        | "           | "         | "         | "       | "       | X     |
| 95-49-8                                                 | 2-Chlorotoluene                      | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 106-43-4                                                | 4-Chlorotoluene                      | < 1.58 | U, D | µg/l  | 5.00 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 96-12-8                                                 | 1,2-Dibromo-3-chloroprop<br>ane      | < 4.32 | U, D | µg/l  | 10.0 | 4.32 | 5        | "           | "         | "         | "       | "       | X     |
| 124-48-1                                                | Dibromochloromethane                 | < 1.58 | U, D | µg/l  | 2.50 | 1.58 | 5        | "           | "         | "         | "       | "       | X     |
| 106-93-4                                                | 1,2-Dibromoethane (EDB)              | < 1.01 | U, D | µg/l  | 2.50 | 1.01 | 5        | "           | "         | "         | "       | "       | X     |
| 74-95-3                                                 | Dibromomethane                       | < 1.54 | U, D | µg/l  | 5.00 | 1.54 | 5        | "           | "         | "         | "       | "       | X     |
| 95-50-1                                                 | 1,2-Dichlorobenzene                  | < 1.38 | U, D | µg/l  | 5.00 | 1.38 | 5        | "           | "         | "         | "       | "       | X     |
| 541-73-1                                                | 1,3-Dichlorobenzene                  | < 1.57 | U, D | µg/l  | 5.00 | 1.57 | 5        | "           | "         | "         | "       | "       | X     |
| 106-46-7                                                | 1,4-Dichlorobenzene                  | < 1.36 | U, D | µg/l  | 5.00 | 1.36 | 5        | "           | "         | "         | "       | "       | X     |
| 75-71-8                                                 | Dichlorodifluoromethane<br>(Freon12) | < 2.92 | U, D | µg/l  | 10.0 | 2.92 | 5        | "           | "         | "         | "       | "       | X     |
| 75-34-3                                                 | 1,1-Dichloroethane                   | < 1.62 | U, D | µg/l  | 5.00 | 1.62 | 5        | "           | "         | "         | "       | "       | X     |
| 107-06-2                                                | 1,2-Dichloroethane                   | < 1.38 | U, D | µg/l  | 5.00 | 1.38 | 5        | "           | "         | "         | "       | "       | X     |
| 75-35-4                                                 | 1,1-Dichloroethene                   | < 3.46 | U, D | µg/l  | 5.00 | 3.46 | 5        | "           | "         | "         | "       | "       | X     |
| 156-59-2                                                | cis-1,2-Dichloroethene               | 84.2   | D    | µg/l  | 5.00 | 1.64 | 5        | "           | "         | "         | "       | "       | X     |
| 156-60-5                                                | trans-1,2-Dichloroethene             | < 1.88 | U, D | µg/l  | 5.00 | 1.88 | 5        | "           | "         | "         | "       | "       | X     |
| 78-87-5                                                 | 1,2-Dichloropropane                  | < 1.46 | U, D | µg/l  | 5.00 | 1.46 | 5        | "           | "         | "         | "       | "       | X     |
| 142-28-9                                                | 1,3-Dichloropropane                  | < 1.07 | U, D | µg/l  | 5.00 | 1.07 | 5        | "           | "         | "         | "       | "       | X     |
| 594-20-7                                                | 2,2-Dichloropropane                  | < 2.09 | U, D | µg/l  | 5.00 | 2.09 | 5        | "           | "         | "         | "       | "       | X     |
| 563-58-6                                                | 1,1-Dichloropropene                  | < 2.89 | U, D | µg/l  | 5.00 | 2.89 | 5        | "           | "         | "         | "       | "       | X     |
| 10061-01-5                                              | cis-1,3-Dichloropropene              | < 1.80 | U, D | µg/l  | 2.50 | 1.80 | 5        | "           | "         | "         | "       | "       | X     |
| 10061-02-6                                              | trans-1,3-Dichloropropene            | < 1.74 | U, D | µg/l  | 2.50 | 1.74 | 5        | "           | "         | "         | "       | "       | X     |
| 100-41-4                                                | Ethylbenzene                         | < 1.64 | U, D | µg/l  | 5.00 | 1.64 | 5        | "           | "         | "         | "       | "       | X     |
| 87-68-3                                                 | Hexachlorobutadiene                  | < 2.35 | U, D | µg/l  | 2.50 | 2.35 | 5        | "           | "         | "         | "       | "       | X     |
| 591-78-6                                                | 2-Hexanone (MBK)                     | < 2.64 | U, D | µg/l  | 10.0 | 2.64 | 5        | "           | "         | "         | "       | "       | X     |
| 98-82-8                                                 | Isopropylbenzene                     | < 1.80 | U, D | µg/l  | 5.00 | 1.80 | 5        | "           | "         | "         | "       | "       | X     |

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Sample Identification

130110-MW-09DR

SC44621-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:20

Received

09-Mar-18

| CAS No.                                                 | Analyte(s)                        | Result                          | Flag | Units | *RDL     | MDL  | Dilution | Method Ref.          | Prepared  | Analyzed  | Analyst | Batch   | Cert. |
|---------------------------------------------------------|-----------------------------------|---------------------------------|------|-------|----------|------|----------|----------------------|-----------|-----------|---------|---------|-------|
| Volatile Organic Compounds                              |                                   |                                 |      |       |          |      |          |                      |           |           |         |         |       |
| Re-analysis of Volatile Organic Compounds by SW846 8260 |                                   |                                 | GS1  |       |          |      |          |                      |           |           |         |         |       |
| 99-87-6                                                 | 4-Isopropyltoluene                | < 1.40                          | U, D | µg/l  | 5.00     | 1.40 | 5        | SW846 8260C          | 15-Mar-18 | 16-Mar-18 | GMA     | 1803567 | X     |
| 1634-04-4                                               | Methyl tert-butyl ether           | < 1.18                          | U, D | µg/l  | 5.00     | 1.18 | 5        | "                    | "         | "         | "       | "       | X     |
| 108-10-1                                                | 4-Methyl-2-pentanone (MIBK)       | < 2.58                          | U, D | µg/l  | 10.0     | 2.58 | 5        | "                    | "         | "         | "       | "       | X     |
| 75-09-2                                                 | Methylene chloride                | < 3.30                          | U, D | µg/l  | 10.0     | 3.30 | 5        | "                    | "         | "         | "       | "       | X     |
| 91-20-3                                                 | Naphthalene                       | < 1.76                          | U, D | µg/l  | 5.00     | 1.76 | 5        | "                    | "         | "         | "       | "       | X     |
| 103-65-1                                                | n-Propylbenzene                   | < 1.72                          | U, D | µg/l  | 5.00     | 1.72 | 5        | "                    | "         | "         | "       | "       | X     |
| 100-42-5                                                | Styrene                           | < 2.02                          | U, D | µg/l  | 5.00     | 2.02 | 5        | "                    | "         | "         | "       | "       | X     |
| 630-20-6                                                | 1,1,1,2-Tetrachloroethane         | < 1.89                          | U, D | µg/l  | 5.00     | 1.89 | 5        | "                    | "         | "         | "       | "       | X     |
| 79-34-5                                                 | 1,1,2,2-Tetrachloroethane         | < 1.65                          | U, D | µg/l  | 2.50     | 1.65 | 5        | "                    | "         | "         | "       | "       | X     |
| 127-18-4                                                | Tetrachloroethene                 | 3.40                            | J, D | µg/l  | 5.00     | 2.85 | 5        | "                    | "         | "         | "       | "       | X     |
| 108-88-3                                                | Toluene                           | < 1.50                          | U, D | µg/l  | 5.00     | 1.50 | 5        | "                    | "         | "         | "       | "       | X     |
| 87-61-6                                                 | 1,2,3-Trichlorobenzene            | < 1.88                          | U, D | µg/l  | 5.00     | 1.88 | 5        | "                    | "         | "         | "       | "       | X     |
| 120-82-1                                                | 1,2,4-Trichlorobenzene            | < 1.89                          | U, D | µg/l  | 5.00     | 1.89 | 5        | "                    | "         | "         | "       | "       | X     |
| 108-70-3                                                | 1,3,5-Trichlorobenzene            | < 1.48                          | U, D | µg/l  | 5.00     | 1.48 | 5        | "                    | "         | "         | "       | "       |       |
| 71-55-6                                                 | 1,1,1-Trichloroethane             | < 2.54                          | U, D | µg/l  | 5.00     | 2.54 | 5        | "                    | "         | "         | "       | "       | X     |
| 79-00-5                                                 | 1,1,2-Trichloroethane             | < 1.65                          | U, D | µg/l  | 5.00     | 1.65 | 5        | "                    | "         | "         | "       | "       | X     |
| 79-01-6                                                 | Trichloroethene                   | 9.15                            | D    | µg/l  | 5.00     | 2.48 | 5        | "                    | "         | "         | "       | "       | X     |
| 75-69-4                                                 | Trichlorofluoromethane (Freon 11) | < 2.44                          | U, D | µg/l  | 5.00     | 2.44 | 5        | "                    | "         | "         | "       | "       | X     |
| 96-18-4                                                 | 1,2,3-Trichloropropane            | < 1.46                          | U, D | µg/l  | 5.00     | 1.46 | 5        | "                    | "         | "         | "       | "       | X     |
| 95-63-6                                                 | 1,2,4-Trimethylbenzene            | < 1.78                          | U, D | µg/l  | 5.00     | 1.78 | 5        | "                    | "         | "         | "       | "       | X     |
| 108-67-8                                                | 1,3,5-Trimethylbenzene            | < 2.16                          | U, D | µg/l  | 5.00     | 2.16 | 5        | "                    | "         | "         | "       | "       | X     |
| 75-01-4                                                 | Vinyl chloride                    | 15.8                            | D    | µg/l  | 5.00     | 2.36 | 5        | "                    | "         | "         | "       | "       | X     |
| 179601-23-1                                             | m,p-Xylene                        | < 1.90                          | U, D | µg/l  | 10.0     | 1.90 | 5        | "                    | "         | "         | "       | "       | X     |
| 95-47-6                                                 | o-Xylene                          | < 1.42                          | U, D | µg/l  | 5.00     | 1.42 | 5        | "                    | "         | "         | "       | "       | X     |
| 109-99-9                                                | Tetrahydrofuran                   | < 5.30                          | U, D | µg/l  | 10.0     | 5.30 | 5        | "                    | "         | "         | "       | "       |       |
| 60-29-7                                                 | Ethyl ether                       | < 1.87                          | U, D | µg/l  | 5.00     | 1.87 | 5        | "                    | "         | "         | "       | "       | X     |
| 994-05-8                                                | Tert-amyl methyl ether            | < 2.46                          | U, D | µg/l  | 5.00     | 2.46 | 5        | "                    | "         | "         | "       | "       | X     |
| 637-92-3                                                | Ethyl tert-butyl ether            | < 1.66                          | U, D | µg/l  | 5.00     | 1.66 | 5        | "                    | "         | "         | "       | "       | X     |
| 108-20-3                                                | Di-isopropyl ether                | < 1.43                          | U, D | µg/l  | 5.00     | 1.43 | 5        | "                    | "         | "         | "       | "       | X     |
| 75-65-0                                                 | Tert-Butanol / butyl alcohol      | < 29.5                          | U, D | µg/l  | 50.0     | 29.5 | 5        | "                    | "         | "         | "       | "       | X     |
| 123-91-1                                                | 1,4-Dioxane                       | < 57.0                          | U, D | µg/l  | 100      | 57.0 | 5        | "                    | "         | "         | "       | "       | X     |
| 110-57-6                                                | trans-1,4-Dichloro-2-buten e      | < 4.10                          | U, D | µg/l  | 25.0     | 4.10 | 5        | "                    | "         | "         | "       | "       | X     |
| 64-17-5                                                 | Ethanol                           | 572                             | J, D | µg/l  | 1000     | 154  | 5        | "                    | "         | "         | "       | "       | X     |
| Surrogate recoveries:                                   |                                   |                                 |      |       |          |      |          |                      |           |           |         |         |       |
| 460-00-4                                                | 4-Bromofluorobenzene              | 94                              |      |       | 70-130 % |      |          | "                    | "         | "         | "       | "       |       |
| 2037-26-5                                               | Toluene-d8                        | 98                              |      |       | 70-130 % |      |          | "                    | "         | "         | "       | "       |       |
| 17060-07-0                                              | 1,2-Dichloroethane-d4             | 113                             |      |       | 70-130 % |      |          | "                    | "         | "         | "       | "       |       |
| 1868-53-7                                               | Dibromofluoromethane              | 98                              |      |       | 70-130 % |      |          | "                    | "         | "         | "       | "       |       |
| Total Metals by EPA 200/6000 Series Methods             |                                   |                                 |      |       |          |      |          |                      |           |           |         |         |       |
| Prepared by method General Prep-Metal                   |                                   |                                 |      |       |          |      |          |                      |           |           |         |         |       |
|                                                         | Preservation                      | Field Preserved; pH<2 confirmed |      | N/A   |          |      | 1        | EPA 200/6000 methods | 09-Mar-18 |           | JS      | 1803317 |       |

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Sample Identification

130110-MW-09DR

SC44621-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

08-Mar-18 12:20

Received

09-Mar-18

| <i>CAS No.</i> | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |         |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|---------|---------|---|
| 7440-22-4 | Silver    | < 0.0006 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 16-Mar-18 | 16-Mar-18 | SJR/TBC | 1803493 | X |
| 7429-90-5 | Aluminum  | 1.77     |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "       | "       | X |
| 7440-38-2 | Arsenic   | 0.01600  |   | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "       | "       | X |
| 7440-39-3 | Barium    | 0.458    |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "       | "       | X |
| 7440-41-7 | Beryllium | 0.0003   | J | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "       | "       | X |
| 7440-70-2 | Calcium   | 10.9     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "       | "       | X |
| 7440-43-9 | Cadmium   | 0.0009   | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "       | "       | X |
| 7440-48-4 | Cobalt    | 0.0038   | J | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "       | "       | X |
| 7440-47-3 | Chromium  | 0.0177   |   | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7440-50-8 | Copper    | 1.35     |   | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "       | "       | X |
| 7439-89-6 | Iron      | 6.00     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "       | "       | X |
| 7440-09-7 | Potassium | 3.59     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "       | "       | X |
| 7439-95-4 | Magnesium | 3.55     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "       | "       | X |
| 7439-96-5 | Manganese | 0.113    |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "       | "       | X |
| 7440-23-5 | Sodium    | 24.8     |   | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "       | "       | X |
| 7440-02-0 | Nickel    | 0.0081   |   | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "       | "       | X |
| 7439-92-1 | Lead      | 0.0134   |   | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "       | "       | X |
| 7440-36-0 | Antimony  | 0.0016   | J | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |
| 7782-49-2 | Selenium  | < 0.0042 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "       | "       | X |
| 7440-28-0 | Thallium  | < 0.0021 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "       | "       | X |
| 7440-62-2 | Vanadium  | 0.0067   |   | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "       | "       | X |
| 7440-66-6 | Zinc      | 0.640    |   | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "       | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |   |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00013 | U | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 14-Mar-18 | 16-Mar-18 | ABW | 1803494 | X |
|-----------|---------|-----------|---|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|                      |     |        |      |      |      |    |                     |           |           |     |         |   |
|----------------------|-----|--------|------|------|------|----|---------------------|-----------|-----------|-----|---------|---|
| Total Organic Carbon | 230 | GS1, D | mg/l | 50.0 | 11.9 | 50 | SM5310B (00,<br>11) | 21-Mar-18 | 21-Mar-18 | RLT | 1803825 | X |
|----------------------|-----|--------|------|------|------|----|---------------------|-----------|-----------|-----|---------|---|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.16 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 16-Mar-18 | 16-Mar-18 | SAD | 1803637 |  |
| 74-84-0 | Ethane  | < 3.48 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 4.58 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Subcontracted AnalysesPrepared by method 422554*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |                     |      |  |      |      |      |   |        |                    |                    |       |         |  |
|------------|---------------------|------|--|------|------|------|---|--------|--------------------|--------------------|-------|---------|--|
| 16887-00-6 | Chloride            | 35.5 |  | mg/L | 3.0  | 3    | 1 | E300.0 | 08-Mar-18<br>12:20 | 09-Mar-18<br>22:35 | CT007 | 422554A |  |
| 14797-55-8 | Nitrate as Nitrogen | 0.22 |  | mg/L | 0.05 | 0.01 | 1 | "      | "                  | "                  | "     | "       |  |
| 14808-79-8 | Sulfate             | 4.3  |  | mg/L | 3.0  | 3    | 1 | "      | "                  | "                  | "     | "       |  |

Prepared by method 422729-SM4500S-D*Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007*

|            |         |      |  |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | 0.07 |  | mg/L | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 14-Mar-18 | 14-Mar-18<br>12:40 | CT007 | 422729A |  |
|------------|---------|------|--|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

Trip Blank

SC44621-05

Client Project #

1490709

Matrix

Aqueous

Collection Date/Time

08-Mar-18 00:00

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 14-Mar-18       | 14-Mar-18       | GMA            | 1803478      | X            |
| 67-64-1                                         | Acetone                                    | < 0.80        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.42        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 0.90        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 1.07        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 0.41        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 0.41        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 0.44        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 0.25        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 0.59        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 0.37        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 0.86        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.32        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.20        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 0.31        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 0.27        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 0.58        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 0.32        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 0.69        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 0.21        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 0.42        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 0.58        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.36        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.35        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.47        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 0.53        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

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Sample Identification

Trip Blank

SC44621-05

Client Project #

1490709

Matrix

Aqueous

Collection Date/Time

08-Mar-18 00:00

Received

09-Mar-18

| <i>CAS No.</i>                           | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>        |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| Volatile Organic Compounds by SW846 8260 |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                  | Isopropylbenzene                  | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 14-Mar-18       | 14-Mar-18       | GMA            | 1803478      | X            |
| 99-87-6                                  | 4-Isopropyltoluene                | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                | Methyl tert-butyl ether           | < 0.24        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                 | 4-Methyl-2-pentanone (MIBK)       | < 0.52        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                  | Methylene chloride                | < 0.66        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                  | Naphthalene                       | < 0.35        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                 | n-Propylbenzene                   | < 0.34        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                 | Styrene                           | < 0.40        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                 | 1,1,1,2-Tetrachloroethane         | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                  | 1,1,2,2-Tetrachloroethane         | < 0.33        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                 | Tetrachloroethene                 | < 0.57        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                 | Toluene                           | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                  | 1,2,3-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                 | 1,2,4-Trichlorobenzene            | < 0.38        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                 | 1,3,5-Trichlorobenzene            | < 0.30        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                  | 1,1,1-Trichloroethane             | < 0.51        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                  | 1,1,2-Trichloroethane             | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                  | Trichloroethene                   | < 0.50        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                  | Trichlorofluoromethane (Freon 11) | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                  | 1,2,3-Trichloropropane            | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                  | 1,2,4-Trimethylbenzene            | < 0.36        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                 | 1,3,5-Trimethylbenzene            | < 0.43        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                  | Vinyl chloride                    | < 0.47        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                              | m,p-Xylene                        | < 0.38        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                  | o-Xylene                          | < 0.28        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                 | Tetrahydrofuran                   | < 1.06        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                  | Ethyl ether                       | < 0.37        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                 | Tert-amyl methyl ether            | < 0.49        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                 | Ethyl tert-butyl ether            | < 0.33        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                 | Di-isopropyl ether                | < 0.29        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                  | Tert-Butanol / butyl alcohol      | < 5.90        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                 | 1,4-Dioxane                       | < 11.4        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                 | trans-1,4-Dichloro-2-buten<br>e   | < 0.82        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                  | Ethanol                           | < 30.9        | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 93  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 99  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 114 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 97  |  | 70-130 % |  | " | " | " | " | " |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803373-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53 | U    | µg/l  | 0.53 |                                           |               |      |             |     |           |
| Acetone                                    | < 0.80 | U    | µg/l  | 0.80 |                                           |               |      |             |     |           |
| Acrylonitrile                              | < 0.47 | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| Benzene                                    | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Bromobenzene                               | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Bromochloromethane                         | < 0.34 | U    | µg/l  | 0.34 |                                           |               |      |             |     |           |
| Bromodichloromethane                       | < 0.42 | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| Bromoform                                  | < 0.42 | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| Bromomethane                               | < 0.90 | U    | µg/l  | 0.90 |                                           |               |      |             |     |           |
| 2-Butanone (MEK)                           | < 1.07 | U    | µg/l  | 1.07 |                                           |               |      |             |     |           |
| n-Butylbenzene                             | < 0.41 | U    | µg/l  | 0.41 |                                           |               |      |             |     |           |
| sec-Butylbenzene                           | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| tert-Butylbenzene                          | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| Carbon disulfide                           | < 0.41 | U    | µg/l  | 0.41 |                                           |               |      |             |     |           |
| Carbon tetrachloride                       | < 0.44 | U    | µg/l  | 0.44 |                                           |               |      |             |     |           |
| Chlorobenzene                              | < 0.25 | U    | µg/l  | 0.25 |                                           |               |      |             |     |           |
| Chloroethane                               | < 0.59 | U    | µg/l  | 0.59 |                                           |               |      |             |     |           |
| Chloroform                                 | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Chloromethane                              | < 0.37 | U    | µg/l  | 0.37 |                                           |               |      |             |     |           |
| 2-Chlorotoluene                            | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 4-Chlorotoluene                            | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | < 0.86 | U    | µg/l  | 0.86 |                                           |               |      |             |     |           |
| Dibromochloromethane                       | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                    | < 0.20 | U    | µg/l  | 0.20 |                                           |               |      |             |     |           |
| Dibromomethane                             | < 0.31 | U    | µg/l  | 0.31 |                                           |               |      |             |     |           |
| 1,2-Dichlorobenzene                        | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| 1,3-Dichlorobenzene                        | < 0.31 | U    | µg/l  | 0.31 |                                           |               |      |             |     |           |
| 1,4-Dichlorobenzene                        | < 0.27 | U    | µg/l  | 0.27 |                                           |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)          | < 0.58 | U    | µg/l  | 0.58 |                                           |               |      |             |     |           |
| 1,1-Dichloroethane                         | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dichloroethane                         | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| 1,1-Dichloroethene                         | < 0.69 | U    | µg/l  | 0.69 |                                           |               |      |             |     |           |
| cis-1,2-Dichloroethene                     | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| trans-1,2-Dichloroethene                   | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,2-Dichloropropane                        | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| 1,3-Dichloropropane                        | < 0.21 | U    | µg/l  | 0.21 |                                           |               |      |             |     |           |
| 2,2-Dichloropropane                        | < 0.42 | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| 1,1-Dichloropropene                        | < 0.58 | U    | µg/l  | 0.58 |                                           |               |      |             |     |           |
| cis-1,3-Dichloropropene                    | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.35 | U    | µg/l  | 0.35 |                                           |               |      |             |     |           |
| Ethylbenzene                               | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.47 | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 0.53 | U    | µg/l  | 0.53 |                                           |               |      |             |     |           |
| Isopropylbenzene                           | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 0.24 | U    | µg/l  | 0.24 |                                           |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 0.52 | U    | µg/l  | 0.52 |                                           |               |      |             |     |           |
| Methylene chloride                         | < 0.66 | U    | µg/l  | 0.66 |                                           |               |      |             |     |           |
| Naphthalene                                | < 0.35 | U    | µg/l  | 0.35 |                                           |               |      |             |     |           |
| n-Propylbenzene                            | < 0.34 | U    | µg/l  | 0.34 |                                           |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b><u>Blank (1803373-BLK1)</u></b>         |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| Styrene                                    | < 0.40 | U    | µg/l  | 0.40 |                                           |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Tetrachloroethene                          | < 0.57 | U    | µg/l  | 0.57 |                                           |               |      |             |     |           |
| Toluene                                    | < 0.30 | U    | µg/l  | 0.30 |                                           |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 0.30 | U    | µg/l  | 0.30 |                                           |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 0.51 | U    | µg/l  | 0.51 |                                           |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Trichloroethene                            | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 0.49 | U    | µg/l  | 0.49 |                                           |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 0.43 | U    | µg/l  | 0.43 |                                           |               |      |             |     |           |
| Vinyl chloride                             | < 0.47 | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| m,p-Xylene                                 | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| o-Xylene                                   | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Tetrahydrofuran                            | < 1.06 | U    | µg/l  | 1.06 |                                           |               |      |             |     |           |
| Ethyl ether                                | < 0.37 | U    | µg/l  | 0.37 |                                           |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 0.49 | U    | µg/l  | 0.49 |                                           |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Di-isopropyl ether                         | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 5.90 | U    | µg/l  | 5.90 |                                           |               |      |             |     |           |
| 1,4-Dioxane                                | < 11.4 | U    | µg/l  | 11.4 |                                           |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 0.82 | U    | µg/l  | 0.82 |                                           |               |      |             |     |           |
| Ethanol                                    | < 30.9 | U    | µg/l  | 30.9 |                                           |               |      |             |     |           |
| Surrogate: 4-Bromofluorobenzene            | 46.6   |      | µg/l  |      | 50.0                                      |               | 93   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 48.4   |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 55.4   |      | µg/l  |      | 50.0                                      |               | 111  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.1   |      | µg/l  |      | 50.0                                      |               | 96   | 70-130      |     |           |
| <b><u>LCS (1803373-BS1)</u></b>            |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      |     |           |
| Acetone                                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Acrylonitrile                              | 16.3   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      |     |           |
| Benzene                                    | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Bromobenzene                               | 18.9   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| Bromochloromethane                         | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Bromodichloromethane                       | 19.7   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      |     |           |
| Bromoform                                  | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      |     |           |
| Bromomethane                               | 23.7   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      |     |           |
| n-Butylbenzene                             | 16.3   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      |     |           |
| sec-Butylbenzene                           | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      |     |           |
| tert-Butylbenzene                          | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Carbon disulfide                           | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      |     |           |
| Carbon tetrachloride                       | 18.5   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Chlorobenzene                              | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| Chloroethane                               | 22.7   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      |     |           |
| Chloroform                                 | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                    | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|-------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                                           |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |                                           |      |       |      |             |               |      |             |     |           |
| <b>LCS (1803373-BS1)</b>                   | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |      |       |      |             |               |      |             |     |           |
| Chloromethane                              | 15.1                                      |      | µg/l  |      | 20.0        |               | 76   | 70-130      |     |           |
| 2-Chlorotoluene                            | 18.9                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 4-Chlorotoluene                            | 18.9                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 20.7                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| Dibromochloromethane                       | 20.0                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 18.7                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Dibromomethane                             | 18.8                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 18.9                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 19.0                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 18.5                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 14.4                                      |      | µg/l  |      | 20.0        |               | 72   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 17.5                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 19.6                                      |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| 1,1-Dichloroethene                         | 16.1                                      |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 16.9                                      |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 15.9                                      |      | µg/l  |      | 20.0        |               | 79   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 16.8                                      |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 17.8                                      |      | µg/l  |      | 20.0        |               | 89   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 14.6                                      |      | µg/l  |      | 20.0        |               | 73   | 70-130      |     |           |
| 1,1-Dichloropropene                        | 15.5                                      |      | µg/l  |      | 20.0        |               | 77   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 16.2                                      |      | µg/l  |      | 20.0        |               | 81   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 18.3                                      |      | µg/l  |      | 20.0        |               | 91   | 70-130      |     |           |
| Ethylbenzene                               | 17.5                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| Hexachlorobutadiene                        | 17.0                                      |      | µg/l  |      | 20.0        |               | 85   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 16.5                                      |      | µg/l  |      | 20.0        |               | 82   | 70-130      |     |           |
| Isopropylbenzene                           | 17.5                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 17.4                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 17.2                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.1                                      |      | µg/l  |      | 20.0        |               | 85   | 70-130      |     |           |
| Methylene chloride                         | 17.2                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| Naphthalene                                | 22.6                                      |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| n-Propylbenzene                            | 17.6                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| Styrene                                    | 18.5                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 21.0                                      |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.1                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| Tetrachloroethene                          | 16.1                                      |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| Toluene                                    | 17.1                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 20.1                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 19.4                                      |      | µg/l  |      | 20.0        |               | 97   | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 19.3                                      |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 18.8                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Trichloroethene                            | 17.7                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 20.5                                      |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 19.8                                      |      | µg/l  |      | 20.0        |               | 99   | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 18.7                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Vinyl chloride                             | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| m,p-Xylene                                 | 17.4                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| o-Xylene                                   | 17.6                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b><u>LCS (1803373-BS1)</u></b>            |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| Tetrahydrofuran                            | 15.6   |      | µg/l  |      | 20.0                                      |               | 78   | 70-130      |     |           |
| Ethyl ether                                | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| Tert-amyl methyl ether                     | 17.0   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      |     |           |
| Ethyl tert-butyl ether                     | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Di-isopropyl ether                         | 15.8   |      | µg/l  |      | 20.0                                      |               | 79   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 161    |      | µg/l  |      | 200                                       |               | 80   | 70-130      |     |           |
| 1,4-Dioxane                                | 166    |      | µg/l  |      | 200                                       |               | 83   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      |     |           |
| Ethanol                                    | 341    |      | µg/l  |      | 400                                       |               | 85   | 70-130      |     |           |
| <i>Surrogate: 4-Bromofluorobenzene</i>     | 48.8   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| <i>Surrogate: Toluene-d8</i>               | 49.0   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| <i>Surrogate: 1,2-Dichloroethane-d4</i>    | 54.4   |      | µg/l  |      | 50.0                                      |               | 109  | 70-130      |     |           |
| <i>Surrogate: Dibromofluoromethane</i>     | 48.8   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| <b><u>LCS Dup (1803373-BSD1)</u></b>       |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 16.0   |      | µg/l  |      | 20.0                                      |               | 80   | 70-130      | 3   | 20        |
| Acetone                                    | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 1   | 20        |
| Acrylonitrile                              | 17.1   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 5   | 20        |
| Benzene                                    | 16.3   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 3   | 20        |
| Bromobenzene                               | 18.3   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3   | 20        |
| Bromochloromethane                         | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 3   | 20        |
| Bromodichloromethane                       | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 3   | 20        |
| Bromoform                                  | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 2   | 20        |
| Bromomethane                               | 22.3   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 6   | 20        |
| 2-Butanone (MEK)                           | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 5   | 20        |
| n-Butylbenzene                             | 15.9   |      | µg/l  |      | 20.0                                      |               | 79   | 70-130      | 3   | 20        |
| sec-Butylbenzene                           | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 2   | 20        |
| tert-Butylbenzene                          | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 4   | 20        |
| Carbon disulfide                           | 15.5   |      | µg/l  |      | 20.0                                      |               | 78   | 70-130      | 8   | 20        |
| Carbon tetrachloride                       | 17.7   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      | 4   | 20        |
| Chlorobenzene                              | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 3   | 20        |
| Chloroethane                               | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 11  | 20        |
| Chloroform                                 | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 4   | 20        |
| Chloromethane                              | 14.8   |      | µg/l  |      | 20.0                                      |               | 74   | 70-130      | 2   | 20        |
| 2-Chlorotoluene                            | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 5   | 20        |
| 4-Chlorotoluene                            | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3   | 20        |
| 1,2-Dibromo-3-chloropropane                | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 3   | 20        |
| Dibromochloromethane                       | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 0.8 | 20        |
| 1,2-Dibromoethane (EDB)                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 0.4 | 20        |
| Dibromomethane                             | 18.8   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 0.3 | 20        |
| 1,2-Dichlorobenzene                        | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 3   | 20        |
| 1,3-Dichlorobenzene                        | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 4   | 20        |
| 1,4-Dichlorobenzene                        | 18.1   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 2   | 20        |
| Dichlorodifluoromethane (Freon12)          | 13.8   |      | µg/l  |      | 20.0                                      |               | 69   | 70-130      | 4   | 20        |
| 1,1-Dichloroethane                         | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 4   | 20        |
| 1,2-Dichloroethane                         | 19.3   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 1   | 20        |
| 1,1-Dichloroethene                         | 15.7   |      | µg/l  |      | 20.0                                      |               | 79   | 70-130      | 2   | 20        |
| cis-1,2-Dichloroethene                     | 16.1   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      | 4   | 20        |
| trans-1,2-Dichloroethene                   | 15.3   |      | µg/l  |      | 20.0                                      |               | 77   | 70-130      | 3   | 20        |
| 1,2-Dichloropropane                        | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 2   | 20        |
| 1,3-Dichloropropane                        | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 2   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC                                      | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|-------------------------------------------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |                                           |             |      |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |                                           |             |      |           |
| <b>LCS Dup (1803373-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |               |                                           |             |      |           |
| 2,2-Dichloropropane                        | 13.8   | QM9  | µg/l  |      | 20.0                                      |               | 69                                        | 70-130      | 5    | 20        |
| 1,1-Dichloropropene                        | 14.9   |      | µg/l  |      | 20.0                                      |               | 75                                        | 70-130      | 4    | 20        |
| cis-1,3-Dichloropropene                    | 16.2   |      | µg/l  |      | 20.0                                      |               | 81                                        | 70-130      | 0.06 | 20        |
| trans-1,3-Dichloropropene                  | 17.7   |      | µg/l  |      | 20.0                                      |               | 88                                        | 70-130      | 3    | 20        |
| Ethylbenzene                               | 16.7   |      | µg/l  |      | 20.0                                      |               | 84                                        | 70-130      | 4    | 20        |
| Hexachlorobutadiene                        | 17.5   |      | µg/l  |      | 20.0                                      |               | 88                                        | 70-130      | 3    | 20        |
| 2-Hexanone (MBK)                           | 17.0   |      | µg/l  |      | 20.0                                      |               | 85                                        | 70-130      | 3    | 20        |
| Isopropylbenzene                           | 16.8   |      | µg/l  |      | 20.0                                      |               | 84                                        | 70-130      | 4    | 20        |
| 4-Isopropyltoluene                         | 17.0   |      | µg/l  |      | 20.0                                      |               | 85                                        | 70-130      | 3    | 20        |
| Methyl tert-butyl ether                    | 16.8   |      | µg/l  |      | 20.0                                      |               | 84                                        | 70-130      | 3    | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 17.3   |      | µg/l  |      | 20.0                                      |               | 86                                        | 70-130      | 1    | 20        |
| Methylene chloride                         | 16.6   |      | µg/l  |      | 20.0                                      |               | 83                                        | 70-130      | 4    | 20        |
| Naphthalene                                | 23.0   |      | µg/l  |      | 20.0                                      |               | 115                                       | 70-130      | 2    | 20        |
| n-Propylbenzene                            | 16.9   |      | µg/l  |      | 20.0                                      |               | 85                                        | 70-130      | 4    | 20        |
| Styrene                                    | 17.8   |      | µg/l  |      | 20.0                                      |               | 89                                        | 70-130      | 4    | 20        |
| 1,1,1,2-Tetrachloroethane                  | 20.2   |      | µg/l  |      | 20.0                                      |               | 101                                       | 70-130      | 4    | 20        |
| 1,1,2,2-Tetrachloroethane                  | 20.2   |      | µg/l  |      | 20.0                                      |               | 101                                       | 70-130      | 0.5  | 20        |
| Tetrachloroethene                          | 15.4   |      | µg/l  |      | 20.0                                      |               | 77                                        | 70-130      | 4    | 20        |
| Toluene                                    | 16.4   |      | µg/l  |      | 20.0                                      |               | 82                                        | 70-130      | 4    | 20        |
| 1,2,3-Trichlorobenzene                     | 20.4   |      | µg/l  |      | 20.0                                      |               | 102                                       | 70-130      | 1    | 20        |
| 1,2,4-Trichlorobenzene                     | 19.2   |      | µg/l  |      | 20.0                                      |               | 96                                        | 70-130      | 1    | 20        |
| 1,3,5-Trichlorobenzene                     | 19.0   |      | µg/l  |      | 20.0                                      |               | 95                                        | 70-130      | 1    | 20        |
| 1,1,1-Trichloroethane                      | 18.0   |      | µg/l  |      | 20.0                                      |               | 90                                        | 70-130      | 5    | 20        |
| 1,1,2-Trichloroethane                      | 18.0   |      | µg/l  |      | 20.0                                      |               | 90                                        | 70-130      | 3    | 20        |
| Trichloroethene                            | 16.9   |      | µg/l  |      | 20.0                                      |               | 85                                        | 70-130      | 4    | 20        |
| Trichlorofluoromethane (Freon 11)          | 19.5   |      | µg/l  |      | 20.0                                      |               | 97                                        | 70-130      | 5    | 20        |
| 1,2,3-Trichloropropane                     | 20.3   |      | µg/l  |      | 20.0                                      |               | 102                                       | 70-130      | 3    | 20        |
| 1,2,4-Trimethylbenzene                     | 17.9   |      | µg/l  |      | 20.0                                      |               | 89                                        | 70-130      | 5    | 20        |
| 1,3,5-Trimethylbenzene                     | 18.0   |      | µg/l  |      | 20.0                                      |               | 90                                        | 70-130      | 3    | 20        |
| Vinyl chloride                             | 17.6   |      | µg/l  |      | 20.0                                      |               | 88                                        | 70-130      | 5    | 20        |
| m,p-Xylene                                 | 16.7   |      | µg/l  |      | 20.0                                      |               | 84                                        | 70-130      | 4    | 20        |
| o-Xylene                                   | 16.9   |      | µg/l  |      | 20.0                                      |               | 85                                        | 70-130      | 4    | 20        |
| Tetrahydrofuran                            | 15.9   |      | µg/l  |      | 20.0                                      |               | 80                                        | 70-130      | 2    | 20        |
| Ethyl ether                                | 20.9   |      | µg/l  |      | 20.0                                      |               | 105                                       | 70-130      | 0.1  | 20        |
| Tert-amyl methyl ether                     | 16.8   |      | µg/l  |      | 20.0                                      |               | 84                                        | 70-130      | 1    | 20        |
| Ethyl tert-butyl ether                     | 16.5   |      | µg/l  |      | 20.0                                      |               | 82                                        | 70-130      | 1    | 20        |
| Di-isopropyl ether                         | 15.4   |      | µg/l  |      | 20.0                                      |               | 77                                        | 70-130      | 2    | 20        |
| Tert-Butanol / butyl alcohol               | 162    |      | µg/l  |      | 200                                       |               | 81                                        | 70-130      | 0.8  | 20        |
| 1,4-Dioxane                                | 159    |      | µg/l  |      | 200                                       |               | 80                                        | 70-130      | 4    | 20        |
| trans-1,4-Dichloro-2-butene                | 21.8   |      | µg/l  |      | 20.0                                      |               | 109                                       | 70-130      | 0.9  | 20        |
| Ethanol                                    | 344    |      | µg/l  |      | 400                                       |               | 86                                        | 70-130      | 0.9  | 20        |
| Surrogate: 4-Bromofluorobenzene            | 49.2   |      | µg/l  |      | 50.0                                      |               | 98                                        | 70-130      |      |           |
| Surrogate: Toluene-d8                      | 48.6   |      | µg/l  |      | 50.0                                      |               | 97                                        | 70-130      |      |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.9   |      | µg/l  |      | 50.0                                      |               | 108                                       | 70-130      |      |           |
| Surrogate: Dibromofluoromethane            | 48.4   |      | µg/l  |      | 50.0                                      |               | 97                                        | 70-130      |      |           |
| <b>Matrix Spike (1803373-MS1)</b>          |        |      |       |      | <b>Source: SC44621-02</b>                 |               | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |             |      |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 20.2   | D    | µg/l  |      | 20.0                                      | 0.00          | 101                                       | 70-130      |      |           |
| Acetone                                    | 19.9   | D    | µg/l  |      | 20.0                                      | 0.00          | 99                                        | 70-130      |      |           |
| Acrylonitrile                              | 17.8   | D    | µg/l  |      | 20.0                                      | 0.00          | 89                                        | 70-130      |      |           |
| Benzene                                    | 18.2   | D    | µg/l  |      | 20.0                                      | 0.00          | 91                                        | 70-130      |      |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                    | Flag   | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|---------------------------|--------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                           |        |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |                           |        |       |      |                                           |               |      |             |     |           |
| <b>Matrix Spike (1803373-MS1)</b>          | <b>Source: SC44621-02</b> |        |       |      | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |               |      |             |     |           |
| Bromobenzene                               | 19.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| Bromochloromethane                         | 19.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| Bromodichloromethane                       | 20.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      |     |           |
| Bromoform                                  | 20.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      |     |           |
| Bromomethane                               | 24.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 120  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 18.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| n-Butylbenzene                             | 19.4                      | D      | µg/l  |      | 20.0                                      | 0.00          | 97   | 70-130      |     |           |
| sec-Butylbenzene                           | 20.1                      | D      | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| tert-Butylbenzene                          | 20.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      |     |           |
| Carbon disulfide                           | 18.3                      | D      | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      |     |           |
| Carbon tetrachloride                       | 21.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 109  | 70-130      |     |           |
| Chlorobenzene                              | 19.5                      | D      | µg/l  |      | 20.0                                      | 0.00          | 97   | 70-130      |     |           |
| Chloroethane                               | 22.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 110  | 70-130      |     |           |
| Chloroform                                 | 19.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| Chloromethane                              | 15.1                      | D      | µg/l  |      | 20.0                                      | 0.00          | 75   | 70-130      |     |           |
| 2-Chlorotoluene                            | 20.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 103  | 70-130      |     |           |
| 4-Chlorotoluene                            | 20.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 23.3                      | D      | µg/l  |      | 20.0                                      | 0.00          | 117  | 70-130      |     |           |
| Dibromochloromethane                       | 21.4                      | D      | µg/l  |      | 20.0                                      | 0.00          | 107  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 19.5                      | D      | µg/l  |      | 20.0                                      | 0.00          | 98   | 70-130      |     |           |
| Dibromomethane                             | 19.9                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 20.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.9                      | D      | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 20.4                      | D      | µg/l  |      | 20.0                                      | 0.00          | 102  | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 13.8                      | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 69   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 18.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 94   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 20.2                      | D      | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| 1,1-Dichloroethene                         | 18.2                      | D      | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 19.0                      | D      | µg/l  |      | 20.0                                      | 1.05          | 90   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 18.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 18.2                      | D      | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 18.7                      | D      | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 17.1                      | D      | µg/l  |      | 20.0                                      | 0.00          | 86   | 70-130      |     |           |
| 1,1-Dichloropropene                        | 17.9                      | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 17.9                      | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 19.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| Ethylbenzene                               | 19.2                      | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      |     |           |
| Hexachlorobutadiene                        | 19.6                      | D      | µg/l  |      | 20.0                                      | 0.00          | 98   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 18.6                      | D      | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      |     |           |
| Isopropylbenzene                           | 19.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 20.3                      | D      | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| Methyl tert-butyl ether                    | 17.9                      | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 18.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 94   | 70-130      |     |           |
| Methylene chloride                         | 18.2                      | D      | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      |     |           |
| Naphthalene                                | 25.4                      | D      | µg/l  |      | 20.0                                      | 0.00          | 127  | 70-130      |     |           |
| n-Propylbenzene                            | 20.0                      | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      |     |           |
| Styrene                                    | 19.8                      | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 22.1                      | D      | µg/l  |      | 20.0                                      | 0.00          | 110  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 21.4                      | D      | µg/l  |      | 20.0                                      | 0.00          | 107  | 70-130      |     |           |
| Tetrachloroethene                          | 163                       | D, E   | µg/l  |      | 20.0                                      | 145           | 89   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL                      | Spike Level                                    | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|---------------------------|------------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |                           |                                                |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |                           |                                                |               |      |             |     |           |
| <b>Matrix Spike (1803373-MS1)</b>          |        |      |       | <b>Source: SC44621-02</b> | <b>Prepared &amp; Analyzed: 12-Mar-18</b>      |               |      |             |     |           |
| Toluene                                    | 18.8   | D    | µg/l  |                           | 20.0                                           | 0.00          | 94   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 22.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 112  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 21.5   | D    | µg/l  |                           | 20.0                                           | 0.00          | 107  | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 21.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 108  | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 20.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 104  | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 19.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 98   | 70-130      |     |           |
| Trichloroethene                            | 20.3   | D    | µg/l  |                           | 20.0                                           | 1.04          | 96   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 23.1   | D    | µg/l  |                           | 20.0                                           | 0.00          | 115  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 21.9   | D    | µg/l  |                           | 20.0                                           | 0.00          | 109  | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 20.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 102  | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 20.5   | D    | µg/l  |                           | 20.0                                           | 0.00          | 102  | 70-130      |     |           |
| Vinyl chloride                             | 19.7   | D    | µg/l  |                           | 20.0                                           | 0.21          | 97   | 70-130      |     |           |
| m,p-Xylene                                 | 19.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 97   | 70-130      |     |           |
| o-Xylene                                   | 19.0   | D    | µg/l  |                           | 20.0                                           | 0.00          | 95   | 70-130      |     |           |
| Tetrahydrofuran                            | 16.9   | D    | µg/l  |                           | 20.0                                           | 0.00          | 85   | 70-130      |     |           |
| Ethyl ether                                | 18.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 93   | 70-130      |     |           |
| Tert-amyl methyl ether                     | 17.6   | D    | µg/l  |                           | 20.0                                           | 0.00          | 88   | 70-130      |     |           |
| Ethyl tert-butyl ether                     | 17.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 87   | 70-130      |     |           |
| Di-isopropyl ether                         | 16.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 83   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 178    | D    | µg/l  |                           | 200                                            | 0.00          | 89   | 70-130      |     |           |
| 1,4-Dioxane                                | 181    | D    | µg/l  |                           | 200                                            | 0.00          | 91   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 25.7   | D    | µg/l  |                           | 20.0                                           | 0.00          | 128  | 70-130      |     |           |
| Ethanol                                    | 387    | D    | µg/l  |                           | 400                                            | 0.00          | 97   | 70-130      |     |           |
| Surrogate: 4-Bromofluorobenzene            | 48.8   |      | µg/l  |                           | 50.0                                           |               | 98   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.1   |      | µg/l  |                           | 50.0                                           |               | 98   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.7   |      | µg/l  |                           | 50.0                                           |               | 107  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.0   |      | µg/l  |                           | 50.0                                           |               | 96   | 70-130      |     |           |
| <b>Matrix Spike Dup (1803373-MSD1)</b>     |        |      |       | <b>Source: SC44621-02</b> | <b>Prepared: 12-Mar-18 Analyzed: 13-Mar-18</b> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 20.3   | D    | µg/l  |                           | 20.0                                           | 0.00          | 101  | 70-130      | 0.5 | 20        |
| Acetone                                    | 19.3   | D    | µg/l  |                           | 20.0                                           | 0.00          | 97   | 70-130      | 3   | 20        |
| Acrylonitrile                              | 17.2   | D    | µg/l  |                           | 20.0                                           | 0.00          | 86   | 70-130      | 3   | 20        |
| Benzene                                    | 18.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 92   | 70-130      | 0.9 | 20        |
| Bromobenzene                               | 20.5   | D    | µg/l  |                           | 20.0                                           | 0.00          | 102  | 70-130      | 3   | 20        |
| Bromochloromethane                         | 19.9   | D    | µg/l  |                           | 20.0                                           | 0.00          | 99   | 70-130      | 0.9 | 20        |
| Bromodichloromethane                       | 21.1   | D    | µg/l  |                           | 20.0                                           | 0.00          | 106  | 70-130      | 2   | 20        |
| Bromoform                                  | 21.3   | D    | µg/l  |                           | 20.0                                           | 0.00          | 106  | 70-130      | 3   | 20        |
| Bromomethane                               | 24.3   | D    | µg/l  |                           | 20.0                                           | 0.00          | 122  | 70-130      | 1   | 20        |
| 2-Butanone (MEK)                           | 17.3   | D    | µg/l  |                           | 20.0                                           | 0.00          | 86   | 70-130      | 4   | 20        |
| n-Butylbenzene                             | 20.0   | D    | µg/l  |                           | 20.0                                           | 0.00          | 100  | 70-130      | 3   | 20        |
| sec-Butylbenzene                           | 20.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 102  | 70-130      | 1   | 20        |
| tert-Butylbenzene                          | 20.6   | D    | µg/l  |                           | 20.0                                           | 0.00          | 103  | 70-130      | 3   | 20        |
| Carbon disulfide                           | 18.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 92   | 70-130      | 0.6 | 20        |
| Carbon tetrachloride                       | 21.6   | D    | µg/l  |                           | 20.0                                           | 0.00          | 108  | 70-130      | 0.9 | 20        |
| Chlorobenzene                              | 20.0   | D    | µg/l  |                           | 20.0                                           | 0.00          | 100  | 70-130      | 3   | 20        |
| Chloroethane                               | 22.2   | D    | µg/l  |                           | 20.0                                           | 0.00          | 111  | 70-130      | 0.9 | 20        |
| Chloroform                                 | 20.2   | D    | µg/l  |                           | 20.0                                           | 0.00          | 101  | 70-130      | 2   | 20        |
| Chloromethane                              | 15.5   | D    | µg/l  |                           | 20.0                                           | 0.00          | 77   | 70-130      | 3   | 20        |
| 2-Chlorotoluene                            | 21.2   | D    | µg/l  |                           | 20.0                                           | 0.00          | 106  | 70-130      | 3   | 20        |
| 4-Chlorotoluene                            | 21.4   | D    | µg/l  |                           | 20.0                                           | 0.00          | 107  | 70-130      | 3   | 20        |
| 1,2-Dibromo-3-chloropropane                | 23.0   | D    | µg/l  |                           | 20.0                                           | 0.00          | 115  | 70-130      | 1   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL                      | Spike Level | Source Result | %REC | %REC Limits                                    | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|---------------------------|-------------|---------------|------|------------------------------------------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |                           |             |               |      |                                                |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |                           |             |               |      |                                                |     |           |
| <b>Matrix Spike Dup (1803373-MSD1)</b>     |        |      |       | <b>Source: SC44621-02</b> |             |               |      | <b>Prepared: 12-Mar-18 Analyzed: 13-Mar-18</b> |     |           |
| Dibromochloromethane                       | 21.6   | D    | µg/l  |                           | 20.0        | 0.00          | 108  | 70-130                                         | 0.9 | 20        |
| 1,2-Dibromoethane (EDB)                    | 19.8   | D    | µg/l  |                           | 20.0        | 0.00          | 99   | 70-130                                         | 2   | 20        |
| Dibromomethane                             | 19.8   | D    | µg/l  |                           | 20.0        | 0.00          | 99   | 70-130                                         | 0.5 | 20        |
| 1,2-Dichlorobenzene                        | 20.7   | D    | µg/l  |                           | 20.0        | 0.00          | 104  | 70-130                                         | 3   | 20        |
| 1,3-Dichlorobenzene                        | 21.4   | D    | µg/l  |                           | 20.0        | 0.00          | 107  | 70-130                                         | 3   | 20        |
| 1,4-Dichlorobenzene                        | 20.9   | D    | µg/l  |                           | 20.0        | 0.00          | 104  | 70-130                                         | 2   | 20        |
| Dichlorodifluoromethane (Freon12)          | 14.1   | D    | µg/l  |                           | 20.0        | 0.00          | 70   | 70-130                                         | 2   | 20        |
| 1,1-Dichloroethane                         | 19.1   | D    | µg/l  |                           | 20.0        | 0.00          | 96   | 70-130                                         | 2   | 20        |
| 1,2-Dichloroethane                         | 20.5   | D    | µg/l  |                           | 20.0        | 0.00          | 103  | 70-130                                         | 1   | 20        |
| 1,1-Dichloroethene                         | 18.6   | D    | µg/l  |                           | 20.0        | 0.00          | 93   | 70-130                                         | 2   | 20        |
| cis-1,2-Dichloroethene                     | 19.4   | D    | µg/l  |                           | 20.0        | 1.05          | 92   | 70-130                                         | 2   | 20        |
| trans-1,2-Dichloroethene                   | 18.3   | D    | µg/l  |                           | 20.0        | 0.00          | 91   | 70-130                                         | 2   | 20        |
| 1,2-Dichloropropane                        | 18.4   | D    | µg/l  |                           | 20.0        | 0.00          | 92   | 70-130                                         | 0.7 | 20        |
| 1,3-Dichloropropane                        | 19.2   | D    | µg/l  |                           | 20.0        | 0.00          | 96   | 70-130                                         | 3   | 20        |
| 2,2-Dichloropropane                        | 16.5   | D    | µg/l  |                           | 20.0        | 0.00          | 83   | 70-130                                         | 4   | 20        |
| 1,1-Dichloropropene                        | 18.0   | D    | µg/l  |                           | 20.0        | 0.00          | 90   | 70-130                                         | 0.7 | 20        |
| cis-1,3-Dichloropropene                    | 18.2   | D    | µg/l  |                           | 20.0        | 0.00          | 91   | 70-130                                         | 1   | 20        |
| trans-1,3-Dichloropropene                  | 20.0   | D    | µg/l  |                           | 20.0        | 0.00          | 100  | 70-130                                         | 1   | 20        |
| Ethylbenzene                               | 19.8   | D    | µg/l  |                           | 20.0        | 0.00          | 99   | 70-130                                         | 3   | 20        |
| Hexachlorobutadiene                        | 20.8   | D    | µg/l  |                           | 20.0        | 0.00          | 104  | 70-130                                         | 6   | 20        |
| 2-Hexanone (MBK)                           | 17.3   | D    | µg/l  |                           | 20.0        | 0.00          | 86   | 70-130                                         | 7   | 20        |
| Isopropylbenzene                           | 20.2   | D    | µg/l  |                           | 20.0        | 0.00          | 101  | 70-130                                         | 2   | 20        |
| 4-Isopropyltoluene                         | 20.5   | D    | µg/l  |                           | 20.0        | 0.00          | 103  | 70-130                                         | 1   | 20        |
| Methyl tert-butyl ether                    | 18.1   | D    | µg/l  |                           | 20.0        | 0.00          | 90   | 70-130                                         | 1   | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 17.8   | D    | µg/l  |                           | 20.0        | 0.00          | 89   | 70-130                                         | 5   | 20        |
| Methylene chloride                         | 18.5   | D    | µg/l  |                           | 20.0        | 0.00          | 92   | 70-130                                         | 2   | 20        |
| Naphthalene                                | 25.0   | D    | µg/l  |                           | 20.0        | 0.00          | 125  | 70-130                                         | 2   | 20        |
| n-Propylbenzene                            | 20.4   | D    | µg/l  |                           | 20.0        | 0.00          | 102  | 70-130                                         | 2   | 20        |
| Styrene                                    | 20.5   | D    | µg/l  |                           | 20.0        | 0.00          | 102  | 70-130                                         | 3   | 20        |
| 1,1,1,2-Tetrachloroethane                  | 23.1   | D    | µg/l  |                           | 20.0        | 0.00          | 116  | 70-130                                         | 5   | 20        |
| 1,1,1,2,2-Tetrachloroethane                | 21.3   | D    | µg/l  |                           | 20.0        | 0.00          | 107  | 70-130                                         | 0.4 | 20        |
| Tetrachloroethene                          | 163    | D, E | µg/l  |                           | 20.0        | 145           | 92   | 70-130                                         | 0.4 | 20        |
| Toluene                                    | 19.0   | D    | µg/l  |                           | 20.0        | 0.00          | 95   | 70-130                                         | 1   | 20        |
| 1,2,3-Trichlorobenzene                     | 22.7   | D    | µg/l  |                           | 20.0        | 0.00          | 113  | 70-130                                         | 1   | 20        |
| 1,2,4-Trichlorobenzene                     | 22.2   | D    | µg/l  |                           | 20.0        | 0.00          | 111  | 70-130                                         | 3   | 20        |
| 1,3,5-Trichlorobenzene                     | 22.6   | D    | µg/l  |                           | 20.0        | 0.00          | 113  | 70-130                                         | 4   | 20        |
| 1,1,1-Trichloroethane                      | 20.9   | D    | µg/l  |                           | 20.0        | 0.00          | 104  | 70-130                                         | 0.6 | 20        |
| 1,1,2-Trichloroethane                      | 19.7   | D    | µg/l  |                           | 20.0        | 0.00          | 98   | 70-130                                         | 0.1 | 20        |
| Trichloroethene                            | 20.5   | D    | µg/l  |                           | 20.0        | 1.04          | 97   | 70-130                                         | 0.7 | 20        |
| Trichlorofluoromethane (Freon 11)          | 23.2   | D    | µg/l  |                           | 20.0        | 0.00          | 116  | 70-130                                         | 0.4 | 20        |
| 1,2,3-Trichloropropane                     | 21.2   | D    | µg/l  |                           | 20.0        | 0.00          | 106  | 70-130                                         | 3   | 20        |
| 1,2,4-Trimethylbenzene                     | 21.1   | D    | µg/l  |                           | 20.0        | 0.00          | 105  | 70-130                                         | 4   | 20        |
| 1,3,5-Trimethylbenzene                     | 21.2   | D    | µg/l  |                           | 20.0        | 0.00          | 106  | 70-130                                         | 3   | 20        |
| Vinyl chloride                             | 20.1   | D    | µg/l  |                           | 20.0        | 0.21          | 99   | 70-130                                         | 2   | 20        |
| m,p-Xylene                                 | 19.9   | D    | µg/l  |                           | 20.0        | 0.00          | 100  | 70-130                                         | 2   | 20        |
| o-Xylene                                   | 19.8   | D    | µg/l  |                           | 20.0        | 0.00          | 99   | 70-130                                         | 4   | 20        |
| Tetrahydrofuran                            | 16.3   | D    | µg/l  |                           | 20.0        | 0.00          | 82   | 70-130                                         | 4   | 20        |
| Ethyl ether                                | 22.2   | D    | µg/l  |                           | 20.0        | 0.00          | 111  | 70-130                                         | 17  | 20        |
| Tert-amyl methyl ether                     | 18.1   | D    | µg/l  |                           | 20.0        | 0.00          | 90   | 70-130                                         | 3   | 20        |
| Ethyl tert-butyl ether                     | 18.0   | D    | µg/l  |                           | 20.0        | 0.00          | 90   | 70-130                                         | 4   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                    | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|--------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                     |        |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b>    |        |      |       |      |             |               |      |             |     |           |
| <b><u>Matrix Spike Dup (1803373-MSD1)</u></b> |        |      |       |      |             |               |      |             |     |           |
|                                               |        |      |       |      |             |               |      |             |     |           |
| Di-isopropyl ether                            | 17.0   | D    | µg/l  |      | 20.0        | 0.00          | 85   | 70-130      | 2   | 20        |
| Tert-Butanol / butyl alcohol                  | 165    | D    | µg/l  |      | 200         | 0.00          | 83   | 70-130      | 7   | 20        |
| 1,4-Dioxane                                   | 162    | D    | µg/l  |      | 200         | 0.00          | 81   | 70-130      | 11  | 20        |
| trans-1,4-Dichloro-2-butene                   | 24.0   | D    | µg/l  |      | 20.0        | 0.00          | 120  | 70-130      | 7   | 20        |
| Ethanol                                       | 353    | D    | µg/l  |      | 400         | 0.00          | 88   | 70-130      | 9   | 20        |
| Surrogate: 4-Bromofluorobenzene               | 49.2   |      | µg/l  |      | 50.0        |               | 98   | 70-130      |     |           |
| Surrogate: Toluene-d8                         | 48.4   |      | µg/l  |      | 50.0        |               | 97   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4              | 53.2   |      | µg/l  |      | 50.0        |               | 106  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane               | 48.2   |      | µg/l  |      | 50.0        |               | 96   | 70-130      |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b>    |        |      |       |      |             |               |      |             |     |           |
| <b><u>Blank (1803478-BLK1)</u></b>            |        |      |       |      |             |               |      |             |     |           |
|                                               |        |      |       |      |             |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113)    | < 0.53 | U    | µg/l  | 0.53 |             |               |      |             |     |           |
| Acetone                                       | < 0.80 | U    | µg/l  | 0.80 |             |               |      |             |     |           |
| Acrylonitrile                                 | < 0.47 | U    | µg/l  | 0.47 |             |               |      |             |     |           |
| Benzene                                       | < 0.28 | U    | µg/l  | 0.28 |             |               |      |             |     |           |
| Bromobenzene                                  | < 0.33 | U    | µg/l  | 0.33 |             |               |      |             |     |           |
| Bromochloromethane                            | < 0.34 | U    | µg/l  | 0.34 |             |               |      |             |     |           |
| Bromodichloromethane                          | < 0.42 | U    | µg/l  | 0.42 |             |               |      |             |     |           |
| Bromoform                                     | < 0.42 | U    | µg/l  | 0.42 |             |               |      |             |     |           |
| Bromomethane                                  | < 0.90 | U    | µg/l  | 0.90 |             |               |      |             |     |           |
| 2-Butanone (MEK)                              | < 1.07 | U    | µg/l  | 1.07 |             |               |      |             |     |           |
| n-Butylbenzene                                | < 0.41 | U    | µg/l  | 0.41 |             |               |      |             |     |           |
| sec-Butylbenzene                              | < 0.33 | U    | µg/l  | 0.33 |             |               |      |             |     |           |
| tert-Butylbenzene                             | < 0.32 | U    | µg/l  | 0.32 |             |               |      |             |     |           |
| Carbon disulfide                              | < 0.41 | U    | µg/l  | 0.41 |             |               |      |             |     |           |
| Carbon tetrachloride                          | < 0.44 | U    | µg/l  | 0.44 |             |               |      |             |     |           |
| Chlorobenzene                                 | < 0.25 | U    | µg/l  | 0.25 |             |               |      |             |     |           |
| Chloroethane                                  | < 0.59 | U    | µg/l  | 0.59 |             |               |      |             |     |           |
| Chloroform                                    | < 0.33 | U    | µg/l  | 0.33 |             |               |      |             |     |           |
| Chloromethane                                 | < 0.37 | U    | µg/l  | 0.37 |             |               |      |             |     |           |
| 2-Chlorotoluene                               | < 0.32 | U    | µg/l  | 0.32 |             |               |      |             |     |           |
| 4-Chlorotoluene                               | < 0.32 | U    | µg/l  | 0.32 |             |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                   | < 0.86 | U    | µg/l  | 0.86 |             |               |      |             |     |           |
| Dibromochloromethane                          | < 0.32 | U    | µg/l  | 0.32 |             |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                       | < 0.20 | U    | µg/l  | 0.20 |             |               |      |             |     |           |
| Dibromomethane                                | < 0.31 | U    | µg/l  | 0.31 |             |               |      |             |     |           |
| 1,2-Dichlorobenzene                           | < 0.28 | U    | µg/l  | 0.28 |             |               |      |             |     |           |
| 1,3-Dichlorobenzene                           | < 0.31 | U    | µg/l  | 0.31 |             |               |      |             |     |           |
| 1,4-Dichlorobenzene                           | < 0.27 | U    | µg/l  | 0.27 |             |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)             | < 0.58 | U    | µg/l  | 0.58 |             |               |      |             |     |           |
| 1,1-Dichloroethane                            | < 0.32 | U    | µg/l  | 0.32 |             |               |      |             |     |           |
| 1,2-Dichloroethane                            | < 0.28 | U    | µg/l  | 0.28 |             |               |      |             |     |           |
| 1,1-Dichloroethene                            | < 0.69 | U    | µg/l  | 0.69 |             |               |      |             |     |           |
| cis-1,2-Dichloroethene                        | < 0.33 | U    | µg/l  | 0.33 |             |               |      |             |     |           |
| trans-1,2-Dichloroethene                      | < 0.38 | U    | µg/l  | 0.38 |             |               |      |             |     |           |
| 1,2-Dichloropropane                           | < 0.29 | U    | µg/l  | 0.29 |             |               |      |             |     |           |
| 1,3-Dichloropropane                           | < 0.21 | U    | µg/l  | 0.21 |             |               |      |             |     |           |
| 2,2-Dichloropropane                           | < 0.42 | U    | µg/l  | 0.42 |             |               |      |             |     |           |
| 1,1-Dichloropropene                           | < 0.58 | U    | µg/l  | 0.58 |             |               |      |             |     |           |
| cis-1,3-Dichloropropene                       | < 0.36 | U    | µg/l  | 0.36 |             |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                                      | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|--------------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |        |      |       |      |                                                  |               |      |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |        |      |       |      |                                                  |               |      |             |     |           |
| <b><u>Blank (1803478-BLK1)</u></b>         |        |      |       |      | <b><u>Prepared &amp; Analyzed: 14-Mar-18</u></b> |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.35 | U    | µg/l  | 0.35 |                                                  |               |      |             |     |           |
| Ethylbenzene                               | < 0.33 | U    | µg/l  | 0.33 |                                                  |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.47 | U    | µg/l  | 0.47 |                                                  |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 0.53 | U    | µg/l  | 0.53 |                                                  |               |      |             |     |           |
| Isopropylbenzene                           | < 0.36 | U    | µg/l  | 0.36 |                                                  |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 0.28 | U    | µg/l  | 0.28 |                                                  |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 0.24 | U    | µg/l  | 0.24 |                                                  |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 0.52 | U    | µg/l  | 0.52 |                                                  |               |      |             |     |           |
| Methylene chloride                         | < 0.66 | U    | µg/l  | 0.66 |                                                  |               |      |             |     |           |
| Naphthalene                                | < 0.35 | U    | µg/l  | 0.35 |                                                  |               |      |             |     |           |
| n-Propylbenzene                            | < 0.34 | U    | µg/l  | 0.34 |                                                  |               |      |             |     |           |
| Styrene                                    | < 0.40 | U    | µg/l  | 0.40 |                                                  |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 0.38 | U    | µg/l  | 0.38 |                                                  |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.33 | U    | µg/l  | 0.33 |                                                  |               |      |             |     |           |
| Tetrachloroethene                          | < 0.57 | U    | µg/l  | 0.57 |                                                  |               |      |             |     |           |
| Toluene                                    | < 0.30 | U    | µg/l  | 0.30 |                                                  |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                                  |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                                  |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 0.30 | U    | µg/l  | 0.30 |                                                  |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 0.51 | U    | µg/l  | 0.51 |                                                  |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 0.33 | U    | µg/l  | 0.33 |                                                  |               |      |             |     |           |
| Trichloroethene                            | < 0.50 | U    | µg/l  | 0.50 |                                                  |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 0.49 | U    | µg/l  | 0.49 |                                                  |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 0.29 | U    | µg/l  | 0.29 |                                                  |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 0.36 | U    | µg/l  | 0.36 |                                                  |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 0.43 | U    | µg/l  | 0.43 |                                                  |               |      |             |     |           |
| Vinyl chloride                             | < 0.47 | U    | µg/l  | 0.47 |                                                  |               |      |             |     |           |
| m,p-Xylene                                 | < 0.38 | U    | µg/l  | 0.38 |                                                  |               |      |             |     |           |
| o-Xylene                                   | < 0.28 | U    | µg/l  | 0.28 |                                                  |               |      |             |     |           |
| Tetrahydrofuran                            | < 1.06 | U    | µg/l  | 1.06 |                                                  |               |      |             |     |           |
| Ethyl ether                                | < 0.37 | U    | µg/l  | 0.37 |                                                  |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 0.49 | U    | µg/l  | 0.49 |                                                  |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 0.33 | U    | µg/l  | 0.33 |                                                  |               |      |             |     |           |
| Di-isopropyl ether                         | < 0.29 | U    | µg/l  | 0.29 |                                                  |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 5.90 | U    | µg/l  | 5.90 |                                                  |               |      |             |     |           |
| 1,4-Dioxane                                | < 11.4 | U    | µg/l  | 11.4 |                                                  |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 0.82 | U    | µg/l  | 0.82 |                                                  |               |      |             |     |           |
| Ethanol                                    | < 30.9 | U    | µg/l  | 30.9 |                                                  |               |      |             |     |           |
| <hr/>                                      |        |      |       |      |                                                  |               |      |             |     |           |
| Surrogate: 4-Bromofluorobenzene            | 46.4   |      | µg/l  |      | 50.0                                             |               | 93   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.2   |      | µg/l  |      | 50.0                                             |               | 98   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 58.0   |      | µg/l  |      | 50.0                                             |               | 116  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 49.1   |      | µg/l  |      | 50.0                                             |               | 98   | 70-130      |     |           |
| <b><u>LCS (1803478-BS1)</u></b>            |        |      |       |      | <b><u>Prepared &amp; Analyzed: 14-Mar-18</u></b> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 18.4   |      | µg/l  |      | 20.0                                             |               | 92   | 70-130      |     |           |
| Acetone                                    | 18.2   |      | µg/l  |      | 20.0                                             |               | 91   | 70-130      |     |           |
| Acrylonitrile                              | 17.2   |      | µg/l  |      | 20.0                                             |               | 86   | 70-130      |     |           |
| Benzene                                    | 17.1   |      | µg/l  |      | 20.0                                             |               | 86   | 70-130      |     |           |
| Bromobenzene                               | 19.6   |      | µg/l  |      | 20.0                                             |               | 98   | 70-130      |     |           |
| Bromochloromethane                         | 19.8   |      | µg/l  |      | 20.0                                             |               | 99   | 70-130      |     |           |
| Bromodichloromethane                       | 21.2   |      | µg/l  |      | 20.0                                             |               | 106  | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>LCS (1803478-BS1)</b>                   |        |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |     |           |
| Bromoform                                  | 20.5   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| Bromomethane                               | 26.5   |      | µg/l  |      | 20.0                                      |               | 132  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| n-Butylbenzene                             | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      |     |           |
| sec-Butylbenzene                           | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| tert-Butylbenzene                          | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Carbon disulfide                           | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| Carbon tetrachloride                       | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |     |           |
| Chlorobenzene                              | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Chloroethane                               | 25.5   |      | µg/l  |      | 20.0                                      |               | 128  | 70-130      |     |           |
| Chloroform                                 | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| Chloromethane                              | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      |     |           |
| 2-Chlorotoluene                            | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| 4-Chlorotoluene                            | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 21.8   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      |     |           |
| Dibromochloromethane                       | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |     |           |
| Dibromomethane                             | 19.9   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.3   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      |     |           |
| 1,1-Dichloroethene                         | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 18.3   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |     |           |
| 1,1-Dichloropropene                        | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Ethylbenzene                               | 18.1   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| Hexachlorobutadiene                        | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 16.9   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Isopropylbenzene                           | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.3   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      |     |           |
| Methylene chloride                         | 17.9   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Naphthalene                                | 23.8   |      | µg/l  |      | 20.0                                      |               | 119  | 70-130      |     |           |
| n-Propylbenzene                            | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Styrene                                    | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.7   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| Tetrachloroethene                          | 17.6   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |     |           |
| Toluene                                    | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>LCS (1803478-BS1)</b>                   |        |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |      |           |
| 1,3,5-Trichlorobenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |      |           |
| 1,1,1-Trichloroethane                      | 20.5   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |      |           |
| 1,1,2-Trichloroethane                      | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      |      |           |
| Trichloroethene                            | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |      |           |
| Trichlorofluoromethane (Freon 11)          | 23.8   |      | µg/l  |      | 20.0                                      |               | 119  | 70-130      |      |           |
| 1,2,3-Trichloropropane                     | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      |      |           |
| 1,2,4-Trimethylbenzene                     | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |      |           |
| 1,3,5-Trimethylbenzene                     | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |      |           |
| Vinyl chloride                             | 20.9   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      |      |           |
| m,p-Xylene                                 | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |      |           |
| o-Xylene                                   | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |      |           |
| Tetrahydrofuran                            | 15.9   |      | µg/l  |      | 20.0                                      |               | 79   | 70-130      |      |           |
| Ethyl ether                                | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |      |           |
| Tert-amyl methyl ether                     | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |      |           |
| Ethyl tert-butyl ether                     | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      |      |           |
| Di-isopropyl ether                         | 16.0   |      | µg/l  |      | 20.0                                      |               | 80   | 70-130      |      |           |
| Tert-Butanol / butyl alcohol               | 169    |      | µg/l  |      | 200                                       |               | 84   | 70-130      |      |           |
| 1,4-Dioxane                                | 160    |      | µg/l  |      | 200                                       |               | 80   | 70-130      |      |           |
| trans-1,4-Dichloro-2-butene                | 25.8   |      | µg/l  |      | 20.0                                      |               | 129  | 70-130      |      |           |
| Ethanol                                    | 360    |      | µg/l  |      | 400                                       |               | 90   | 70-130      |      |           |
| Surrogate: 4-Bromofluorobenzene            | 49.3   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |      |           |
| Surrogate: Toluene-d8                      | 49.1   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |      |           |
| Surrogate: 1,2-Dichloroethane-d4           | 57.7   |      | µg/l  |      | 50.0                                      |               | 115  | 70-130      |      |           |
| Surrogate: Dibromofluoromethane            | 49.7   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |      |           |
| <b>LCS Dup (1803478-BS1)</b>               |        |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |      |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 18.1   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 2    | 20        |
| Acetone                                    | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 8    | 20        |
| Acrylonitrile                              | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 1    | 20        |
| Benzene                                    | 17.1   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 0.06 | 20        |
| Bromobenzene                               | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 0.9  | 20        |
| Bromochloromethane                         | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 0.8  | 20        |
| Bromodichloromethane                       | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 3    | 20        |
| Bromoform                                  | 21.1   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 3    | 20        |
| Bromomethane                               | 25.8   |      | µg/l  |      | 20.0                                      |               | 129  | 70-130      | 2    | 20        |
| 2-Butanone (MEK)                           | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 4    | 20        |
| n-Butylbenzene                             | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 5    | 20        |
| sec-Butylbenzene                           | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      | 4    | 20        |
| tert-Butylbenzene                          | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 1    | 20        |
| Carbon disulfide                           | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 3    | 20        |
| Carbon tetrachloride                       | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 3    | 20        |
| Chlorobenzene                              | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 0.4  | 20        |
| Chloroethane                               | 24.5   |      | µg/l  |      | 20.0                                      |               | 122  | 70-130      | 4    | 20        |
| Chloroform                                 | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 1    | 20        |
| Chloromethane                              | 16.2   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      | 2    | 20        |
| 2-Chlorotoluene                            | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 0.8  | 20        |
| 4-Chlorotoluene                            | 19.7   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 1    | 20        |
| 1,2-Dibromo-3-chloropropane                | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 2    | 20        |
| Dibromochloromethane                       | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 2    | 20        |
| 1,2-Dibromoethane (EDB)                    | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 0.4  | 20        |
| Dibromomethane                             | 19.7   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 0.7  | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>LCS Dup (1803478-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |      |           |
| 1,2-Dichlorobenzene                        | 18.9   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 1    | 20        |
| 1,3-Dichlorobenzene                        | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 2    | 20        |
| 1,4-Dichlorobenzene                        | 19.1   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 2    | 20        |
| Dichlorodifluoromethane (Freon12)          | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 3    | 20        |
| 1,1-Dichloroethane                         | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 1    | 20        |
| 1,2-Dichloroethane                         | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1    | 20        |
| 1,1-Dichloroethene                         | 17.0   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 0.2  | 20        |
| cis-1,2-Dichloroethene                     | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 0.2  | 20        |
| trans-1,2-Dichloroethene                   | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      | 0.6  | 20        |
| 1,2-Dichloropropane                        | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 1    | 20        |
| 1,3-Dichloropropane                        | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 0.1  | 20        |
| 2,2-Dichloropropane                        | 18.8   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 3    | 20        |
| 1,1-Dichloropropene                        | 16.3   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      | 1    | 20        |
| cis-1,3-Dichloropropene                    | 17.6   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      | 1    | 20        |
| trans-1,3-Dichloropropene                  | 19.9   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 2    | 20        |
| Ethylbenzene                               | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.6  | 20        |
| Hexachlorobutadiene                        | 17.3   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 5    | 20        |
| 2-Hexanone (MBK)                           | 17.5   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 4    | 20        |
| Isopropylbenzene                           | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 3    | 20        |
| 4-Isopropyltoluene                         | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      | 3    | 20        |
| Methyl tert-butyl ether                    | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.06 | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 3    | 20        |
| Methylene chloride                         | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.5  | 20        |
| Naphthalene                                | 23.7   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      | 0.5  | 20        |
| n-Propylbenzene                            | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 2    | 20        |
| Styrene                                    | 18.5   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 4    | 20        |
| 1,1,1,2-Tetrachloroethane                  | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 0.09 | 20        |
| 1,1,2,2-Tetrachloroethane                  | 20.8   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      | 0.6  | 20        |
| Tetrachloroethene                          | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2    | 20        |
| Toluene                                    | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      | 2    | 20        |
| 1,2,3-Trichlorobenzene                     | 20.5   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 3    | 20        |
| 1,2,4-Trichlorobenzene                     | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 4    | 20        |
| 1,3,5-Trichlorobenzene                     | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 7    | 20        |
| 1,1,1-Trichloroethane                      | 19.7   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 4    | 20        |
| 1,1,2-Trichloroethane                      | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 2    | 20        |
| Trichloroethene                            | 18.5   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 0.6  | 20        |
| Trichlorofluoromethane (Freon 11)          | 23.2   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 3    | 20        |
| 1,2,3-Trichloropropane                     | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 1    | 20        |
| 1,2,4-Trimethylbenzene                     | 18.9   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 3    | 20        |
| 1,3,5-Trimethylbenzene                     | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 3    | 20        |
| Vinyl chloride                             | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 5    | 20        |
| m,p-Xylene                                 | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.2  | 20        |
| o-Xylene                                   | 18.1   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 0.2  | 20        |
| Tetrahydrofuran                            | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 4    | 20        |
| Ethyl ether                                | 19.3   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 7    | 20        |
| Tert-amyl methyl ether                     | 17.4   |      | µg/l  |      | 20.0                                      |               | 87   | 70-130      | 0.3  | 20        |
| Ethyl tert-butyl ether                     | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 0.5  | 20        |
| Di-isopropyl ether                         | 15.8   |      | µg/l  |      | 20.0                                      |               | 79   | 70-130      | 1    | 20        |
| Tert-Butanol / butyl alcohol               | 182    |      | µg/l  |      | 200                                       |               | 91   | 70-130      | 8    | 20        |
| 1,4-Dioxane                                | 162    |      | µg/l  |      | 200                                       |               | 81   | 70-130      | 1    | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag   | Units | *RDL | Spike Level                               | Source Result | %REC                                      | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|--------|-------|------|-------------------------------------------|---------------|-------------------------------------------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |        |       |      |                                           |               |                                           |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |        |        |       |      |                                           |               |                                           |             |     |           |
| <b>LCS Dup (1803478-BSD1)</b>              |        |        |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |                                           |             |     |           |
| trans-1,4-Dichloro-2-butene                | 25.9   |        | µg/l  |      | 20.0                                      |               | 129                                       | 70-130      | 0.4 | 20        |
| Ethanol                                    | 390    |        | µg/l  |      | 400                                       |               | 98                                        | 70-130      | 8   | 20        |
| Surrogate: 4-Bromofluorobenzene            | 49.7   |        | µg/l  |      | 50.0                                      |               | 99                                        | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.2   |        | µg/l  |      | 50.0                                      |               | 98                                        | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 56.6   |        | µg/l  |      | 50.0                                      |               | 113                                       | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 49.4   |        | µg/l  |      | 50.0                                      |               | 99                                        | 70-130      |     |           |
| <b>Matrix Spike (1803478-MS1)</b>          |        |        |       |      | <b>Source: SC44621-02RE1</b>              |               | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 17.3   | D      | µg/l  |      | 20.0                                      | 0.00          | 86                                        | 70-130      |     |           |
| Acetone                                    | 18.5   | D      | µg/l  |      | 20.0                                      | 0.00          | 92                                        | 70-130      |     |           |
| Acrylonitrile                              | 17.2   | D      | µg/l  |      | 20.0                                      | 0.00          | 86                                        | 70-130      |     |           |
| Benzene                                    | 16.9   | D      | µg/l  |      | 20.0                                      | 0.00          | 84                                        | 70-130      |     |           |
| Bromobenzene                               | 19.3   | D      | µg/l  |      | 20.0                                      | 0.00          | 96                                        | 70-130      |     |           |
| Bromochloromethane                         | 18.6   | D      | µg/l  |      | 20.0                                      | 0.00          | 93                                        | 70-130      |     |           |
| Bromodichloromethane                       | 20.5   | D      | µg/l  |      | 20.0                                      | 0.00          | 102                                       | 70-130      |     |           |
| Bromoform                                  | 20.8   | D      | µg/l  |      | 20.0                                      | 0.00          | 104                                       | 70-130      |     |           |
| Bromomethane                               | 10.9   | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 55                                        | 70-130      |     |           |
| 2-Butanone (MEK)                           | 17.9   | D      | µg/l  |      | 20.0                                      | 0.00          | 90                                        | 70-130      |     |           |
| n-Butylbenzene                             | 17.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 87                                        | 70-130      |     |           |
| sec-Butylbenzene                           | 18.2   | D      | µg/l  |      | 20.0                                      | 0.00          | 91                                        | 70-130      |     |           |
| tert-Butylbenzene                          | 18.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 92                                        | 70-130      |     |           |
| Carbon disulfide                           | 14.3   | D      | µg/l  |      | 20.0                                      | 0.00          | 72                                        | 70-130      |     |           |
| Carbon tetrachloride                       | 21.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 107                                       | 70-130      |     |           |
| Chlorobenzene                              | 18.7   | D      | µg/l  |      | 20.0                                      | 0.00          | 93                                        | 70-130      |     |           |
| Chloroethane                               | 20.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 102                                       | 70-130      |     |           |
| Chloroform                                 | 19.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 97                                        | 70-130      |     |           |
| Chloromethane                              | 11.5   | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 57                                        | 70-130      |     |           |
| 2-Chlorotoluene                            | 19.5   | D      | µg/l  |      | 20.0                                      | 0.00          | 97                                        | 70-130      |     |           |
| 4-Chlorotoluene                            | 19.8   | D      | µg/l  |      | 20.0                                      | 0.00          | 99                                        | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 21.6   | D      | µg/l  |      | 20.0                                      | 0.00          | 108                                       | 70-130      |     |           |
| Dibromochloromethane                       | 21.1   | D      | µg/l  |      | 20.0                                      | 0.00          | 106                                       | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 19.2   | D      | µg/l  |      | 20.0                                      | 0.00          | 96                                        | 70-130      |     |           |
| Dibromomethane                             | 19.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 95                                        | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 19.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 97                                        | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 100                                       | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 19.7   | D      | µg/l  |      | 20.0                                      | 0.00          | 98                                        | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 10.1   | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 50                                        | 70-130      |     |           |
| 1,1-Dichloroethane                         | 17.6   | D      | µg/l  |      | 20.0                                      | 0.00          | 88                                        | 70-130      |     |           |
| 1,2-Dichloroethane                         | 19.4   | D      | µg/l  |      | 20.0                                      | 0.00          | 97                                        | 70-130      |     |           |
| 1,1-Dichloroethene                         | 15.9   | D      | µg/l  |      | 20.0                                      | 0.00          | 79                                        | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 17.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 85                                        | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 16.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 80                                        | 70-130      |     |           |
| 1,2-Dichloropropane                        | 17.2   | D      | µg/l  |      | 20.0                                      | 0.00          | 86                                        | 70-130      |     |           |
| 1,3-Dichloropropane                        | 18.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 90                                        | 70-130      |     |           |
| 2,2-Dichloropropane                        | 16.5   | D      | µg/l  |      | 20.0                                      | 0.00          | 82                                        | 70-130      |     |           |
| 1,1-Dichloropropene                        | 15.3   | D      | µg/l  |      | 20.0                                      | 0.00          | 76                                        | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 17.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 85                                        | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 18.9   | D      | µg/l  |      | 20.0                                      | 0.00          | 94                                        | 70-130      |     |           |
| Ethylbenzene                               | 18.2   | D      | µg/l  |      | 20.0                                      | 0.00          | 91                                        | 70-130      |     |           |
| Hexachlorobutadiene                        | 17.3   | D      | µg/l  |      | 20.0                                      | 0.00          | 86                                        | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 17.0   | D      | µg/l  |      | 20.0                                      | 0.00          | 85                                        | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                       | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|------------------------------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                              |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |                              |      |       |      |                                           |               |      |             |     |           |
| <b>Matrix Spike (1803478-MS1)</b>          | <b>Source: SC44621-02RE1</b> |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |     |           |
| Isopropylbenzene                           | 18.3                         | D    | µg/l  |      | 20.0                                      | 0.00          | 92   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 18.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 17.2                         | D    | µg/l  |      | 20.0                                      | 0.00          | 86   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.9                         | D    | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| Methylene chloride                         | 17.4                         | D    | µg/l  |      | 20.0                                      | 0.00          | 87   | 70-130      |     |           |
| Naphthalene                                | 23.7                         | D    | µg/l  |      | 20.0                                      | 0.00          | 118  | 70-130      |     |           |
| n-Propylbenzene                            | 18.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      |     |           |
| Styrene                                    | 19.0                         | D    | µg/l  |      | 20.0                                      | 0.00          | 95   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 22.1                         | D    | µg/l  |      | 20.0                                      | 0.00          | 110  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 21.3                         | D    | µg/l  |      | 20.0                                      | 0.00          | 106  | 70-130      |     |           |
| Tetrachloroethene                          | 48.9                         | D    | µg/l  |      | 20.0                                      | 34.5          | 72   | 70-130      |     |           |
| Toluene                                    | 17.4                         | D    | µg/l  |      | 20.0                                      | 0.00          | 87   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 20.8                         | D    | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 20.3                         | D    | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 20.2                         | D    | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 19.1                         | D    | µg/l  |      | 20.0                                      | 0.00          | 95   | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 19.1                         | D    | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      |     |           |
| Trichloroethene                            | 18.1                         | D    | µg/l  |      | 20.0                                      | 0.30          | 89   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 20.2                         | D    | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 20.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 103  | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 19.4                         | D    | µg/l  |      | 20.0                                      | 0.00          | 97   | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 19.5                         | D    | µg/l  |      | 20.0                                      | 0.00          | 97   | 70-130      |     |           |
| Vinyl chloride                             | 15.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 78   | 70-130      |     |           |
| m,p-Xylene                                 | 18.3                         | D    | µg/l  |      | 20.0                                      | 0.00          | 92   | 70-130      |     |           |
| o-Xylene                                   | 17.9                         | D    | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      |     |           |
| Tetrahydrofuran                            | 15.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 78   | 70-130      |     |           |
| Ethyl ether                                | 20.0                         | D    | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      |     |           |
| Tert-amyl methyl ether                     | 16.8                         | D    | µg/l  |      | 20.0                                      | 0.00          | 84   | 70-130      |     |           |
| Ethyl tert-butyl ether                     | 16.8                         | D    | µg/l  |      | 20.0                                      | 0.00          | 84   | 70-130      |     |           |
| Di-isopropyl ether                         | 15.7                         | D    | µg/l  |      | 20.0                                      | 0.00          | 78   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 169                          | D    | µg/l  |      | 200                                       | 0.00          | 85   | 70-130      |     |           |
| 1,4-Dioxane                                | 152                          | D    | µg/l  |      | 200                                       | 0.00          | 76   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 21.9                         | D    | µg/l  |      | 20.0                                      | 0.00          | 109  | 70-130      |     |           |
| Ethanol                                    | 418                          | D    | µg/l  |      | 400                                       | 0.00          | 104  | 70-130      |     |           |
| Surrogate: 4-Bromofluorobenzene            | 48.2                         |      | µg/l  |      | 50.0                                      |               | 96   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 48.8                         |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.1                         |      | µg/l  |      | 50.0                                      |               | 106  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.7                         |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |     |           |
| <b>Matrix Spike Dup (1803478-MSD1)</b>     | <b>Source: SC44621-02RE1</b> |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 18.4                         | D    | µg/l  |      | 20.0                                      | 0.00          | 92   | 70-130      | 6   | 20        |
| Acetone                                    | 18.7                         | D    | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      | 1   | 20        |
| Acrylonitrile                              | 17.1                         | D    | µg/l  |      | 20.0                                      | 0.00          | 86   | 70-130      | 0.5 | 20        |
| Benzene                                    | 17.3                         | D    | µg/l  |      | 20.0                                      | 0.00          | 87   | 70-130      | 3   | 20        |
| Bromobenzene                               | 19.9                         | D    | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      | 3   | 20        |
| Bromochloromethane                         | 19.2                         | D    | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 3   | 20        |
| Bromodichloromethane                       | 20.9                         | D    | µg/l  |      | 20.0                                      | 0.00          | 105  | 70-130      | 2   | 20        |
| Bromoform                                  | 20.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 103  | 70-130      | 1   | 20        |
| Bromomethane                               | 14.1                         | D    | µg/l  |      | 20.0                                      | 0.00          | 70   | 70-130      |     | 20        |
| 2-Butanone (MEK)                           | 17.6                         | D    | µg/l  |      | 20.0                                      | 0.00          | 88   | 70-130      |     | 20        |
| n-Butylbenzene                             | 18.2                         | D    | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      | 5   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                       | Flag   | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|------------------------------|--------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                              |        |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |                              |        |       |      |                                           |               |      |             |     |           |
| <b>Matrix Spike Dup (1803478-MSD1)</b>     | <b>Source: SC44621-02RE1</b> |        |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |     |           |
| sec-Butylbenzene                           | 18.8                         | D      | µg/l  |      | 20.0                                      | 0.00          | 94   | 70-130      | 3   | 20        |
| tert-Butylbenzene                          | 19.0                         | D      | µg/l  |      | 20.0                                      | 0.00          | 95   | 70-130      | 3   | 20        |
| Carbon disulfide                           | 15.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 76   | 70-130      | 5   | 20        |
| Carbon tetrachloride                       | 22.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 111  | 70-130      | 3   | 20        |
| Chlorobenzene                              | 19.3                         | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 3   | 20        |
| Chloroethane                               | 20.5                         | D      | µg/l  |      | 20.0                                      | 0.00          | 102  | 70-130      | 0.1 | 20        |
| Chloroform                                 | 19.8                         | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      | 2   | 20        |
| Chloromethane                              | 12.1                         | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 60   | 70-130      | 5   | 20        |
| 2-Chlorotoluene                            | 20.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      | 3   | 20        |
| 4-Chlorotoluene                            | 20.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 101  | 70-130      | 2   | 20        |
| 1,2-Dibromo-3-chloropropane                | 22.0                         | D      | µg/l  |      | 20.0                                      | 0.00          | 110  | 70-130      | 2   | 20        |
| Dibromochloromethane                       | 21.6                         | D      | µg/l  |      | 20.0                                      | 0.00          | 108  | 70-130      | 2   | 20        |
| 1,2-Dibromoethane (EDB)                    | 19.3                         | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 0.3 | 20        |
| Dibromomethane                             | 19.8                         | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      | 4   | 20        |
| 1,2-Dichlorobenzene                        | 20.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      | 4   | 20        |
| 1,3-Dichlorobenzene                        | 20.4                         | D      | µg/l  |      | 20.0                                      | 0.00          | 102  | 70-130      | 2   | 20        |
| 1,4-Dichlorobenzene                        | 20.0                         | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      | 2   | 20        |
| Dichlorodifluoromethane (Freon12)          | 10.9                         | QM7, D | µg/l  |      | 20.0                                      | 0.00          | 55   | 70-130      |     | 20        |
| 1,1-Dichloroethane                         | 18.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      | 3   | 20        |
| 1,2-Dichloroethane                         | 19.9                         | D      | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      | 3   | 20        |
| 1,1-Dichloroethene                         | 16.5                         | D      | µg/l  |      | 20.0                                      | 0.00          | 82   | 70-130      | 4   | 20        |
| cis-1,2-Dichloroethene                     | 17.8                         | D      | µg/l  |      | 20.0                                      | 0.00          | 89   | 70-130      | 5   | 20        |
| trans-1,2-Dichloroethene                   | 16.4                         | D      | µg/l  |      | 20.0                                      | 0.00          | 82   | 70-130      | 3   | 20        |
| 1,2-Dichloropropane                        | 17.7                         | D      | µg/l  |      | 20.0                                      | 0.00          | 89   | 70-130      | 3   | 20        |
| 1,3-Dichloropropane                        | 18.4                         | D      | µg/l  |      | 20.0                                      | 0.00          | 92   | 70-130      | 2   | 20        |
| 2,2-Dichloropropane                        | 17.3                         | D      | µg/l  |      | 20.0                                      | 0.00          | 86   | 70-130      | 5   | 20        |
| 1,1-Dichloropropene                        | 16.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 80   | 70-130      | 5   | 20        |
| cis-1,3-Dichloropropene                    | 17.6                         | D      | µg/l  |      | 20.0                                      | 0.00          | 88   | 70-130      | 3   | 20        |
| trans-1,3-Dichloropropene                  | 19.4                         | D      | µg/l  |      | 20.0                                      | 0.00          | 97   | 70-130      | 2   | 20        |
| Ethylbenzene                               | 18.7                         | D      | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      | 2   | 20        |
| Hexachlorobutadiene                        | 18.5                         | D      | µg/l  |      | 20.0                                      | 0.00          | 92   | 70-130      | 7   | 20        |
| 2-Hexanone (MBK)                           | 17.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 86   | 70-130      | 1   | 20        |
| Isopropylbenzene                           | 18.9                         | D      | µg/l  |      | 20.0                                      | 0.00          | 94   | 70-130      | 3   | 20        |
| 4-Isopropyltoluene                         | 19.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 3   | 20        |
| Methyl tert-butyl ether                    | 17.4                         | D      | µg/l  |      | 20.0                                      | 0.00          | 87   | 70-130      | 1   | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 17.9                         | D      | µg/l  |      | 20.0                                      | 0.00          | 90   | 70-130      | 0   | 20        |
| Methylene chloride                         | 17.9                         | D      | µg/l  |      | 20.0                                      | 0.00          | 89   | 70-130      | 3   | 20        |
| Naphthalene                                | 24.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 121  | 70-130      | 2   | 20        |
| n-Propylbenzene                            | 19.1                         | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 3   | 20        |
| Styrene                                    | 19.5                         | D      | µg/l  |      | 20.0                                      | 0.00          | 98   | 70-130      | 2   | 20        |
| 1,1,1,2-Tetrachloroethane                  | 22.3                         | D      | µg/l  |      | 20.0                                      | 0.00          | 112  | 70-130      | 1   | 20        |
| 1,1,2,2-Tetrachloroethane                  | 21.5                         | D      | µg/l  |      | 20.0                                      | 0.00          | 108  | 70-130      | 1   | 20        |
| Tetrachloroethene                          | 51.4                         | D      | µg/l  |      | 20.0                                      | 34.5          | 85   | 70-130      | 5   | 20        |
| Toluene                                    | 18.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 91   | 70-130      | 5   | 20        |
| 1,2,3-Trichlorobenzene                     | 21.6                         | D      | µg/l  |      | 20.0                                      | 0.00          | 108  | 70-130      | 3   | 20        |
| 1,2,4-Trichlorobenzene                     | 20.7                         | D      | µg/l  |      | 20.0                                      | 0.00          | 104  | 70-130      | 2   | 20        |
| 1,3,5-Trichlorobenzene                     | 21.0                         | D      | µg/l  |      | 20.0                                      | 0.00          | 105  | 70-130      | 4   | 20        |
| 1,1,1-Trichloroethane                      | 20.0                         | D      | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      | 5   | 20        |
| 1,1,2-Trichloroethane                      | 19.2                         | D      | µg/l  |      | 20.0                                      | 0.00          | 96   | 70-130      | 0.4 | 20        |
| Trichloroethene                            | 18.7                         | D      | µg/l  |      | 20.0                                      | 0.30          | 92   | 70-130      | 3   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                    | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|-------------------------------------------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                                           |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803478 - SW846 5030 Water MS</b> |                                           |      |       |      |                                           |               |      |             |     |           |
| <b>Matrix Spike Dup (1803478-MSD1)</b>     | <b>Source: SC44621-02RE1</b>              |      |       |      | <b>Prepared &amp; Analyzed: 14-Mar-18</b> |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | 20.7                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 103  | 70-130      | 2   | 20        |
| 1,2,3-Trichloropropane                     | 20.5                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 102  | 70-130      | 0.2 | 20        |
| 1,2,4-Trimethylbenzene                     | 20.0                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 100  | 70-130      | 3   | 20        |
| 1,3,5-Trimethylbenzene                     | 19.9                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 99   | 70-130      | 2   | 20        |
| Vinyl chloride                             | 16.3                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 81   | 70-130      | 5   | 20        |
| m,p-Xylene                                 | 18.9                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 95   | 70-130      | 3   | 20        |
| o-Xylene                                   | 18.6                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 93   | 70-130      | 4   | 20        |
| Tetrahydrofuran                            | 15.5                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 78   | 70-130      |     | 20        |
| Ethyl ether                                | 21.5                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 108  | 70-130      | 7   | 20        |
| Tert-amyl methyl ether                     | 17.3                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 87   | 70-130      | 3   | 20        |
| Ethyl tert-butyl ether                     | 17.0                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 85   | 70-130      | 1   | 20        |
| Di-isopropyl ether                         | 16.2                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 81   | 70-130      | 3   | 20        |
| Tert-Butanol / butyl alcohol               | 174                                       | D    | µg/l  |      | 200                                       | 0.00          | 87   | 70-130      | 3   | 20        |
| 1,4-Dioxane                                | 157                                       | D    | µg/l  |      | 200                                       | 0.00          | 79   | 70-130      |     | 20        |
| trans-1,4-Dichloro-2-butene                | 21.0                                      | D    | µg/l  |      | 20.0                                      | 0.00          | 105  | 70-130      | 4   | 20        |
| Ethanol                                    | 365                                       | D    | µg/l  |      | 400                                       | 0.00          | 91   | 70-130      |     | 20        |
| Surrogate: 4-Bromofluorobenzene            | 48.2                                      |      | µg/l  |      | 50.0                                      |               | 96   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 48.7                                      |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.1                                      |      | µg/l  |      | 50.0                                      |               | 106  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.8                                      |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |                                           |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803567-BLK1)</b>                | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |      |       |      |                                           |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 0.53                                    | U    | µg/l  | 0.53 |                                           |               |      |             |     |           |
| Acetone                                    | 1.94                                      | J    | µg/l  | 0.80 |                                           |               |      |             |     |           |
| Acrylonitrile                              | < 0.47                                    | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| Benzene                                    | < 0.28                                    | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Bromobenzene                               | < 0.33                                    | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Bromochloromethane                         | < 0.34                                    | U    | µg/l  | 0.34 |                                           |               |      |             |     |           |
| Bromodichloromethane                       | < 0.42                                    | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| Bromoform                                  | < 0.42                                    | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| Bromomethane                               | < 0.90                                    | U    | µg/l  | 0.90 |                                           |               |      |             |     |           |
| 2-Butanone (MEK)                           | < 1.07                                    | U    | µg/l  | 1.07 |                                           |               |      |             |     |           |
| n-Butylbenzene                             | < 0.41                                    | U    | µg/l  | 0.41 |                                           |               |      |             |     |           |
| sec-Butylbenzene                           | < 0.33                                    | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| tert-Butylbenzene                          | < 0.32                                    | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| Carbon disulfide                           | < 0.41                                    | U    | µg/l  | 0.41 |                                           |               |      |             |     |           |
| Carbon tetrachloride                       | < 0.44                                    | U    | µg/l  | 0.44 |                                           |               |      |             |     |           |
| Chlorobenzene                              | < 0.25                                    | U    | µg/l  | 0.25 |                                           |               |      |             |     |           |
| Chloroethane                               | < 0.59                                    | U    | µg/l  | 0.59 |                                           |               |      |             |     |           |
| Chloroform                                 | < 0.33                                    | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Chloromethane                              | < 0.37                                    | U    | µg/l  | 0.37 |                                           |               |      |             |     |           |
| 2-Chlorotoluene                            | < 0.32                                    | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 4-Chlorotoluene                            | < 0.32                                    | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | < 0.86                                    | U    | µg/l  | 0.86 |                                           |               |      |             |     |           |
| Dibromochloromethane                       | < 0.32                                    | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                    | < 0.20                                    | U    | µg/l  | 0.20 |                                           |               |      |             |     |           |
| Dibromomethane                             | < 0.31                                    | U    | µg/l  | 0.31 |                                           |               |      |             |     |           |
| 1,2-Dichlorobenzene                        | < 0.28                                    | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| 1,3-Dichlorobenzene                        | < 0.31                                    | U    | µg/l  | 0.31 |                                           |               |      |             |     |           |
| 1,4-Dichlorobenzene                        | < 0.27                                    | U    | µg/l  | 0.27 |                                           |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803567-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)          | < 0.58 | U    | µg/l  | 0.58 |                                           |               |      |             |     |           |
| 1,1-Dichloroethane                         | < 0.32 | U    | µg/l  | 0.32 |                                           |               |      |             |     |           |
| 1,2-Dichloroethane                         | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| 1,1-Dichloroethene                         | < 0.69 | U    | µg/l  | 0.69 |                                           |               |      |             |     |           |
| cis-1,2-Dichloroethene                     | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| trans-1,2-Dichloroethene                   | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,2-Dichloropropane                        | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| 1,3-Dichloropropane                        | < 0.21 | U    | µg/l  | 0.21 |                                           |               |      |             |     |           |
| 2,2-Dichloropropane                        | < 0.42 | U    | µg/l  | 0.42 |                                           |               |      |             |     |           |
| 1,1-Dichloropropene                        | < 0.58 | U    | µg/l  | 0.58 |                                           |               |      |             |     |           |
| cis-1,3-Dichloropropene                    | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.35 | U    | µg/l  | 0.35 |                                           |               |      |             |     |           |
| Ethylbenzene                               | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.47 | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 0.53 | U    | µg/l  | 0.53 |                                           |               |      |             |     |           |
| Isopropylbenzene                           | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 0.24 | U    | µg/l  | 0.24 |                                           |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 0.52 | U    | µg/l  | 0.52 |                                           |               |      |             |     |           |
| Methylene chloride                         | < 0.66 | U    | µg/l  | 0.66 |                                           |               |      |             |     |           |
| Naphthalene                                | < 0.35 | U    | µg/l  | 0.35 |                                           |               |      |             |     |           |
| n-Propylbenzene                            | < 0.34 | U    | µg/l  | 0.34 |                                           |               |      |             |     |           |
| Styrene                                    | < 0.40 | U    | µg/l  | 0.40 |                                           |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Tetrachloroethene                          | < 0.57 | U    | µg/l  | 0.57 |                                           |               |      |             |     |           |
| Toluene                                    | < 0.30 | U    | µg/l  | 0.30 |                                           |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 0.30 | U    | µg/l  | 0.30 |                                           |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 0.51 | U    | µg/l  | 0.51 |                                           |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Trichloroethene                            | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 0.49 | U    | µg/l  | 0.49 |                                           |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 0.36 | U    | µg/l  | 0.36 |                                           |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 0.43 | U    | µg/l  | 0.43 |                                           |               |      |             |     |           |
| Vinyl chloride                             | < 0.47 | U    | µg/l  | 0.47 |                                           |               |      |             |     |           |
| m,p-Xylene                                 | < 0.38 | U    | µg/l  | 0.38 |                                           |               |      |             |     |           |
| o-Xylene                                   | < 0.28 | U    | µg/l  | 0.28 |                                           |               |      |             |     |           |
| Tetrahydrofuran                            | < 1.06 | U    | µg/l  | 1.06 |                                           |               |      |             |     |           |
| Ethyl ether                                | < 0.37 | U    | µg/l  | 0.37 |                                           |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 0.49 | U    | µg/l  | 0.49 |                                           |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 0.33 | U    | µg/l  | 0.33 |                                           |               |      |             |     |           |
| Di-isopropyl ether                         | < 0.29 | U    | µg/l  | 0.29 |                                           |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 5.90 | U    | µg/l  | 5.90 |                                           |               |      |             |     |           |
| 1,4-Dioxane                                | < 11.4 | U    | µg/l  | 11.4 |                                           |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 0.82 | U    | µg/l  | 0.82 |                                           |               |      |             |     |           |
| Ethanol                                    | < 30.9 | U    | µg/l  | 30.9 |                                           |               |      |             |     |           |
| Surrogate: 4-Bromofluorobenzene            | 47.5   |      | µg/l  |      | 50.0                                      |               | 95   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803567-BLK1)</b>                |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |     |           |
| Surrogate: Toluene-d8                      | 49.5   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 58.1   |      | µg/l  |      | 50.0                                      |               | 116  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 50.2   |      | µg/l  |      | 50.0                                      |               | 100  | 70-130      |     |           |
| <b>LCS (1803567-BS1)</b>                   |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 18.7   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| Acetone                                    | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| Acrylonitrile                              | 16.9   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Benzene                                    | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Bromobenzene                               | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Bromochloromethane                         | 20.7   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| Bromodichloromethane                       | 22.1   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      |     |           |
| Bromoform                                  | 21.7   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      |     |           |
| Bromomethane                               | 20.7   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |     |           |
| n-Butylbenzene                             | 17.6   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |     |           |
| sec-Butylbenzene                           | 18.7   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| tert-Butylbenzene                          | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| Carbon disulfide                           | 18.8   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| Carbon tetrachloride                       | 22.6   |      | µg/l  |      | 20.0                                      |               | 113  | 70-130      |     |           |
| Chlorobenzene                              | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| Chloroethane                               | 29.7   | QC2  | µg/l  |      | 20.0                                      |               | 148  | 70-130      |     |           |
| Chloroform                                 | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| Chloromethane                              | 15.9   |      | µg/l  |      | 20.0                                      |               | 80   | 70-130      |     |           |
| 2-Chlorotoluene                            | 20.5   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |     |           |
| 4-Chlorotoluene                            | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 23.1   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      |     |           |
| Dibromochloromethane                       | 23.0   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Dibromomethane                             | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 19.7   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 19.9   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 22.2   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      |     |           |
| 1,1-Dichloroethene                         | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 17.7   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 18.9   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 20.5   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      |     |           |
| 1,1-Dichloropropene                        | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| Ethylbenzene                               | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| Hexachlorobutadiene                        | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Isopropylbenzene                           | 19.1   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 18.9   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>LCS (1803567-BS1)</b>                   |        |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.7   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Methylene chloride                         | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Naphthalene                                | 22.9   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      |     |           |
| n-Propylbenzene                            | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| Styrene                                    | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 22.9   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| Tetrachloroethene                          | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Toluene                                    | 19.1   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 20.9   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 21.8   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Trichloroethene                            | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 25.1   |      | µg/l  |      | 20.0                                      |               | 125  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      |     |           |
| Vinyl chloride                             | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      |     |           |
| m,p-Xylene                                 | 18.9   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| o-Xylene                                   | 18.7   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Tetrahydrofuran                            | 15.9   |      | µg/l  |      | 20.0                                      |               | 80   | 70-130      |     |           |
| Ethyl ether                                | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      |     |           |
| Tert-amyl methyl ether                     | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| Ethyl tert-butyl ether                     | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Di-isopropyl ether                         | 16.3   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 176    |      | µg/l  |      | 200                                       |               | 88   | 70-130      |     |           |
| 1,4-Dioxane                                | 161    |      | µg/l  |      | 200                                       |               | 81   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 25.0   |      | µg/l  |      | 20.0                                      |               | 125  | 70-130      |     |           |
| Ethanol                                    | 346    |      | µg/l  |      | 400                                       |               | 86   | 70-130      |     |           |
| Surrogate: 4-Bromofluorobenzene            | 49.3   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.5   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 58.4   |      | µg/l  |      | 50.0                                      |               | 117  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 50.2   |      | µg/l  |      | 50.0                                      |               | 100  | 70-130      |     |           |
| <b>LCS Dup (1803567-BS1)</b>               |        |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 11  | 20        |
| Acetone                                    | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 0.5 | 20        |
| Acrylonitrile                              | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2   | 20        |
| Benzene                                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 1   | 20        |
| Bromobenzene                               | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 1   | 20        |
| Bromochloromethane                         | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1   | 20        |
| Bromodichloromethane                       | 22.5   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 2   | 20        |
| Bromoform                                  | 21.7   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      | 0.3 | 20        |
| Bromomethane                               | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1   | 20        |
| 2-Butanone (MEK)                           | 18.1   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3   | 20        |
| n-Butylbenzene                             | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 4   | 20        |
| sec-Butylbenzene                           | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 4   | 20        |
| tert-Butylbenzene                          | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4   | 20        |
| Carbon disulfide                           | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 6   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>LCS Dup (1803567-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |      |           |
| Carbon tetrachloride                       | 23.7   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      | 4    | 20        |
| Chlorobenzene                              | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 0.3  | 20        |
| Chloroethane                               | 27.8   | QC2  | µg/l  |      | 20.0                                      |               | 139  | 70-130      | 6    | 20        |
| Chloroform                                 | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 0.4  | 20        |
| Chloromethane                              | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 8    | 20        |
| 2-Chlorotoluene                            | 20.8   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      | 2    | 20        |
| 4-Chlorotoluene                            | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 3    | 20        |
| 1,2-Dibromo-3-chloropropane                | 23.2   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 0.1  | 20        |
| Dibromochloromethane                       | 23.1   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 0.4  | 20        |
| 1,2-Dibromoethane (EDB)                    | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 0.5  | 20        |
| Dibromomethane                             | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1    | 20        |
| 1,2-Dichlorobenzene                        | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 3    | 20        |
| 1,3-Dichlorobenzene                        | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 3    | 20        |
| 1,4-Dichlorobenzene                        | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 3    | 20        |
| Dichlorodifluoromethane (Freon12)          | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 11   | 20        |
| 1,1-Dichloroethane                         | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 3    | 20        |
| 1,2-Dichloroethane                         | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      | 0.8  | 20        |
| 1,1-Dichloroethene                         | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 10   | 20        |
| cis-1,2-Dichloroethene                     | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3    | 20        |
| trans-1,2-Dichloroethene                   | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 3    | 20        |
| 1,2-Dichloropropane                        | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 1    | 20        |
| 1,3-Dichloropropane                        | 19.1   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 1    | 20        |
| 2,2-Dichloropropane                        | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 2    | 20        |
| 1,1-Dichloropropene                        | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 6    | 20        |
| cis-1,3-Dichloropropene                    | 18.7   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 0.8  | 20        |
| trans-1,3-Dichloropropene                  | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 1    | 20        |
| Ethylbenzene                               | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 2    | 20        |
| Hexachlorobutadiene                        | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 3    | 20        |
| 2-Hexanone (MBK)                           | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2    | 20        |
| Isopropylbenzene                           | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 2    | 20        |
| 4-Isopropyltoluene                         | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 2    | 20        |
| Methyl tert-butyl ether                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 1    | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3    | 20        |
| Methylene chloride                         | 18.9   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 2    | 20        |
| Naphthalene                                | 24.0   |      | µg/l  |      | 20.0                                      |               | 120  | 70-130      | 5    | 20        |
| n-Propylbenzene                            | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 3    | 20        |
| Styrene                                    | 20.1   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4    | 20        |
| 1,1,1,2-Tetrachloroethane                  | 22.8   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      | 0.3  | 20        |
| 1,1,2,2-Tetrachloroethane                  | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 1    | 20        |
| Tetrachloroethene                          | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 5    | 20        |
| Toluene                                    | 19.1   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 0.05 | 20        |
| 1,2,3-Trichlorobenzene                     | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 2    | 20        |
| 1,2,4-Trichlorobenzene                     | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 4    | 20        |
| 1,3,5-Trichlorobenzene                     | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 3    | 20        |
| 1,1,1-Trichloroethane                      | 22.5   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 3    | 20        |
| 1,1,2-Trichloroethane                      | 19.7   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 2    | 20        |
| Trichloroethene                            | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 3    | 20        |
| Trichlorofluoromethane (Freon 11)          | 27.3   | QM9  | µg/l  |      | 20.0                                      |               | 136  | 70-130      | 8    | 20        |
| 1,2,3-Trichloropropane                     | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 0.9  | 20        |
| 1,2,4-Trimethylbenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 2    | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>LCS Dup (1803567-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 3   | 20        |
| Vinyl chloride                             | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      | 15  | 20        |
| m,p-Xylene                                 | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 3   | 20        |
| o-Xylene                                   | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 1   | 20        |
| Tetrahydrofuran                            | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 3   | 20        |
| Ethyl ether                                | 22.2   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      | 1   | 20        |
| Tert-amyl methyl ether                     | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 2   | 20        |
| Ethyl tert-butyl ether                     | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 2   | 20        |
| Di-isopropyl ether                         | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 3   | 20        |
| Tert-Butanol / butyl alcohol               | 182    |      | µg/l  |      | 200                                       |               | 91   | 70-130      | 3   | 20        |
| 1,4-Dioxane                                | 162    |      | µg/l  |      | 200                                       |               | 81   | 70-130      | 0.3 | 20        |
| trans-1,4-Dichloro-2-butene                | 24.4   |      | µg/l  |      | 20.0                                      |               | 122  | 70-130      | 3   | 20        |
| Ethanol                                    | 350    |      | µg/l  |      | 400                                       |               | 87   | 70-130      | 1   | 20        |
| Surrogate: 4-Bromofluorobenzene            | 48.9   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.5   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 56.8   |      | µg/l  |      | 50.0                                      |               | 114  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 50.1   |      | µg/l  |      | 50.0                                      |               | 100  | 70-130      |     |           |

# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                          | Result    | Flag | Units | *RDL    | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-------------------------------------|-----------|------|-------|---------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>           |           |      |       |         |                                           |               |      |             |     |           |
| <b>Batch 1803493 - SW846 3005A</b>  |           |      |       |         |                                           |               |      |             |     |           |
| <b><u>Blank (1803493-BLK1)</u></b>  |           |      |       |         | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Sodium                              | 0.191     | J    | mg/l  | 0.0392  |                                           |               |      |             |     |           |
| Potassium                           | 0.140     | J    | mg/l  | 0.0600  |                                           |               |      |             |     |           |
| Iron                                | < 0.0045  | U    | mg/l  | 0.0045  |                                           |               |      |             |     |           |
| Manganese                           | < 0.0019  | U    | mg/l  | 0.0019  |                                           |               |      |             |     |           |
| Thallium                            | < 0.0021  | U    | mg/l  | 0.0021  |                                           |               |      |             |     |           |
| Nickel                              | < 0.0009  | U    | mg/l  | 0.0009  |                                           |               |      |             |     |           |
| Lead                                | < 0.0062  | U    | mg/l  | 0.0062  |                                           |               |      |             |     |           |
| Selenium                            | < 0.0042  | U    | mg/l  | 0.0042  |                                           |               |      |             |     |           |
| Zinc                                | < 0.0016  | U    | mg/l  | 0.0016  |                                           |               |      |             |     |           |
| Aluminum                            | < 0.0103  | U    | mg/l  | 0.0103  |                                           |               |      |             |     |           |
| Silver                              | < 0.0006  | U    | mg/l  | 0.0006  |                                           |               |      |             |     |           |
| Vanadium                            | < 0.0011  | U    | mg/l  | 0.0011  |                                           |               |      |             |     |           |
| Antimony                            | 0.0017    | J    | mg/l  | 0.0016  |                                           |               |      |             |     |           |
| Beryllium                           | < 0.0003  | U    | mg/l  | 0.0003  |                                           |               |      |             |     |           |
| Copper                              | < 0.0023  | U    | mg/l  | 0.0023  |                                           |               |      |             |     |           |
| Chromium                            | < 0.0009  | U    | mg/l  | 0.0009  |                                           |               |      |             |     |           |
| Cobalt                              | < 0.0008  | U    | mg/l  | 0.0008  |                                           |               |      |             |     |           |
| Cadmium                             | < 0.0004  | U    | mg/l  | 0.0004  |                                           |               |      |             |     |           |
| Calcium                             | 0.0132    | J    | mg/l  | 0.0071  |                                           |               |      |             |     |           |
| Magnesium                           | < 0.0044  | U    | mg/l  | 0.0044  |                                           |               |      |             |     |           |
| Barium                              | < 0.0007  | U    | mg/l  | 0.0007  |                                           |               |      |             |     |           |
| Arsenic                             | < 0.00138 | U    | mg/l  | 0.00138 |                                           |               |      |             |     |           |
| <b><u>LCS (1803493-BS1)</u></b>     |           |      |       |         | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Sodium                              | 6.03      |      | mg/l  | 0.0392  | 6.25                                      |               | 96   | 85-115      |     |           |
| Iron                                | 1.29      |      | mg/l  | 0.0045  | 1.25                                      |               | 104  | 85-115      |     |           |
| Potassium                           | 12.1      |      | mg/l  | 0.0600  | 12.5                                      |               | 97   | 85-115      |     |           |
| Manganese                           | 1.30      |      | mg/l  | 0.0019  | 1.25                                      |               | 104  | 85-115      |     |           |
| Lead                                | 1.33      |      | mg/l  | 0.0062  | 1.25                                      |               | 106  | 85-115      |     |           |
| Selenium                            | 1.31      |      | mg/l  | 0.0042  | 1.25                                      |               | 105  | 85-115      |     |           |
| Nickel                              | 1.28      |      | mg/l  | 0.0009  | 1.25                                      |               | 103  | 85-115      |     |           |
| Antimony                            | 1.26      |      | mg/l  | 0.0016  | 1.25                                      |               | 101  | 85-115      |     |           |
| Silver                              | 1.27      |      | mg/l  | 0.0006  | 1.25                                      |               | 102  | 85-115      |     |           |
| Aluminum                            | 1.28      |      | mg/l  | 0.0103  | 1.25                                      |               | 102  | 85-115      |     |           |
| Thallium                            | 1.35      |      | mg/l  | 0.0021  | 1.25                                      |               | 108  | 85-115      |     |           |
| Vanadium                            | 1.25      |      | mg/l  | 0.0011  | 1.25                                      |               | 100  | 85-115      |     |           |
| Zinc                                | 1.32      |      | mg/l  | 0.0016  | 1.25                                      |               | 105  | 85-115      |     |           |
| Arsenic                             | 1.286     |      | mg/l  | 0.00138 | 1.25                                      |               | 103  | 85-115      |     |           |
| Barium                              | 1.30      |      | mg/l  | 0.0007  | 1.25                                      |               | 104  | 85-115      |     |           |
| Magnesium                           | 1.27      |      | mg/l  | 0.0044  | 1.25                                      |               | 102  | 85-115      |     |           |
| Copper                              | 1.36      |      | mg/l  | 0.0023  | 1.25                                      |               | 109  | 85-115      |     |           |
| Chromium                            | 1.32      |      | mg/l  | 0.0009  | 1.25                                      |               | 106  | 85-115      |     |           |
| Cobalt                              | 1.27      |      | mg/l  | 0.0008  | 1.25                                      |               | 101  | 85-115      |     |           |
| Cadmium                             | 1.28      |      | mg/l  | 0.0004  | 1.25                                      |               | 102  | 85-115      |     |           |
| Calcium                             | 6.50      |      | mg/l  | 0.0071  | 6.25                                      |               | 104  | 85-115      |     |           |
| Beryllium                           | 1.42      |      | mg/l  | 0.0003  | 1.25                                      |               | 114  | 85-115      |     |           |
| <b><u>LCS Dup (1803493-BS1)</u></b> |           |      |       |         | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Iron                                | 1.25      |      | mg/l  | 0.0045  | 1.25                                      |               | 100  | 85-115      | 3   | 20        |
| Potassium                           | 12.2      |      | mg/l  | 0.0600  | 12.5                                      |               | 97   | 85-115      | 0.3 | 20        |
| Manganese                           | 1.24      |      | mg/l  | 0.0019  | 1.25                                      |               | 100  | 85-115      | 5   | 20        |
| Sodium                              | 6.08      |      | mg/l  | 0.0392  | 6.25                                      |               | 97   | 85-115      | 0.8 | 20        |

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# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                               | Result    | Flag   | Units | *RDL                      | Spike Level                               | Source Result                             | %REC | %REC Limits | RPD | RPD Limit |
|------------------------------------------|-----------|--------|-------|---------------------------|-------------------------------------------|-------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>                |           |        |       |                           |                                           |                                           |      |             |     |           |
| <b>Batch 1803493 - SW846 3005A</b>       |           |        |       |                           |                                           |                                           |      |             |     |           |
| <b><u>LCS Dup (1803493-BSD1)</u></b>     |           |        |       |                           | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |                                           |      |             |     |           |
| Magnesium                                | 1.27      |        | mg/l  | 0.0044                    | 1.25                                      |                                           | 101  | 85-115      | 0.5 | 20        |
| Nickel                                   | 1.24      |        | mg/l  | 0.0009                    | 1.25                                      |                                           | 100  | 85-115      | 3   | 20        |
| Lead                                     | 1.28      |        | mg/l  | 0.0062                    | 1.25                                      |                                           | 102  | 85-115      | 4   | 20        |
| Antimony                                 | 1.22      |        | mg/l  | 0.0016                    | 1.25                                      |                                           | 98   | 85-115      | 3   | 20        |
| Copper                                   | 1.29      |        | mg/l  | 0.0023                    | 1.25                                      |                                           | 103  | 85-115      | 5   | 20        |
| Thallium                                 | 1.30      |        | mg/l  | 0.0021                    | 1.25                                      |                                           | 104  | 85-115      | 3   | 20        |
| Beryllium                                | 1.40      |        | mg/l  | 0.0003                    | 1.25                                      |                                           | 112  | 85-115      | 1   | 20        |
| Vanadium                                 | 1.25      |        | mg/l  | 0.0011                    | 1.25                                      |                                           | 100  | 85-115      | 0.4 | 20        |
| Selenium                                 | 1.26      |        | mg/l  | 0.0042                    | 1.25                                      |                                           | 101  | 85-115      | 4   | 20        |
| Chromium                                 | 1.29      |        | mg/l  | 0.0009                    | 1.25                                      |                                           | 104  | 85-115      | 2   | 20        |
| Cobalt                                   | 1.22      |        | mg/l  | 0.0008                    | 1.25                                      |                                           | 98   | 85-115      | 4   | 20        |
| Calcium                                  | 6.36      |        | mg/l  | 0.0071                    | 6.25                                      |                                           | 102  | 85-115      | 2   | 20        |
| Barium                                   | 1.30      |        | mg/l  | 0.0007                    | 1.25                                      |                                           | 104  | 85-115      | 0   | 20        |
| Arsenic                                  | 1.249     |        | mg/l  | 0.00138                   | 1.25                                      |                                           | 100  | 85-115      | 3   | 20        |
| Aluminum                                 | 1.29      |        | mg/l  | 0.0103                    | 1.25                                      |                                           | 103  | 85-115      | 1   | 20        |
| Silver                                   | 1.24      |        | mg/l  | 0.0006                    | 1.25                                      |                                           | 99   | 85-115      | 2   | 20        |
| Zinc                                     | 1.28      |        | mg/l  | 0.0016                    | 1.25                                      |                                           | 103  | 85-115      | 3   | 20        |
| Cadmium                                  | 1.24      |        | mg/l  | 0.0004                    | 1.25                                      |                                           | 99   | 85-115      | 3   | 20        |
| <b><u>Duplicate (1803493-DUP1)</u></b>   |           |        |       | <u>Source: SC44621-02</u> |                                           | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |             |     |           |
| Manganese                                | 0.338     |        | mg/l  | 0.0019                    |                                           | 0.329                                     |      |             | 3   | 20        |
| Iron                                     | 2.84      |        | mg/l  | 0.0045                    |                                           | 2.81                                      |      |             | 1   | 20        |
| Sodium                                   | 168       |        | mg/l  | 0.0392                    |                                           | 161                                       |      |             | 4   | 20        |
| Potassium                                | 7.10      |        | mg/l  | 0.0600                    |                                           | 6.95                                      |      |             | 2   | 20        |
| Cadmium                                  | 0.0011    | J      | mg/l  | 0.0004                    |                                           | 0.0011                                    |      |             | 1   | 20        |
| Lead                                     | < 0.0062  | U      | mg/l  | 0.0062                    |                                           | BRL                                       |      |             |     | 20        |
| Selenium                                 | < 0.0042  | U      | mg/l  | 0.0042                    |                                           | BRL                                       |      |             |     | 20        |
| Antimony                                 | < 0.0016  | U      | mg/l  | 0.0016                    |                                           | BRL                                       |      |             |     | 20        |
| Nickel                                   | 0.0047    | J      | mg/l  | 0.0009                    |                                           | 0.0046                                    |      |             | 3   | 20        |
| Magnesium                                | 12.1      |        | mg/l  | 0.0044                    |                                           | 11.9                                      |      |             | 2   | 20        |
| Copper                                   | 0.0104    |        | mg/l  | 0.0023                    |                                           | 0.0098                                    |      |             | 5   | 20        |
| Thallium                                 | < 0.0021  | U      | mg/l  | 0.0021                    |                                           | BRL                                       |      |             |     | 20        |
| Cobalt                                   | 0.0010    | J      | mg/l  | 0.0008                    |                                           | 0.0010                                    |      |             | 10  | 20        |
| Vanadium                                 | < 0.0011  | U      | mg/l  | 0.0011                    |                                           | BRL                                       |      |             |     | 20        |
| Calcium                                  | 46.7      |        | mg/l  | 0.0071                    |                                           | 46.1                                      |      |             | 1   | 20        |
| Beryllium                                | < 0.0003  | U      | mg/l  | 0.0003                    |                                           | BRL                                       |      |             |     | 20        |
| Barium                                   | 0.0164    |        | mg/l  | 0.0007                    |                                           | 0.0158                                    |      |             | 3   | 20        |
| Arsenic                                  | < 0.00138 | U      | mg/l  | 0.00138                   |                                           | 0.0018                                    |      |             |     | 20        |
| Aluminum                                 | 0.0421    |        | mg/l  | 0.0103                    |                                           | 0.0364                                    |      |             | 15  | 20        |
| Silver                                   | < 0.0006  | U      | mg/l  | 0.0006                    |                                           | BRL                                       |      |             |     | 20        |
| Zinc                                     | 0.0044    | QR6, J | mg/l  | 0.0016                    |                                           | 0.0034                                    |      |             | 23  | 20        |
| Chromium                                 | 0.0014    | J      | mg/l  | 0.0009                    |                                           | 0.0014                                    |      |             | 7   | 20        |
| <b><u>Matrix Spike (1803493-MS1)</u></b> |           |        |       | <u>Source: SC44621-02</u> |                                           | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |             |     |           |
| Iron                                     | 3.97      |        | mg/l  | 0.0045                    | 1.25                                      | 2.81                                      | 93   | 75-125      |     |           |
| Sodium                                   | 161       | QM2    | mg/l  | 0.0392                    | 6.25                                      | 161                                       | 2    | 75-125      |     |           |
| Manganese                                | 1.59      |        | mg/l  | 0.0019                    | 1.25                                      | 0.329                                     | 101  | 75-125      |     |           |
| Potassium                                | 18.6      |        | mg/l  | 0.0600                    | 12.5                                      | 6.95                                      | 93   | 75-125      |     |           |
| Aluminum                                 | 1.34      |        | mg/l  | 0.0103                    | 1.25                                      | 0.0364                                    | 104  | 75-125      |     |           |
| Calcium                                  | 51.4      |        | mg/l  | 0.0071                    | 6.25                                      | 46.1                                      | 86   | 75-125      |     |           |
| Cadmium                                  | 1.22      |        | mg/l  | 0.0004                    | 1.25                                      | 0.0011                                    | 98   | 75-125      |     |           |
| Cobalt                                   | 1.20      |        | mg/l  | 0.0008                    | 1.25                                      | 0.0010                                    | 96   | 75-125      |     |           |

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# **Total Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte(s)                                    | Result | Flag | Units | *RDL                             | Spike Level | Source Result                                    | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|--------|------|-------|----------------------------------|-------------|--------------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>                     |        |      |       |                                  |             |                                                  |      |             |     |           |
| <b>Batch 1803493 - SW846 3005A</b>            |        |      |       |                                  |             |                                                  |      |             |     |           |
| <b><u>Matrix Spike (1803493-MS1)</u></b>      |        |      |       | <b><u>Source: SC44621-02</u></b> |             | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Chromium                                      | 1.28   |      | mg/l  | 0.0009                           | 1.25        | 0.0014                                           | 102  | 75-125      |     |           |
| Copper                                        | 1.39   |      | mg/l  | 0.0023                           | 1.25        | 0.0098                                           | 111  | 75-125      |     |           |
| Zinc                                          | 1.27   |      | mg/l  | 0.0016                           | 1.25        | 0.0034                                           | 101  | 75-125      |     |           |
| Barium                                        | 1.27   |      | mg/l  | 0.0007                           | 1.25        | 0.0158                                           | 100  | 75-125      |     |           |
| Beryllium                                     | 1.38   |      | mg/l  | 0.0003                           | 1.25        | BRL                                              | 111  | 75-125      |     |           |
| Arsenic                                       | 1.341  |      | mg/l  | 0.00138                          | 1.25        | 0.0018                                           | 107  | 75-125      |     |           |
| Magnesium                                     | 12.8   | QM4X | mg/l  | 0.0044                           | 1.25        | 11.9                                             | 70   | 75-125      |     |           |
| Nickel                                        | 1.21   |      | mg/l  | 0.0009                           | 1.25        | 0.0046                                           | 96   | 75-125      |     |           |
| Lead                                          | 1.23   |      | mg/l  | 0.0062                           | 1.25        | BRL                                              | 99   | 75-125      |     |           |
| Antimony                                      | 1.29   |      | mg/l  | 0.0016                           | 1.25        | BRL                                              | 103  | 75-125      |     |           |
| Silver                                        | 1.29   |      | mg/l  | 0.0006                           | 1.25        | BRL                                              | 103  | 75-125      |     |           |
| Vanadium                                      | 1.21   |      | mg/l  | 0.0011                           | 1.25        | BRL                                              | 97   | 70-130      |     |           |
| Thallium                                      | 1.28   |      | mg/l  | 0.0021                           | 1.25        | BRL                                              | 102  | 75-125      |     |           |
| Selenium                                      | 1.36   |      | mg/l  | 0.0042                           | 1.25        | BRL                                              | 108  | 75-125      |     |           |
| <b><u>Matrix Spike Dup (1803493-MSD1)</u></b> |        |      |       | <b><u>Source: SC44621-02</u></b> |             | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Manganese                                     | 1.55   |      | mg/l  | 0.0019                           | 1.25        | 0.329                                            | 97   | 75-125      | 3   | 20        |
| Potassium                                     | 19.0   |      | mg/l  | 0.0600                           | 12.5        | 6.95                                             | 97   | 75-125      | 2   | 20        |
| Iron                                          | 3.97   |      | mg/l  | 0.0045                           | 1.25        | 2.81                                             | 93   | 75-125      | 0.2 | 20        |
| Sodium                                        | 166    |      | mg/l  | 0.0392                           | 6.25        | 161                                              | 82   | 75-125      | 3   | 20        |
| Zinc                                          | 1.26   |      | mg/l  | 0.0016                           | 1.25        | 0.0034                                           | 101  | 75-125      | 0.5 | 20        |
| Antimony                                      | 1.27   |      | mg/l  | 0.0016                           | 1.25        | BRL                                              | 102  | 75-125      | 1   | 20        |
| Silver                                        | 1.31   |      | mg/l  | 0.0006                           | 1.25        | BRL                                              | 105  | 75-125      | 1   | 20        |
| Thallium                                      | 1.27   |      | mg/l  | 0.0021                           | 1.25        | BRL                                              | 102  | 75-125      | 0.2 | 20        |
| Selenium                                      | 1.32   |      | mg/l  | 0.0042                           | 1.25        | BRL                                              | 106  | 75-125      | 2   | 20        |
| Lead                                          | 1.22   |      | mg/l  | 0.0062                           | 1.25        | BRL                                              | 97   | 75-125      | 1   | 20        |
| Nickel                                        | 1.19   |      | mg/l  | 0.0009                           | 1.25        | 0.0046                                           | 95   | 75-125      | 1   | 20        |
| Magnesium                                     | 13.0   |      | mg/l  | 0.0044                           | 1.25        | 11.9                                             | 93   | 75-125      | 2   | 20        |
| Copper                                        | 1.36   |      | mg/l  | 0.0023                           | 1.25        | 0.0098                                           | 108  | 75-125      | 2   | 20        |
| Cobalt                                        | 1.17   |      | mg/l  | 0.0008                           | 1.25        | 0.0010                                           | 94   | 75-125      | 2   | 20        |
| Cadmium                                       | 1.21   |      | mg/l  | 0.0004                           | 1.25        | 0.0011                                           | 96   | 75-125      | 2   | 20        |
| Calcium                                       | 51.6   |      | mg/l  | 0.0071                           | 6.25        | 46.1                                             | 89   | 75-125      | 0.4 | 20        |
| Beryllium                                     | 1.40   |      | mg/l  | 0.0003                           | 1.25        | BRL                                              | 112  | 75-125      | 1   | 20        |
| Barium                                        | 1.30   |      | mg/l  | 0.0007                           | 1.25        | 0.0158                                           | 102  | 75-125      | 2   | 20        |
| Arsenic                                       | 1.331  |      | mg/l  | 0.00138                          | 1.25        | 0.0018                                           | 106  | 75-125      | 0.7 | 20        |
| Chromium                                      | 1.29   |      | mg/l  | 0.0009                           | 1.25        | 0.0014                                           | 103  | 75-125      | 0.9 | 20        |
| Vanadium                                      | 1.24   |      | mg/l  | 0.0011                           | 1.25        | BRL                                              | 99   | 70-130      | 2   | 20        |
| Aluminum                                      | 1.37   |      | mg/l  | 0.0103                           | 1.25        | 0.0364                                           | 107  | 75-125      | 2   | 20        |
| <b><u>Post Spike (1803493-PS1)</u></b>        |        |      |       | <b><u>Source: SC44621-02</u></b> |             | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Sodium                                        | 173    | QM2  | mg/l  | 0.0392                           | 6.25        | 161                                              | 189  | 80-120      |     |           |
| Potassium                                     | 19.6   |      | mg/l  | 0.0600                           | 12.5        | 6.95                                             | 101  | 80-120      |     |           |
| Iron                                          | 4.11   |      | mg/l  | 0.0045                           | 1.25        | 2.81                                             | 104  | 80-120      |     |           |
| Manganese                                     | 1.58   |      | mg/l  | 0.0019                           | 1.25        | 0.329                                            | 100  | 80-120      |     |           |
| Zinc                                          | 1.29   |      | mg/l  | 0.0016                           | 1.25        | 0.0034                                           | 103  | 80-120      |     |           |
| Magnesium                                     | 13.5   | QM4X | mg/l  | 0.0044                           | 1.25        | 11.9                                             | 126  | 80-120      |     |           |
| Nickel                                        | 1.22   |      | mg/l  | 0.0009                           | 1.25        | 0.0046                                           | 98   | 80-120      |     |           |
| Antimony                                      | 1.31   |      | mg/l  | 0.0016                           | 1.25        | BRL                                              | 105  | 80-120      |     |           |
| Selenium                                      | 1.38   |      | mg/l  | 0.0042                           | 1.25        | BRL                                              | 110  | 80-120      |     |           |
| Vanadium                                      | 1.27   |      | mg/l  | 0.0011                           | 1.25        | BRL                                              | 101  | 80-120      |     |           |
| Thallium                                      | 1.29   |      | mg/l  | 0.0021                           | 1.25        | BRL                                              | 104  | 80-120      |     |           |
| Chromium                                      | 1.31   |      | mg/l  | 0.0009                           | 1.25        | 0.0014                                           | 105  | 80-120      |     |           |

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte(s)                             | Result       | Flag | Units | *RDL                             | Spike Level | Source Result                                    | %REC | %REC Limits | RPD | RPD Limit |
|----------------------------------------|--------------|------|-------|----------------------------------|-------------|--------------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>              |              |      |       |                                  |             |                                                  |      |             |     |           |
| <b>Batch 1803493 - SW846 3005A</b>     |              |      |       |                                  |             |                                                  |      |             |     |           |
| <b><u>Post Spike (1803493-PS1)</u></b> |              |      |       | <b><u>Source: SC44621-02</u></b> |             | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |             |     |           |
| Cobalt                                 | <b>1.21</b>  |      | mg/l  | 0.0008                           | 1.25        | 0.0010                                           | 97   | 80-120      |     |           |
| Cadmium                                | <b>1.24</b>  |      | mg/l  | 0.0004                           | 1.25        | 0.0011                                           | 99   | 80-120      |     |           |
| Calcium                                | <b>53.4</b>  |      | mg/l  | 0.0071                           | 6.25        | 46.1                                             | 117  | 80-120      |     |           |
| Beryllium                              | <b>1.45</b>  |      | mg/l  | 0.0003                           | 1.25        | BRL                                              | 116  | 80-120      |     |           |
| Barium                                 | <b>1.33</b>  |      | mg/l  | 0.0007                           | 1.25        | 0.0158                                           | 105  | 80-120      |     |           |
| Arsenic                                | <b>1.372</b> |      | mg/l  | 0.00138                          | 1.25        | 0.0018                                           | 110  | 80-120      |     |           |
| Aluminum                               | <b>1.35</b>  |      | mg/l  | 0.0103                           | 1.25        | 0.0364                                           | 105  | 80-120      |     |           |
| Lead                                   | <b>1.25</b>  |      | mg/l  | 0.0062                           | 1.25        | BRL                                              | 100  | 80-120      |     |           |
| Copper                                 | <b>1.39</b>  |      | mg/l  | 0.0023                           | 1.25        | 0.0098                                           | 111  | 80-120      |     |           |
| Silver                                 | <b>1.33</b>  |      | mg/l  | 0.0006                           | 1.25        | BRL                                              | 107  | 80-120      |     |           |

**Total Metals by EPA 200 Series Methods - Quality Control**

| Analyte(s)                                    | Result                                                              | Flag | Units | *RDL    | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|---------------------------------------------------------------------|------|-------|---------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>EPA 245.1/7470A</u></b>                 |                                                                     |      |       |         |             |               |      |             |     |           |
| <b>Batch 1803494 - EPA200/SW7000 Series</b>   |                                                                     |      |       |         |             |               |      |             |     |           |
| <b><u>Blank (1803494-BLK1)</u></b>            | <u>Prepared &amp; Analyzed: 16-Mar-18</u>                           |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00013                                                           | U    | mg/l  | 0.00013 |             |               |      |             |     |           |
| <b><u>LCS (1803494-BS1)</u></b>               | <u>Prepared &amp; Analyzed: 16-Mar-18</u>                           |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00423</b>                                                      |      | mg/l  | 0.00013 | 0.00500     |               | 85   | 85-115      |     |           |
| <b><u>Duplicate (1803494-DUP1)</u></b>        | <u>Source: SC44621-02</u> <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00013                                                           | U    | mg/l  | 0.00013 |             | BRL           |      |             |     | 20        |
| <b><u>Matrix Spike (1803494-MS1)</u></b>      | <u>Source: SC44621-02</u> <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00419</b>                                                      |      | mg/l  | 0.00013 | 0.00500     | BRL           | 84   | 80-120      |     |           |
| <b><u>Matrix Spike Dup (1803494-MSD1)</u></b> | <u>Source: SC44621-02</u> <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00436</b>                                                      |      | mg/l  | 0.00013 | 0.00500     | BRL           | 87   | 80-120      | 4   | 20        |
| <b><u>Post Spike (1803494-PS1)</u></b>        | <u>Source: SC44621-02</u> <u>Prepared &amp; Analyzed: 16-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00413</b>                                                      | QM9  | mg/l  | 0.00013 | 0.00500     | BRL           | 83   | 85-115      |     |           |

# General Chemistry Parameters - Quality Control

| Analyte(s)                                     | Result                                    | Flag | Units | *RDL  | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|------------------------------------------------|-------------------------------------------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SM5310B (00, 11)</u></b>                 |                                           |      |       |       |             |               |      |             |     |           |
| <b>Batch 1803769 - General Preparation</b>     |                                           |      |       |       |             |               |      |             |     |           |
| <b><u>Blank (1803769-BLK1)</u></b>             | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | < 0.238                                   | U    | mg/l  | 0.238 |             |               |      |             |     |           |
| <b><u>LCS (1803769-BS1)</u></b>                | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.7                                      |      | mg/l  | 0.238 | 15.0        |               | 104  | 85-115      |     |           |
| <b><u>Calibration Blank (1803769-CCB1)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.179                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803769-CCB2)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.215                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803769-CCB3)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.193                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Check (1803769-CCV1)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.7                                      |      | mg/l  | 0.238 | 15.0        |               | 105  | 85-115      |     |           |
| <b><u>Calibration Check (1803769-CCV2)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 16.0                                      |      | mg/l  | 0.238 | 15.0        |               | 106  | 85-115      |     |           |
| <b><u>Calibration Check (1803769-CCV3)</u></b> | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.8                                      |      | mg/l  | 0.238 | 15.0        |               | 106  | 85-115      |     |           |
| <b><u>Reference (1803769-SRM1)</u></b>         | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.5                                      |      | mg/l  | 0.238 | 15.0        |               | 104  | 85-115      |     |           |
| <b>Batch 1803825 - General Preparation</b>     |                                           |      |       |       |             |               |      |             |     |           |
| <b><u>Blank (1803825-BLK1)</u></b>             | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | < 0.238                                   | U    | mg/l  | 0.238 |             |               |      |             |     |           |
| <b><u>LCS (1803825-BS1)</u></b>                | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.1                                      |      | mg/l  | 0.238 | 15.0        |               | 101  | 85-115      |     |           |
| <b><u>Calibration Blank (1803825-CCB1)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.112                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803825-CCB2)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.154                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Blank (1803825-CCB3)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 0.185                                     |      | mg/l  |       |             |               |      |             |     |           |
| <b><u>Calibration Check (1803825-CCV1)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.4                                      |      | mg/l  | 0.238 | 15.0        |               | 103  | 85-115      |     |           |
| <b><u>Calibration Check (1803825-CCV2)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.2                                      |      | mg/l  | 0.238 | 15.0        |               | 101  | 85-115      |     |           |
| <b><u>Calibration Check (1803825-CCV3)</u></b> | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 15.5                                      |      | mg/l  | 0.238 | 15.0        |               | 103  | 85-115      |     |           |
| <b><u>Reference (1803825-SRM1)</u></b>         | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |       |       |             |               |      |             |     |           |
| Total Organic Carbon                           | 14.8                                      |      | mg/l  | 0.238 | 15.0        |               | 99   | 85-115      |     |           |

## Dissolved Gas Analysis - Quality Control

| Analyte(s)                              | Result     | Flag | Units | *RDL | Spike Level                               | Source Result | %REC                                      | %REC Limits | RPD | RPD Limit |
|-----------------------------------------|------------|------|-------|------|-------------------------------------------|---------------|-------------------------------------------|-------------|-----|-----------|
| <b><u>RSK-175</u></b>                   |            |      |       |      |                                           |               |                                           |             |     |           |
| <b>Batch 1803637 - General Air Prep</b> |            |      |       |      |                                           |               |                                           |             |     |           |
| <b><u>Blank (1803637-BLK1)</u></b>      |            |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |                                           |             |     |           |
| Methane                                 | < 2.16     | U    | µg/l  | 2.16 |                                           |               |                                           |             |     |           |
| Ethane                                  | < 3.48     | U    | µg/l  | 3.48 |                                           |               |                                           |             |     |           |
| Ethene                                  | < 4.58     | U    | µg/l  | 4.58 |                                           |               |                                           |             |     |           |
| <b><u>LCS (1803637-BS1)</u></b>         |            |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |                                           |             |     |           |
| Methane                                 | <b>444</b> |      | mg/l  |      | 500                                       |               | 89                                        | 70-130      |     |           |
| Ethane                                  | <b>539</b> |      | mg/l  |      | 500                                       |               | 108                                       | 70-130      |     |           |
| Ethene                                  | <b>523</b> |      | mg/l  |      | 500                                       |               | 105                                       | 70-130      |     |           |
| <b><u>Duplicate (1803637-DUP1)</u></b>  |            |      |       |      | <b><u>Source: SC44621-01</u></b>          |               | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |             |     |           |
| Methane                                 | < 2.16     | U    | µg/l  | 2.16 |                                           | BRL           |                                           |             |     | 30        |
| Ethane                                  | < 3.48     | U    | µg/l  | 3.48 |                                           | BRL           |                                           |             |     | 30        |
| Ethene                                  | < 4.58     | U    | µg/l  | 4.58 |                                           | BRL           |                                           |             |     | 30        |
| <b>Batch 1803813 - General Air Prep</b> |            |      |       |      |                                           |               |                                           |             |     |           |
| <b><u>Blank (1803813-BLK1)</u></b>      |            |      |       |      | <u>Prepared &amp; Analyzed: 19-Mar-18</u> |               |                                           |             |     |           |
| Methane                                 | < 2.16     | U    | µg/l  | 2.16 |                                           |               |                                           |             |     |           |
| Ethane                                  | < 3.48     | U    | µg/l  | 3.48 |                                           |               |                                           |             |     |           |
| Ethene                                  | < 4.58     | U    | µg/l  | 4.58 |                                           |               |                                           |             |     |           |
| <b><u>LCS (1803813-BS1)</u></b>         |            |      |       |      | <u>Prepared &amp; Analyzed: 19-Mar-18</u> |               |                                           |             |     |           |
| Methane                                 | <b>469</b> |      | mg/l  |      | 500                                       |               | 94                                        | 70-130      |     |           |
| Ethane                                  | <b>496</b> |      | mg/l  |      | 500                                       |               | 99                                        | 70-130      |     |           |
| Ethene                                  | <b>497</b> |      | mg/l  |      | 500                                       |               | 99                                        | 70-130      |     |           |

## Subcontracted Analyses - Quality Control

| Analyte(s)                              | Result        | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------|---------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SM4500S-D-00,-11</u></b>          |               |      |       |      |             |               |      |             |     |           |
| <b>Batch 422729A - 422729-SM4500S-D</b> |               |      |       |      |             |               |      |             |     |           |
| <b><u>BLK (CA00430-BLK)</u></b>         |               |      |       |      |             |               |      |             |     |           |
| Sulfide                                 | < 0.05        |      | mg/L  | 0.05 |             | BRL           | -    |             |     |           |
| <b><u>DUP (CA00430-DUP)</u></b>         |               |      |       |      |             |               |      |             |     |           |
| Sulfide                                 | < 0.05        |      | mg/L  | 0.05 |             | BRL           | -    |             | NC  | 20        |
| <b><u>LCS (CA00430-LCS)</u></b>         |               |      |       |      |             |               |      |             |     |           |
| Sulfide                                 | <b>0.2158</b> |      | mg/L  | 0.05 | 0.2         | BRL           | 108  | 90-110      |     | 20        |
| <b><u>MS (CA00430-MS)</u></b>           |               |      |       |      |             |               |      |             |     |           |
| Sulfide                                 | <b>0.2303</b> |      | mg/L  | 0.05 | 0.2         | BRL           | 115  | 75-125      |     | 20        |

## Notes and Definitions

|      |                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D    | Data reported from a dilution                                                                                                                                                                                                                            |
| E    | This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.                                                                          |
| GS1  | Sample dilution required for high concentration of target analytes to be within the instrument calibration range.                                                                                                                                        |
| J    | Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).                                                                                                                   |
| J1   |                                                                                                                                                                                                                                                          |
| QC2  | Analyte out of acceptance range in QC spike but no reportable concentration present in sample.                                                                                                                                                           |
| QM2  | The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.                                                                                                |
| QM4X | The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits. |
| QM7  | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.                                                                                                                         |
| QM9  | The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.                                                        |
| QR6  | The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.                                                                                                                                         |
| U    | Analyte included in the analysis, but not detected at or above the MDL.                                                                                                                                                                                  |
| U1   |                                                                                                                                                                                                                                                          |
| dry  | Sample results reported on a dry weight basis                                                                                                                                                                                                            |
| NR   | Not Reported                                                                                                                                                                                                                                             |
| RPD  | Relative Percent Difference                                                                                                                                                                                                                              |

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.



Spectrum Analytical

## CHAIN OF CUSTODY RECORD

Page 1 of 1

SC 44621-20

Special Handling:

- ☒ Standard TAT - 7 to 10 business days  
☐ Rush TAT - Date Needed: \_\_\_\_\_
- All TATs subject to laboratory approval  
Min. 24-hr notification needed for rushes  
Samples disposed after 30 days unless otherwise instructed.

|                                                                                                                                                                                                                                                                                        |                |                                                          |              |                            |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------|--------------|----------------------------|----------|
| Report To: <u>Megan Miller</u>                                                                                                                                                                                                                                                         |                | Invoice To: <u>Same</u>                                  |              | Project No: <u>1490769</u> |          |
| <u>6072 Brookman Plany Stelby</u><br><u>Syracuse NY 13211</u>                                                                                                                                                                                                                          |                | Site Name: <u>Metal Etching</u>                          |              | Location: <u>Report</u>    |          |
| Telephone #: <u>315-565-6557</u>                                                                                                                                                                                                                                                       |                | Sampler(s): <u>Megan Miller</u>                          |              | State: <u>NY</u>           |          |
| Project Mgr: <u>Megan Miller</u>                                                                                                                                                                                                                                                       |                | P.O. No.: <u>1490201</u>                                 |              | Quote #: _____             |          |
| F=Field Filtered 1=Na <sub>2</sub> SO <sub>3</sub> 2=HCl 3=H <sub>2</sub> SO <sub>4</sub> 4=HNO <sub>3</sub> 5=NaOH 6=Ascorbic Acid<br>7=CH <sub>3</sub> OH 8=NaHSO <sub>4</sub> 9=Deionized Water 10=H <sub>2</sub> PO <sub>4</sub> 11=2n (6g H <sub>2</sub> O <sub>2</sub> ) 12= Ice |                |                                                          |              |                            |          |
| DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water                                                                                                                                                                                                                       |                | O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas |              | X1= X2= X3=                |          |
| G=Grab C=Composite                                                                                                                                                                                                                                                                     |                |                                                          |              |                            |          |
| Lab ID:                                                                                                                                                                                                                                                                                | Sample ID:     | Date:                                                    | Time:        | Type                       | Matrix   |
| SC 44621-20                                                                                                                                                                                                                                                                            | 13011D-MW-08SR | 3/8/18                                                   | 11:40        | G                          | GW       |
| 02                                                                                                                                                                                                                                                                                     | 13011D-MW-08DR | 12/24                                                    | 13           | 0                          | 0        |
| 03                                                                                                                                                                                                                                                                                     | 13011D-MW-09SR | 11/37                                                    | 7            | 0                          | 0        |
| 04                                                                                                                                                                                                                                                                                     | 13011D-MW-09DR | 12/20                                                    | 7            | 0                          | 3        |
| Containers                                                                                                                                                                                                                                                                             |                |                                                          |              |                            |          |
| # of VOA Vials                                                                                                                                                                                                                                                                         |                |                                                          |              |                            |          |
| # of Amber Glass                                                                                                                                                                                                                                                                       |                |                                                          |              |                            |          |
| # of Clear Glass                                                                                                                                                                                                                                                                       |                |                                                          |              |                            |          |
| # of Plastic                                                                                                                                                                                                                                                                           |                |                                                          |              |                            |          |
| List Preservative Code below:                                                                                                                                                                                                                                                          |                |                                                          |              |                            |          |
| 2 4 5 11 12 12 10                                                                                                                                                                                                                                                                      |                |                                                          |              |                            |          |
| Analysis                                                                                                                                                                                                                                                                               |                |                                                          |              |                            |          |
| VOC 8200                                                                                                                                                                                                                                                                               |                |                                                          |              |                            |          |
| Metals + 6010B/7470A                                                                                                                                                                                                                                                                   |                |                                                          |              |                            |          |
| Sulfide SM 4500-SL                                                                                                                                                                                                                                                                     |                |                                                          |              |                            |          |
| Chloride Nitrate Sulfate SM 4500 + 375.2                                                                                                                                                                                                                                               |                |                                                          |              |                            |          |
| Dissolved Gases RSK-175                                                                                                                                                                                                                                                                |                |                                                          |              |                            |          |
| TOC SM 5310C                                                                                                                                                                                                                                                                           |                |                                                          |              |                            |          |
| Check if chlorinated                                                                                                                                                                                                                                                                   |                |                                                          |              |                            |          |
| MA DEP MCP CAM Report? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                        |                |                                                          |              |                            |          |
| CT DPH RCT Report? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                            |                |                                                          |              |                            |          |
| Standard <input type="checkbox"/> No QC <input type="checkbox"/>                                                                                                                                                                                                                       |                |                                                          |              |                            |          |
| DQA* <input type="checkbox"/>                                                                                                                                                                                                                                                          |                |                                                          |              |                            |          |
| RSP A* <input type="checkbox"/> RSP B* <input checked="" type="checkbox"/>                                                                                                                                                                                                             |                |                                                          |              |                            |          |
| NU Reduced* <input type="checkbox"/> NU Full* <input type="checkbox"/>                                                                                                                                                                                                                 |                |                                                          |              |                            |          |
| Filter II* <input type="checkbox"/> Filter IV* <input type="checkbox"/>                                                                                                                                                                                                                |                |                                                          |              |                            |          |
| Other: _____                                                                                                                                                                                                                                                                           |                |                                                          |              |                            |          |
| State-specific reporting standards: _____                                                                                                                                                                                                                                              |                |                                                          |              |                            |          |
| Relinquished by:                                                                                                                                                                                                                                                                       | Received by:   | Date:                                                    | Time:        | Temp °C                    | Observed |
| <u>Megan Miller</u>                                                                                                                                                                                                                                                                    | <u>UPS</u>     | <u>3/8/18</u>                                            | <u>13:30</u> | <u>-0.7</u>                | <u>0</u> |
| <u>UPS</u>                                                                                                                                                                                                                                                                             | <u>ALL</u>     | <u>3/9/18</u>                                            | <u>1045</u>  | <u>0</u>                   | <u>0</u> |
| Condition upon receipt: Custody Seal: <input type="checkbox"/> Present <input type="checkbox"/> Intact <input type="checkbox"/> Broken                                                                                                                                                 |                |                                                          |              |                            |          |
| <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Iced <input type="checkbox"/> Refrigerated <input type="checkbox"/> DI VOA Frozen <input type="checkbox"/> Soil Jar Frozen                                                                                        |                |                                                          |              |                            |          |





UPS CampusShip: View/Print Label

1. Ensure there are no other shipping or tracking labels attached to your package. Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

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|                                                                                                          |                                                                                                  |        |
|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|
| DAWN LAWLER<br>315-431-4610<br>BA SYRACUSE<br>6712 BROOKLAWN PKWY, STE 104<br>SYRACUSE, NY 13212158      | 40 LBS                                                                                           | 4 OF 4 |
| SHIP TO:<br>EUROFINS SPECTRUM ANALYTICAL<br>11 ALMGREN DRIVE<br>AGAWAM MA 01001-3831                     |                                                                                                  |        |
|                        | <br>MA 011 9-06 |        |
| UPS NEXT DAY AIR<br>1                                                                                    |                                                                                                  |        |
| TRACKING #: 1Z.F02.748.01.9411.8481                                                                      |                                                                                                  |        |
|                         |                                                                                                  |        |
| BILLING: P/P                                                                                             |                                                                                                  |        |
| Department Code: 2152<br>Project Phase AND Task: 1490709.0003 *****<br>CS 20.0 32. WNTNVS0 97.DA.01/2018 |                                                                                                  |        |
|                         |                                                                                                  |        |

## Batch Summary

### **1803317**

#### *Total Metals by EPA 200/6000 Series Methods*

SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

### **1803373**

#### *Volatile Organic Compounds*

1803373-BLK1  
1803373-BS1  
1803373-BSD1  
1803373-MS1  
1803373-MSD1  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)

### **1803478**

#### *Volatile Organic Compounds*

1803478-BLK1  
1803478-BS1  
1803478-BSD1  
1803478-MS1  
1803478-MSD1  
SC44621-02RE1 (130110-MW-08DR)  
SC44621-04 (130110-MW-09DR)  
SC44621-05 (Trip Blank)

### **1803493**

#### *Total Metals by EPA 6000/7000 Series Methods*

1803493-BLK1  
1803493-BS1  
1803493-BSD1  
1803493-DUP1  
1803493-MS1  
1803493-MSD1  
1803493-PS1  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

### **1803494**

#### *Total Metals by EPA 200 Series Methods*

1803494-BLK1  
1803494-BS1  
1803494-DUP1  
1803494-MS1  
1803494-MSD1  
1803494-PS1  
SC44621-01 (130110-MW-08SR)

SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

### **1803567**

#### *Volatile Organic Compounds*

1803567-BLK1  
1803567-BS1  
1803567-BSD1  
SC44621-04RE1 (130110-MW-09DR)

### **1803637**

#### *Dissolved Gas Analysis*

1803637-BLK1  
1803637-BS1  
1803637-DUP1  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-04 (130110-MW-09DR)

### **1803769**

#### *General Chemistry Parameters*

1803769-BLK1  
1803769-BS1  
1803769-CCB1  
1803769-CCB2  
1803769-CCB3  
1803769-CCV1  
1803769-CCV2  
1803769-CCV3  
1803769-SRM1  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)

### **1803813**

#### *Dissolved Gas Analysis*

1803813-BLK1  
1803813-BS1  
SC44621-03 (130110-MW-09SR)

**1803825****General Chemistry Parameters**

1803825-BLK1  
1803825-BS1  
1803825-CCB1  
1803825-CCB2  
1803825-CCB3  
1803825-CCV1  
1803825-CCV2  
1803825-CCV3  
1803825-SRM1  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

**422554A****Subcontracted Analyses**

CA00335-BLK  
CA00335-DUP  
CA00335-LCS  
CA00335-MS  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

**422729A****Subcontracted Analyses**

CA00430-BLK  
CA00430-DUP  
CA00430-LCS  
CA00430-MS  
SC44621-01 (130110-MW-08SR)  
SC44621-02 (130110-MW-08DR)  
SC44621-03 (130110-MW-09SR)  
SC44621-04 (130110-MW-09DR)

**S815681****General Chemistry Parameters**

S815681-CAL1  
S815681-CAL2  
S815681-CAL3  
S815681-CAL4  
S815681-CAL5  
S815681-CAL6  
S815681-CAL7  
S815681-ICB1  
S815681-ICV1

**S816041****Dissolved Gas Analysis**

S816041-CAL1  
S816041-CAL2  
S816041-CAL3  
S816041-CAL4

S816041-CAL5  
S816041-CAL6  
S816041-CAL7  
S816041-ICV1  
S816041-LCV1  
S816041-LCV2

**S817144****Volatile Organic Compounds**

S817144-CAL1  
S817144-CAL2  
S817144-CAL3  
S817144-CAL4  
S817144-CAL5  
S817144-CAL6  
S817144-CAL7  
S817144-CAL8  
S817144-CAL9  
S817144-ICV1  
S817144-LCV1  
S817144-TUN1

**S817557****Volatile Organic Compounds**

S817557-CCV1  
S817557-TUN1

**S817616****Volatile Organic Compounds**

S817616-CCV1  
S817616-TUN1

**S817675****Volatile Organic Compounds**

S817675-CCV1  
S817675-TUN1

**S817816****Dissolved Gas Analysis**

S817816-CCV1  
S817816-CCV2

**S817930****Dissolved Gas Analysis**

S817930-CCV1  
S817930-CCV2

**DATA USABILITY SUMMARY REPORT  
METAL ETCHING, FREEPORT, LONG ISLAND, NEW YORK**

Client: EA Engineering, Science & Technology, Inc., Syracuse, New York  
SDG: SC44624  
Laboratory: Eurofins Spectrum Analytical, Agawam, Massachusetts  
Site: Metal Etching, Freeport, Long Island, New York  
Date: June 4, 2018

| VOC    |                  |                      |        |
|--------|------------------|----------------------|--------|
| EDS ID | Client Sample ID | Laboratory Sample ID | Matrix |
| 1      | 130110-MW-06     | SC44624-01           | Water  |
| 2      | 130110-MW-11D    | SC44624-07           | Water  |
| 3      | 130110-MW-11S    | SC44624-08           | Water  |
| 4      | 130110-DUP-0318  | SC44624-09           | Water  |
| 5      | TRIP BLANK       | SC44624-10           | Water  |

A Data Usability Summary Review was performed on the analytical data for four water samples and one aqueous trip blank sample collected on March 7, 2018 by EA Engineering at the Metal Etching site in Freeport, Long Island, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"*.

Specific method references are as follows:

Analysis  
VOCs

Method References  
USEPA SW-846 Method 8260C

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-33A, Revision 0, July 2015: Low/Medium Volatile Data Validation;
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

***Organics***

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

### **Data Usability Assessment**

There was no rejection of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- Four compounds were qualified as estimated in five samples due to high continuing calibration %D values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

### **Data Completeness**

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

### **Volatile Organic Compounds (VOC)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

#### **Initial Calibration**

- All %RSD and/or correlation coefficients and mean RRF criteria were met.

### Continuing Calibration

- The following table presents compounds that exceeded percent deviation (%D) criteria and/or RRF values <0.05 (0.01 for poor performers) in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

| CCAL Date | Compound                    | %D/RRF | Qualifier | Affected Samples |
|-----------|-----------------------------|--------|-----------|------------------|
| 3/12/18   | 2,2-Dichloropropane         | 20.5%  | UJ        | 2-5              |
| 3/16/18   | Chloroethane                | 48.3%  | UJ        | 1                |
|           | Tetrahydrofuran             | 20.4%  |           |                  |
|           | trans-1,4-Dichloro-2-butene | 25%    |           |                  |

### Method Blank

- The method blanks were free of contamination.

### Field Blank

- Field QC results are summarized below.

| VOCs       |           |               |           |                  |
|------------|-----------|---------------|-----------|------------------|
| Blank ID   | Compound  | Conc.<br>ug/L | Qualifier | Affected Samples |
| TRIP BLANK | None - ND | -             | -         |                  |

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

### Laboratory Control Samples

- The following table presents LCS samples that exhibited percent recoveries (%R) outside the QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are



considered estimated and qualified (J). Results are valid and usable, however possibly biased.

| LCS ID      | Compound     | %R   | Qualifier | Affected Samples  |
|-------------|--------------|------|-----------|-------------------|
| 1803567-BS1 | Chloroethane | 148% | None      | All Associated ND |

#### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

#### Target Compound Identification

- All mass spectra and quantitation criteria were met.

#### Compound Quantitation

- All criteria were met.

#### Tentatively Identified Compounds (TICs)

- TICs were not reported.

#### Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

| VOC               |                       |                         |     |           |
|-------------------|-----------------------|-------------------------|-----|-----------|
| Compound          | 130110-MW-11S<br>ug/L | 130110-DUP-0318<br>ug/L | RPD | Qualifier |
| tert-Butylbenzene | 0.36                  | 0.37                    | 3%  | None      |

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:

  
Nancy Weaver  
Senior Chemist

Dated: 6/4/18



### Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-06

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-01 File ID: 4462401.D  
 Sampled: 03/07/18 10:30 Prepared: 03/15/18 11:05 Analyzed: 03/16/18 11:14  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803567 Sequence: S817675 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.13          | 0.28 | 1.00 |   |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 0.61          | 0.33 | 1.00 | J |
| 98-06-6    | tert-Butylbenzene                          | 2.26          | 0.32 | 1.00 |   |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-06

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-01 File ID: 4462401.D  
 Sampled: 03/07/18 10:30 Prepared: 03/15/18 11:05 Analyzed: 03/16/18 11:14  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803567 Sequence: S817675 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q    |
|-------------|-----------------------------------|---------------|------|------|------|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U    |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U    |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U    |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U    |
| 98-82-8     | Isopropylbenzene                  | 2.93          | 0.36 | 1.00 |      |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U    |
| 1634-04-4   | Methyl tert-butyl ether           | 0.51          | 0.24 | 1.00 | J    |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U    |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U    |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U    |
| 103-65-1    | n-Propylbenzene                   | 0.82          | 0.34 | 1.00 | J    |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U    |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U    |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U    |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U    |
| 108-88-3    | Toluene                           | 1.06          | 0.30 | 1.00 |      |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U    |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U    |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U    |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U    |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U    |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U    |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U    |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U    |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U    |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U    |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U    |
| 179601-23-1 | m,p-Xylene                        | 2.84          | 0.38 | 2.00 |      |
| 95-47-6     | o-Xylene                          | 0.30          | 0.28 | 1.00 | J    |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | ✓ WJ |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U    |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U    |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U    |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U    |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U    |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U    |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U    |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U    |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-11D

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-07 File ID: 4462407.D  
 Sampled: 03/07/18 13:03 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 05:33  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 0.34          | 0.33 | 1.00 | J |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.65          | 0.33 | 1.00 |   |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

2

UJ

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-11D

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-07 File ID: 4462407.D  
 Sampled: 03/07/18 13:03 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 05:33  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.38          | 0.57 | 1.00 |   |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.17          | 0.50 | 1.00 |   |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-11S

3

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-08 File ID: 4462408.D  
 Sampled: 03/07/18 12:12 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:01  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 0.36          | 0.32 | 1.00 | J |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-MW-11S

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624 3  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-08 File ID: 4462408.D  
 Sampled: 03/07/18 12:12 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:01  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |



# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-DUP-0318

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-09 File ID: 4462409.D  
 Sampled: 03/07/18 00:00 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:28  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRI Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 0.37          | 0.32 | 1.00 | J |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

130110-DUP-0318

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624 4  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Ground Water Laboratory ID: SC44624-09 File ID: 4462409.D  
 Sampled: 03/07/18 00:00 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:28  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

Trip Blank

5

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Aqueous Laboratory ID: SC44624-10 File ID: 4462410.D  
 Sampled: 03/07/18 00:00 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:55  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.    | COMPOUND                                   | RESULT (µg/l) | MDL  | MRL  | Q |
|------------|--------------------------------------------|---------------|------|------|---|
| 76-13-1    | 1,1,2-Trichlorotrifluoroethane (Freon 113) | 1.00          | 0.53 | 1.00 | U |
| 67-64-1    | Acetone                                    | 10.0          | 0.80 | 10.0 | U |
| 107-13-1   | Acrylonitrile                              | 0.50          | 0.47 | 0.50 | U |
| 71-43-2    | Benzene                                    | 1.00          | 0.28 | 1.00 | U |
| 108-86-1   | Bromobenzene                               | 1.00          | 0.33 | 1.00 | U |
| 74-97-5    | Bromochloromethane                         | 1.00          | 0.34 | 1.00 | U |
| 75-27-4    | Bromodichloromethane                       | 0.50          | 0.42 | 0.50 | U |
| 75-25-2    | Bromoform                                  | 1.00          | 0.42 | 1.00 | U |
| 74-83-9    | Bromomethane                               | 2.00          | 0.90 | 2.00 | U |
| 78-93-3    | 2-Butanone (MEK)                           | 2.00          | 1.07 | 2.00 | U |
| 104-51-8   | n-Butylbenzene                             | 1.00          | 0.41 | 1.00 | U |
| 135-98-8   | sec-Butylbenzene                           | 1.00          | 0.33 | 1.00 | U |
| 98-06-6    | tert-Butylbenzene                          | 1.00          | 0.32 | 1.00 | U |
| 75-15-0    | Carbon disulfide                           | 2.00          | 0.41 | 2.00 | U |
| 56-23-5    | Carbon tetrachloride                       | 1.00          | 0.44 | 1.00 | U |
| 108-90-7   | Chlorobenzene                              | 1.00          | 0.25 | 1.00 | U |
| 75-00-3    | Chloroethane                               | 2.00          | 0.59 | 2.00 | U |
| 67-66-3    | Chloroform                                 | 1.00          | 0.33 | 1.00 | U |
| 74-87-3    | Chloromethane                              | 2.00          | 0.37 | 2.00 | U |
| 95-49-8    | 2-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 106-43-4   | 4-Chlorotoluene                            | 1.00          | 0.32 | 1.00 | U |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                | 2.00          | 0.86 | 2.00 | U |
| 124-48-1   | Dibromochloromethane                       | 0.50          | 0.32 | 0.50 | U |
| 106-93-4   | 1,2-Dibromoethane (EDB)                    | 0.50          | 0.20 | 0.50 | U |
| 74-95-3    | Dibromomethane                             | 1.00          | 0.31 | 1.00 | U |
| 95-50-1    | 1,2-Dichlorobenzene                        | 1.00          | 0.28 | 1.00 | U |
| 541-73-1   | 1,3-Dichlorobenzene                        | 1.00          | 0.31 | 1.00 | U |
| 106-46-7   | 1,4-Dichlorobenzene                        | 1.00          | 0.27 | 1.00 | U |
| 75-71-8    | Dichlorodifluoromethane (Freon 12)         | 2.00          | 0.58 | 2.00 | U |
| 75-34-3    | 1,1-Dichloroethane                         | 1.00          | 0.32 | 1.00 | U |
| 107-06-2   | 1,2-Dichloroethane                         | 1.00          | 0.28 | 1.00 | U |
| 75-35-4    | 1,1-Dichloroethene                         | 1.00          | 0.69 | 1.00 | U |
| 156-59-2   | cis-1,2-Dichloroethene                     | 1.00          | 0.33 | 1.00 | U |
| 156-60-5   | trans-1,2-Dichloroethene                   | 1.00          | 0.38 | 1.00 | U |
| 78-87-5    | 1,2-Dichloropropane                        | 1.00          | 0.29 | 1.00 | U |
| 142-28-9   | 1,3-Dichloropropane                        | 1.00          | 0.21 | 1.00 | U |
| 594-20-7   | 2,2-Dichloropropane                        | 1.00          | 0.42 | 1.00 | U |
| 563-58-6   | 1,1-Dichloropropene                        | 1.00          | 0.58 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene                    | 0.50          | 0.36 | 0.50 | U |

WJ

# FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

Trip Blank

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC44624  
 Client: EA Engineering, Science, & Technology - Syracuse Project: Metal Etching - Freeport, NY  
 Project Number: 1490709 Received: 03/09/18 10:41  
 Matrix: Aqueous Laboratory ID: SC44624-10 File ID: 4462410.D  
 Sampled: 03/07/18 00:00 Prepared: 03/12/18 11:08 Analyzed: 03/13/18 06:55  
 % Solids: Preparation: SW846 5030 Water MS Initial/Final: 5 ml / 5 ml  
 Batch: 1803373 Sequence: S817557 Calibration: 1802088 Instrument: HPV5  
 Reported to: MRL Dilution: 1

| CAS NO.     | COMPOUND                          | RESULT (µg/l) | MDL  | MRL  | Q |
|-------------|-----------------------------------|---------------|------|------|---|
| 10061-02-6  | trans-1,3-Dichloropropene         | 0.50          | 0.35 | 0.50 | U |
| 100-41-4    | Ethylbenzene                      | 1.00          | 0.33 | 1.00 | U |
| 87-68-3     | Hexachlorobutadiene               | 0.50          | 0.47 | 0.50 | U |
| 591-78-6    | 2-Hexanone (MBK)                  | 2.00          | 0.53 | 2.00 | U |
| 98-82-8     | Isopropylbenzene                  | 1.00          | 0.36 | 1.00 | U |
| 99-87-6     | 4-Isopropyltoluene                | 1.00          | 0.28 | 1.00 | U |
| 1634-04-4   | Methyl tert-butyl ether           | 1.00          | 0.24 | 1.00 | U |
| 108-10-1    | 4-Methyl-2-pentanone (MIBK)       | 2.00          | 0.52 | 2.00 | U |
| 75-09-2     | Methylene chloride                | 2.00          | 0.66 | 2.00 | U |
| 91-20-3     | Naphthalene                       | 1.00          | 0.35 | 1.00 | U |
| 103-65-1    | n-Propylbenzene                   | 1.00          | 0.34 | 1.00 | U |
| 100-42-5    | Styrene                           | 1.00          | 0.40 | 1.00 | U |
| 630-20-6    | 1,1,1,2-Tetrachloroethane         | 1.00          | 0.38 | 1.00 | U |
| 79-34-5     | 1,1,2,2-Tetrachloroethane         | 0.50          | 0.33 | 0.50 | U |
| 127-18-4    | Tetrachloroethene                 | 1.00          | 0.57 | 1.00 | U |
| 108-88-3    | Toluene                           | 1.00          | 0.30 | 1.00 | U |
| 87-61-6     | 1,2,3-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 120-82-1    | 1,2,4-Trichlorobenzene            | 1.00          | 0.38 | 1.00 | U |
| 71-55-6     | 1,1,1-Trichloroethane             | 1.00          | 0.51 | 1.00 | U |
| 108-70-3    | 1,3,5-Trichlorobenzene            | 1.00          | 0.30 | 1.00 | U |
| 79-00-5     | 1,1,2-Trichloroethane             | 1.00          | 0.33 | 1.00 | U |
| 79-01-6     | Trichloroethene                   | 1.00          | 0.50 | 1.00 | U |
| 75-69-4     | Trichlorofluoromethane (Freon 11) | 1.00          | 0.49 | 1.00 | U |
| 96-18-4     | 1,2,3-Trichloropropane            | 1.00          | 0.29 | 1.00 | U |
| 95-63-6     | 1,2,4-Trimethylbenzene            | 1.00          | 0.36 | 1.00 | U |
| 108-67-8    | 1,3,5-Trimethylbenzene            | 1.00          | 0.43 | 1.00 | U |
| 75-01-4     | Vinyl chloride                    | 1.00          | 0.47 | 1.00 | U |
| 179601-23-1 | m,p-Xylene                        | 2.00          | 0.38 | 2.00 | U |
| 95-47-6     | o-Xylene                          | 1.00          | 0.28 | 1.00 | U |
| 109-99-9    | Tetrahydrofuran                   | 2.00          | 1.06 | 2.00 | U |
| 60-29-7     | Ethyl ether                       | 1.00          | 0.37 | 1.00 | U |
| 994-05-8    | Tert-amyl methyl ether            | 1.00          | 0.49 | 1.00 | U |
| 637-92-3    | Ethyl tert-butyl ether            | 1.00          | 0.33 | 1.00 | U |
| 108-20-3    | Di-isopropyl ether                | 1.00          | 0.29 | 1.00 | U |
| 75-65-0     | Tert-Butanol / butyl alcohol      | 10.0          | 5.90 | 10.0 | U |
| 110-57-6    | trans-1,4-Dichloro-2-butene       | 5.00          | 0.82 | 5.00 | U |
| 123-91-1    | 1,4-Dioxane                       | 20.0          | 11.4 | 20.0 | U |
| 64-17-5     | Ethanol                           | 200           | 30.9 | 200  | U |



Report Date:  
23-Mar-18 18:08

## Laboratory Report SC44624

EA Engineering, Science, & Technology  
6712 Brooklawn Parkway Suite 104  
Syracuse, NY 13211  
Attn: Megan Miller

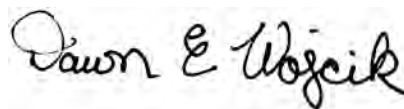
Project: Metal Etching - Freeport, NY  
Project #: 1490709

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87936  
Maine # MA138  
New Hampshire # 2972/2538  
New Jersey # MA011  
New York # 11393  
Pennsylvania # 68-04426/68-02924  
Rhode Island # LAO00348  
USDA # P330-15-00375  
Vermont # VT-11393



Authorized by:  
Dawn Wojcik  
Laboratory Director



Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 51 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

*Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

## Sample Summary

**Work Order:** SC44624  
**Project:** Metal Etching - Freeport, NY  
**Project Number:** 1490709

| <u>Laboratory ID</u> | <u>Client Sample ID</u> | <u>Matrix</u> | <u>Date Sampled</u> | <u>Date Received</u> |
|----------------------|-------------------------|---------------|---------------------|----------------------|
| SC44624-01           | 130110-MW-06            | Ground Water  | 07-Mar-18 10:30     | 09-Mar-18 10:41      |
| SC44624-02           | 130110-MW-05R           | Ground Water  | 07-Mar-18 10:30     | 09-Mar-18 10:41      |
| SC44624-03           | 130110-MW-04            | Ground Water  | 07-Mar-18 11:00     | 09-Mar-18 10:41      |
| SC44624-04           | 130110-MW-10S           | Ground Water  | 07-Mar-18 11:06     | 09-Mar-18 10:41      |
| SC44624-05           | 130110-MW-10M           | Ground Water  | 07-Mar-18 14:05     | 09-Mar-18 10:41      |
| SC44624-06           | 130110-MW-10D           | Ground Water  | 07-Mar-18 14:10     | 09-Mar-18 10:41      |
| SC44624-07           | 130110-MW-11D           | Ground Water  | 07-Mar-18 13:03     | 09-Mar-18 10:41      |
| SC44624-08           | 130110-MW-11S           | Ground Water  | 07-Mar-18 12:12     | 09-Mar-18 10:41      |
| SC44624-09           | 130110-DUP-0318         | Ground Water  | 07-Mar-18 00:00     | 09-Mar-18 10:41      |
| SC44624-10           | Trip Blank              | Aqueous       | 07-Mar-18 00:00     | 09-Mar-18 10:41      |

## CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 1.3 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

## EPA 300.0

### Spikes:

1803330-MS2      *Source: SC44624-03*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Chloride

1803330-MSD2      *Source: SC44624-03*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Chloride

### Samples:

SC44624-01      *130110-MW-06*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride  
Sulfate as SO<sub>4</sub>

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-02      *130110-MW-05R*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-03      *130110-MW-04*

---

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-04      *130110-MW-10S*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

## **EPA 300.0**

### **Samples:**

SC44624-04                      *130110-MW-10S*

---

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-05                      *130110-MW-10M*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-06                      *130110-MW-10D*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-07                      *130110-MW-11D*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Sulfate as SO<sub>4</sub>

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

SC44624-08                      *130110-MW-11S*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

This sample was analyzed outside the EPA recommended holding time per client request.

Nitrate as N

## **SM4500S-D-00,-11**

### **Samples:**

SC44624-07                      *130110-MW-11D*

---

Analyte included in the analysis, but not detected at or above the MDL.

Sulfide

SC44624-08                      *130110-MW-11S*

---

Analyte included in the analysis, but not detected at or above the MDL.

Sulfide

## **SM5310B (00, 11)**

### **Samples:**

SC44624-02                      *130110-MW-05R*

---



## **SM5310B (00, 11)**

### **Samples:**

SC44624-02                      130110-MW-05R

---

The Reporting Limit has been raised to account for matrix interference.

Total Organic Carbon

## **SW846 6010C**

### **Spikes:**

1803635-MS1                      Source: SC44624-09

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Iron  
Magnesium  
Sodium

1803635-MSD1                      Source: SC44624-09

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Iron  
Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Calcium

1803635-PS1                      Source: SC44624-09

---

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Iron  
Magnesium  
Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Calcium

### **Duplicates:**

1803635-DUP1                      Source: SC44624-09

---

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Zinc

### **Samples:**

SC44624-07                      130110-MW-11D

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sodium

## **SW846 8260C**

### **Calibration:**

**Calibration:**

1802088

---

Analyte quantified by quadratic equation type calibration.

Bromoform  
Carbon tetrachloride

This affected the following samples:

130110-DUP-0318  
130110-MW-06  
130110-MW-11D  
130110-MW-11S  
1803373-BLK1  
1803373-BS1  
1803373-BSD1  
1803567-BLK1  
1803567-BS1  
1803567-BSD1  
S817144-ICV1  
S817557-CCV1  
S817675-CCV1  
Trip Blank

**Laboratory Control Samples:**

1803373 BS/BSD

---

2,2-Dichloropropane percent recoveries (73/69) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

130110-DUP-0318  
130110-MW-11D  
130110-MW-11S  
Trip Blank

Dichlorodifluoromethane (Freon12) percent recoveries (72/69) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

130110-DUP-0318  
130110-MW-11D  
130110-MW-11S  
Trip Blank

1803567 BS/BSD

---

Chloroethane percent recoveries (148/139) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-06

Trichlorofluoromethane (Freon 11) percent recoveries (125/136) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

130110-MW-06

**Samples:**

S817557-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,2-Dichloropropane (-20.5%)  
Bromomethane (21.6%)  
Dichlorodifluoromethane (Freon12) (-25.2%)

## **SW846 8260C**

### **Samples:**

S817557-CCV1

---

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,4-Dioxane (-20.8%)  
Chloroethane (20.3%)  
Chloromethane (-25.0%)

This affected the following samples:

130110-DUP-0318  
130110-MW-11D  
130110-MW-11S  
1803373-BLK1  
1803373-BS1  
1803373-BSD1  
Trip Blank

S817675-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Tetrahydrofuran (-20.4%)  
trans-1,4-Dichloro-2-butene (25.0%)  
Trichlorofluoromethane (Freon 11) (25.3%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Chloroethane (48.3%)  
Chloromethane (-20.4%)

This affected the following samples:

130110-MW-06  
1803567-BLK1  
1803567-BS1  
1803567-BSD1

## Sample Acceptance Check Form

Client: EA Engineering, Science, & Technology - Syracuse  
Project: Metal Etching - Freeport, NY / 1490709  
Work Order: SC44624  
Sample(s) received on: 3/9/2018

*The following outlines the condition of samples for the attached Chain of Custody upon receipt.*

|                                                                                                                                                                                                                                                                                      | <u>Yes</u>                          | <u>No</u>                           | <u>N/A</u>                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Were custody seals present?                                                                                                                                                                                                                                                          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Were custody seals intact?                                                                                                                                                                                                                                                           | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were samples received at a temperature of $\leq 6^{\circ}\text{C}$ ?                                                                                                                                                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples cooled on ice upon transfer to laboratory representative?                                                                                                                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were sample containers received intact?                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples accompanied by a Chain of Custody document?                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Did sample container labels agree with Chain of Custody document?                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Were samples received within method-specific holding times?                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |

## Summary of Hits

**Lab ID:** SC44624-01

**Client ID:** 130110-MW-06

| Parameter               | Result | Flag       | Reporting Limit | Units | Analytical Method |
|-------------------------|--------|------------|-----------------|-------|-------------------|
| Chloride                | 745    | GS1, D30.0 |                 | mg/l  | EPA 300.0         |
| Nitrate as N            | 0.008  | O09, J     | 0.100           | mg/l  | EPA 300.0         |
| Sulfate as SO4          | 64.5   | GS1, D30.0 |                 | mg/l  | EPA 300.0         |
| Methane (dissolved)     | 56.0   |            | 2.20            | µg/l  | RSK-175           |
| Benzene                 | 1.13   |            | 1.00            | µg/l  | SW846 8260C       |
| Isopropylbenzene        | 2.93   |            | 1.00            | µg/l  | SW846 8260C       |
| m,p-Xylene              | 2.84   |            | 2.00            | µg/l  | SW846 8260C       |
| Methyl tert-butyl ether | 0.51   | J          | 1.00            | µg/l  | SW846 8260C       |
| n-Propylbenzene         | 0.82   | J          | 1.00            | µg/l  | SW846 8260C       |
| o-Xylene                | 0.30   | J          | 1.00            | µg/l  | SW846 8260C       |
| sec-Butylbenzene        | 0.61   | J          | 1.00            | µg/l  | SW846 8260C       |
| tert-Butylbenzene       | 2.26   |            | 1.00            | µg/l  | SW846 8260C       |
| Toluene                 | 1.06   |            | 1.00            | µg/l  | SW846 8260C       |

**Lab ID:** SC44624-02

**Client ID:** 130110-MW-05R

| Parameter            | Result | Flag       | Reporting Limit | Units | Analytical Method |
|----------------------|--------|------------|-----------------|-------|-------------------|
| Chloride             | 377    | GS1, D15.0 |                 | mg/l  | EPA 300.0         |
| Sulfate as SO4       | 2.46   |            | 1.00            | mg/l  | EPA 300.0         |
| Total Organic Carbon | 17.0   | R01, D10.0 |                 | mg/l  | SM5310B (00, 11)  |

**Lab ID:** SC44624-03

**Client ID:** 130110-MW-04

| Parameter            | Result | Flag | Reporting Limit | Units | Analytical Method |
|----------------------|--------|------|-----------------|-------|-------------------|
| Chloride             | 15.7   |      | 1.00            | mg/l  | EPA 300.0         |
| Nitrate as N         | 0.285  | O09  | 0.100           | mg/l  | EPA 300.0         |
| Sulfate as SO4       | 15.8   |      | 1.00            | mg/l  | EPA 300.0         |
| Total Organic Carbon | 2.14   |      | 1.00            | mg/l  | SM5310B (00, 11)  |

**Lab ID:** SC44624-04

**Client ID:** 130110-MW-10S

| Parameter            | Result | Flag       | Reporting Limit | Units | Analytical Method |
|----------------------|--------|------------|-----------------|-------|-------------------|
| Chloride             | 54.3   | GS1, D2.00 |                 | mg/l  | EPA 300.0         |
| Sulfate as SO4       | 25.0   |            | 1.00            | mg/l  | EPA 300.0         |
| Total Organic Carbon | 8.43   |            | 1.00            | mg/l  | SM5310B (00, 11)  |

**Lab ID:** SC44624-05

**Client ID:** 130110-MW-10M

| Parameter      | Result | Flag       | Reporting Limit | Units | Analytical Method |
|----------------|--------|------------|-----------------|-------|-------------------|
| Chloride       | 265    | GS1, D11.0 |                 | mg/l  | EPA 300.0         |
| Nitrate as N   | 0.620  | O09        | 0.100           | mg/l  | EPA 300.0         |
| Sulfate as SO4 | 45.6   |            | 1.00            | mg/l  | EPA 300.0         |

**Lab ID:** SC44624-06**Client ID:** 130110-MW-10D

| Parameter      | Result | Flag   | Reporting Limit | Units | Analytical Method |
|----------------|--------|--------|-----------------|-------|-------------------|
| Chloride       | 128    | GS1, D | 5.00            | mg/l  | EPA 300.0         |
| Nitrate as N   | 0.020  | O09, J | 0.100           | mg/l  | EPA 300.0         |
| Sulfate as SO4 | 14.6   |        | 1.00            | mg/l  | EPA 300.0         |

**Lab ID:** SC44624-07**Client ID:** 130110-MW-11D

| Parameter              | Result  | Flag   | Reporting Limit | Units | Analytical Method |
|------------------------|---------|--------|-----------------|-------|-------------------|
| Chloride               | 458     | GS1, D | 19.0            | mg/l  | EPA 300.0         |
| Nitrate as N           | 1.18    | O09    | 0.100           | mg/l  | EPA 300.0         |
| Sulfate as SO4         | 80.5    | GS1, D | 19.0            | mg/l  | EPA 300.0         |
| Total Organic Carbon   | 2.11    |        | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum               | 0.0159  | J      | 0.0250          | mg/l  | SW846 6010C       |
| Arsenic                | 0.00175 | J      | 0.00400         | mg/l  | SW846 6010C       |
| Barium                 | 0.0124  |        | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium                | 0.0012  | J      | 0.0025          | mg/l  | SW846 6010C       |
| Calcium                | 32.2    |        | 0.100           | mg/l  | SW846 6010C       |
| Copper                 | 0.0033  | J      | 0.0050          | mg/l  | SW846 6010C       |
| Iron                   | 0.353   |        | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium              | 27.3    |        | 0.0100          | mg/l  | SW846 6010C       |
| Manganese              | 0.748   |        | 0.0020          | mg/l  | SW846 6010C       |
| Potassium              | 12.4    |        | 0.500           | mg/l  | SW846 6010C       |
| Sodium                 | 290     | GS1, D | 1.25            | mg/l  | SW846 6010C       |
| Zinc                   | 0.0218  |        | 0.0050          | mg/l  | SW846 6010C       |
| Chloroform             | 0.34    | J      | 1.00            | µg/l  | SW846 8260C       |
| cis-1,2-Dichloroethene | 1.65    |        | 1.00            | µg/l  | SW846 8260C       |
| Tetrachloroethene      | 1.38    |        | 1.00            | µg/l  | SW846 8260C       |
| Trichloroethene        | 1.17    |        | 1.00            | µg/l  | SW846 8260C       |

Lab ID: SC44624-08

Client ID: 130110-MW-11S

| Parameter            | Result  | Flag | Reporting Limit | Units | Analytical Method |
|----------------------|---------|------|-----------------|-------|-------------------|
| Chloride             | 187     |      | GS1, D8.00      | mg/l  | EPA 300.0         |
| Sulfate as SO4       | 20.3    |      | 1.00            | mg/l  | EPA 300.0         |
| Total Organic Carbon | 4.10    |      | 1.00            | mg/l  | SM5310B (00, 11)  |
| Aluminum             | 0.0290  |      | 0.0250          | mg/l  | SW846 6010C       |
| Arsenic              | 0.00250 | J    | 0.00400         | mg/l  | SW846 6010C       |
| Barium               | 0.0196  |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium              | 0.0022  | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium              | 41.3    |      | 0.100           | mg/l  | SW846 6010C       |
| Cobalt               | 0.0010  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Iron                 | 25.6    |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium            | 18.4    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese            | 0.549   |      | 0.0020          | mg/l  | SW846 6010C       |
| Potassium            | 6.44    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium               | 121     |      | 0.250           | mg/l  | SW846 6010C       |
| Zinc                 | 0.0028  | J    | 0.0050          | mg/l  | SW846 6010C       |
| tert-Butylbenzene    | 0.36    | J    | 1.00            | µg/l  | SW846 8260C       |

Lab ID: SC44624-09

Client ID: 130110-DUP-0318

| Parameter         | Result  | Flag | Reporting Limit | Units | Analytical Method |
|-------------------|---------|------|-----------------|-------|-------------------|
| Aluminum          | 0.0258  |      | 0.0250          | mg/l  | SW846 6010C       |
| Arsenic           | 0.00320 | J    | 0.00400         | mg/l  | SW846 6010C       |
| Barium            | 0.0200  |      | 0.0050          | mg/l  | SW846 6010C       |
| Cadmium           | 0.0024  | J    | 0.0025          | mg/l  | SW846 6010C       |
| Calcium           | 41.9    |      | 0.100           | mg/l  | SW846 6010C       |
| Cobalt            | 0.0011  | J    | 0.0050          | mg/l  | SW846 6010C       |
| Iron              | 29.7    |      | 0.0150          | mg/l  | SW846 6010C       |
| Magnesium         | 18.1    |      | 0.0100          | mg/l  | SW846 6010C       |
| Manganese         | 0.577   |      | 0.0020          | mg/l  | SW846 6010C       |
| Potassium         | 6.26    |      | 0.500           | mg/l  | SW846 6010C       |
| Sodium            | 117     |      | 0.250           | mg/l  | SW846 6010C       |
| Zinc              | 0.0042  | J    | 0.0050          | mg/l  | SW846 6010C       |
| tert-Butylbenzene | 0.37    | J    | 1.00            | µg/l  | SW846 8260C       |

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

130110-MW-06

SC44624-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 10:30

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 15-Mar-18       | 16-Mar-18       | GMA            | 1803567      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | 1.13          |             | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | 0.61          | J           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | 2.26          |             | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*



Sample Identification

130110-MW-06

SC44624-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 10:30

Received

09-Mar-18

| CAS No.                                  | Analyte(s)                        | Result | Flag   | Units | *RDL     | MDL   | Dilution | Method Ref. | Prepared           | Analyzed           | Analyst | Batch   | Cert. |
|------------------------------------------|-----------------------------------|--------|--------|-------|----------|-------|----------|-------------|--------------------|--------------------|---------|---------|-------|
| Volatile Organic Compounds               |                                   |        |        |       |          |       |          |             |                    |                    |         |         |       |
| Volatile Organic Compounds by SW846 8260 |                                   |        |        |       |          |       |          |             |                    |                    |         |         |       |
| 98-82-8                                  | Isopropylbenzene                  | 2.93   |        | µg/l  | 1.00     | 0.36  | 1        | SW846 8260C | 15-Mar-18          | 16-Mar-18          | GMA     | 1803567 | X     |
| 99-87-6                                  | 4-Isopropyltoluene                | < 1.00 | U      | µg/l  | 1.00     | 0.28  | 1        | "           | "                  | "                  | "       | "       | X     |
| 1634-04-4                                | Methyl tert-butyl ether           | 0.51   | J      | µg/l  | 1.00     | 0.24  | 1        | "           | "                  | "                  | "       | "       | X     |
| 108-10-1                                 | 4-Methyl-2-pentanone (MIBK)       | < 2.00 | U      | µg/l  | 2.00     | 0.52  | 1        | "           | "                  | "                  | "       | "       | X     |
| 75-09-2                                  | Methylene chloride                | < 2.00 | U      | µg/l  | 2.00     | 0.66  | 1        | "           | "                  | "                  | "       | "       | X     |
| 91-20-3                                  | Naphthalene                       | < 1.00 | U      | µg/l  | 1.00     | 0.35  | 1        | "           | "                  | "                  | "       | "       | X     |
| 103-65-1                                 | n-Propylbenzene                   | 0.82   | J      | µg/l  | 1.00     | 0.34  | 1        | "           | "                  | "                  | "       | "       | X     |
| 100-42-5                                 | Styrene                           | < 1.00 | U      | µg/l  | 1.00     | 0.40  | 1        | "           | "                  | "                  | "       | "       | X     |
| 630-20-6                                 | 1,1,1,2-Tetrachloroethane         | < 1.00 | U      | µg/l  | 1.00     | 0.38  | 1        | "           | "                  | "                  | "       | "       | X     |
| 79-34-5                                  | 1,1,2,2-Tetrachloroethane         | < 0.50 | U      | µg/l  | 0.50     | 0.33  | 1        | "           | "                  | "                  | "       | "       | X     |
| 127-18-4                                 | Tetrachloroethene                 | < 1.00 | U      | µg/l  | 1.00     | 0.57  | 1        | "           | "                  | "                  | "       | "       | X     |
| 108-88-3                                 | Toluene                           | 1.06   |        | µg/l  | 1.00     | 0.30  | 1        | "           | "                  | "                  | "       | "       | X     |
| 87-61-6                                  | 1,2,3-Trichlorobenzene            | < 1.00 | U      | µg/l  | 1.00     | 0.38  | 1        | "           | "                  | "                  | "       | "       | X     |
| 120-82-1                                 | 1,2,4-Trichlorobenzene            | < 1.00 | U      | µg/l  | 1.00     | 0.38  | 1        | "           | "                  | "                  | "       | "       | X     |
| 108-70-3                                 | 1,3,5-Trichlorobenzene            | < 1.00 | U      | µg/l  | 1.00     | 0.30  | 1        | "           | "                  | "                  | "       | "       |       |
| 71-55-6                                  | 1,1,1-Trichloroethane             | < 1.00 | U      | µg/l  | 1.00     | 0.51  | 1        | "           | "                  | "                  | "       | "       | X     |
| 79-00-5                                  | 1,1,2-Trichloroethane             | < 1.00 | U      | µg/l  | 1.00     | 0.33  | 1        | "           | "                  | "                  | "       | "       | X     |
| 79-01-6                                  | Trichloroethene                   | < 1.00 | U      | µg/l  | 1.00     | 0.50  | 1        | "           | "                  | "                  | "       | "       | X     |
| 75-69-4                                  | Trichlorofluoromethane (Freon 11) | < 1.00 | U      | µg/l  | 1.00     | 0.49  | 1        | "           | "                  | "                  | "       | "       | X     |
| 96-18-4                                  | 1,2,3-Trichloropropane            | < 1.00 | U      | µg/l  | 1.00     | 0.29  | 1        | "           | "                  | "                  | "       | "       | X     |
| 95-63-6                                  | 1,2,4-Trimethylbenzene            | < 1.00 | U      | µg/l  | 1.00     | 0.36  | 1        | "           | "                  | "                  | "       | "       | X     |
| 108-67-8                                 | 1,3,5-Trimethylbenzene            | < 1.00 | U      | µg/l  | 1.00     | 0.43  | 1        | "           | "                  | "                  | "       | "       | X     |
| 75-01-4                                  | Vinyl chloride                    | < 1.00 | U      | µg/l  | 1.00     | 0.47  | 1        | "           | "                  | "                  | "       | "       | X     |
| 179601-23-1                              | m,p-Xylene                        | 2.84   |        | µg/l  | 2.00     | 0.38  | 1        | "           | "                  | "                  | "       | "       | X     |
| 95-47-6                                  | o-Xylene                          | 0.30   | J      | µg/l  | 1.00     | 0.28  | 1        | "           | "                  | "                  | "       | "       | X     |
| 109-99-9                                 | Tetrahydrofuran                   | < 2.00 | U      | µg/l  | 2.00     | 1.06  | 1        | "           | "                  | "                  | "       | "       |       |
| 60-29-7                                  | Ethyl ether                       | < 1.00 | U      | µg/l  | 1.00     | 0.37  | 1        | "           | "                  | "                  | "       | "       | X     |
| 994-05-8                                 | Tert-amyl methyl ether            | < 1.00 | U      | µg/l  | 1.00     | 0.49  | 1        | "           | "                  | "                  | "       | "       | X     |
| 637-92-3                                 | Ethyl tert-butyl ether            | < 1.00 | U      | µg/l  | 1.00     | 0.33  | 1        | "           | "                  | "                  | "       | "       | X     |
| 108-20-3                                 | Di-isopropyl ether                | < 1.00 | U      | µg/l  | 1.00     | 0.29  | 1        | "           | "                  | "                  | "       | "       | X     |
| 75-65-0                                  | Tert-Butanol / butyl alcohol      | < 10.0 | U      | µg/l  | 10.0     | 5.90  | 1        | "           | "                  | "                  | "       | "       | X     |
| 123-91-1                                 | 1,4-Dioxane                       | < 20.0 | U      | µg/l  | 20.0     | 11.4  | 1        | "           | "                  | "                  | "       | "       | X     |
| 110-57-6                                 | trans-1,4-Dichloro-2-buten e      | < 5.00 | U      | µg/l  | 5.00     | 0.82  | 1        | "           | "                  | "                  | "       | "       | X     |
| 64-17-5                                  | Ethanol                           | < 200  | U      | µg/l  | 200      | 30.9  | 1        | "           | "                  | "                  | "       | "       | X     |
| Surrogate recoveries:                    |                                   |        |        |       |          |       |          |             |                    |                    |         |         |       |
| 460-00-4                                 | 4-Bromofluorobenzene              | 94     |        |       | 70-130 % |       |          | "           | "                  | "                  | "       | "       |       |
| 2037-26-5                                | Toluene-d8                        | 100    |        |       | 70-130 % |       |          | "           | "                  | "                  | "       | "       |       |
| 17060-07-0                               | 1,2-Dichloroethane-d4             | 111    |        |       | 70-130 % |       |          | "           | "                  | "                  | "       | "       |       |
| 1868-53-7                                | Dibromofluoromethane              | 98     |        |       | 70-130 % |       |          | "           | "                  | "                  | "       | "       |       |
| General Chemistry Parameters             |                                   |        |        |       |          |       |          |             |                    |                    |         |         |       |
| 16887-00-6                               | Chloride                          | 745    | GS1, D | mg/l  | 30.0     | 2.98  | 30       | EPA 300.0   | 09-Mar-18          | 13-Mar-18          | TN      | 1803330 | X     |
| 14797-55-8                               | Nitrate as N                      | 0.008  | O09, J | mg/l  | 0.100    | 0.007 | 1        | "           | 09-Mar-18<br>16:51 | 13-Mar-18<br>03:41 | "       | "       | X     |
| 14808-79-8                               | Sulfate as SO4                    | 64.5   | GS1, D | mg/l  | 30.0     | 23.9  | 30       | "           | "                  | 13-Mar-18          | "       | "       | X     |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-06

SC44624-01

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 10:30

Received

09-Mar-18

| <i>CAS No.</i> | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | 56.0   |   | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 19-Mar-18 | 19-Mar-18 | SAD | 1803813 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

Sample Identification**130110-MW-05R**

SC44624-02

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 10:30

Received

09-Mar-18

| <i>CAS No.</i>                      | <i>Analyte(s)</i>    | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i>  | <i>Prepared</i>    | <i>Analyzed</i>    | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------|----------------------|---------------|-------------|--------------|-------------|------------|-----------------|---------------------|--------------------|--------------------|----------------|--------------|--------------|
| <b>General Chemistry Parameters</b> |                      |               |             |              |             |            |                 |                     |                    |                    |                |              |              |
| 16887-00-6                          | Chloride             | 377           | GS1, D      | mg/l         | 15.0        | 1.49       | 15              | EPA 300.0           | 09-Mar-18          | 13-Mar-18          | TN             | 1803330      | X            |
| 14797-55-8                          | Nitrate as N         | < 0.100       | O09, U      | mg/l         | 0.100       | 0.007      | 1               | "                   | 09-Mar-18<br>16:51 | 13-Mar-18<br>03:57 | "              | "            | X            |
| 14808-79-8                          | Sulfate as SO4       | 2.46          |             | mg/l         | 1.00        | 0.798      | 1               | "                   | "                  | "                  | "              | "            | X            |
|                                     | Total Organic Carbon | 17.0          | R01, D      | mg/l         | 10.0        | 2.38       | 10              | SM5310B (00,<br>11) | 21-Mar-18          | 21-Mar-18          | RLT            | 1803825      | X            |

Sample Identification**130110-MW-04**

SC44624-03

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 11:00

Received

09-Mar-18

| <i>CAS No.</i>                      | <i>Analyte(s)</i>    | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i>  | <i>Prepared</i>    | <i>Analyzed</i>    | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------|----------------------|---------------|-------------|--------------|-------------|------------|-----------------|---------------------|--------------------|--------------------|----------------|--------------|--------------|
| <b>General Chemistry Parameters</b> |                      |               |             |              |             |            |                 |                     |                    |                    |                |              |              |
| 16887-00-6                          | Chloride             | 15.7          |             | mg/l         | 1.00        | 0.0994     | 1               | EPA 300.0           | 09-Mar-18          | 13-Mar-18          | TN             | 1803330      | X            |
| 14797-55-8                          | Nitrate as N         | 0.285         | O09         | mg/l         | 0.100       | 0.007      | 1               | "                   | 09-Mar-18<br>16:51 | 13-Mar-18<br>04:13 | "              | "            | X            |
| 14808-79-8                          | Sulfate as SO4       | 15.8          |             | mg/l         | 1.00        | 0.798      | 1               | "                   | "                  | "                  | "              | "            | X            |
|                                     | Total Organic Carbon | 2.14          |             | mg/l         | 1.00        | 0.238      | 1               | SM5310B (00,<br>11) | 20-Mar-18          | 20-Mar-18          | RLT            | 1803769      | X            |

Sample Identification

130110-MW-10S

SC44624-04

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 11:06

Received

09-Mar-18

| <i>CAS No.</i>                      | <i>Analyte(s)</i>    | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i>  | <i>Prepared</i>    | <i>Analyzed</i>    | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------|----------------------|---------------|-------------|--------------|-------------|------------|-----------------|---------------------|--------------------|--------------------|----------------|--------------|--------------|
| <b>General Chemistry Parameters</b> |                      |               |             |              |             |            |                 |                     |                    |                    |                |              |              |
| 16887-00-6                          | Chloride             | 54.3          | GS1, D      | mg/l         | 2.00        | 0.199      | 2               | EPA 300.0           | 09-Mar-18          | 13-Mar-18          | TN             | 1803330      | X            |
| 14797-55-8                          | Nitrate as N         | < 0.100       | O09, U      | mg/l         | 0.100       | 0.007      | 1               | "                   | 09-Mar-18<br>16:51 | 13-Mar-18<br>04:29 | "              | "            | X            |
| 14808-79-8                          | Sulfate as SO4       | 25.0          |             | mg/l         | 1.00        | 0.798      | 1               | "                   | "                  | "                  | "              | "            | X            |
|                                     | Total Organic Carbon | 8.43          |             | mg/l         | 1.00        | 0.238      | 1               | SM5310B (00,<br>11) | 20-Mar-18          | 20-Mar-18          | RLT            | 1803769      | X            |

Sample Identification**130110-MW-10M**

SC44624-05

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 14:05

Received

09-Mar-18

| <i>CAS No.</i>                      | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i>    | <i>Analyzed</i>    | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|--------------------|--------------------|----------------|--------------|--------------|
| <b>General Chemistry Parameters</b> |                   |               |             |              |             |            |                 |                    |                    |                    |                |              |              |
| 16887-00-6                          | Chloride          | 265           | GS1, D      | mg/l         | 11.0        | 1.09       | 11              | EPA 300.0          | 09-Mar-18          | 13-Mar-18          | TN             | 1803330      | X            |
| 14797-55-8                          | Nitrate as N      | 0.620         | O09         | mg/l         | 0.100       | 0.007      | 1               | "                  | 09-Mar-18<br>16:51 | 13-Mar-18<br>04:45 | "              | "            | X            |
| 14808-79-8                          | Sulfate as SO4    | 45.6          |             | mg/l         | 1.00        | 0.798      | 1               | "                  | "                  | "                  | "              | "            | X            |

Sample Identification**130110-MW-10D**

SC44624-06

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 14:10

Received

09-Mar-18

| <i>CAS No.</i>                      | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i>    | <i>Analyzed</i>    | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|--------------------|--------------------|----------------|--------------|--------------|
| <b>General Chemistry Parameters</b> |                   |               |             |              |             |            |                 |                    |                    |                    |                |              |              |
| 16887-00-6                          | Chloride          | 128           | GS1, D      | mg/l         | 5.00        | 0.497      | 5               | EPA 300.0          | 09-Mar-18          | 13-Mar-18          | TN             | 1803330      | X            |
| 14797-55-8                          | Nitrate as N      | 0.020         | O09, J      | mg/l         | 0.100       | 0.007      | 1               | "                  | 09-Mar-18<br>16:51 | 13-Mar-18<br>05:01 | "              | "            | X            |
| 14808-79-8                          | Sulfate as SO4    | 14.6          |             | mg/l         | 1.00        | 0.798      | 1               | "                  | "                  | "                  | "              | "            | X            |

Sample Identification

130110-MW-11D

SC44624-07

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 13:03

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | 0.34          | J           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | 1.65          |             | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

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Sample Identification

130110-MW-11D

SC44624-07

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 13:03

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | 1.38          |             | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | 1.17          |             | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-butene       | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 94  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 95  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 100 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 94  |  | 70-130 % |  | " | " | " | " | " |

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

|              |               |     |   |                      |           |    |         |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|
| Preservation | Lab Preserved | N/A | 1 | EPA 200/6000 methods | 09-Mar-18 | JS | 1803317 |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|

**Total Metals by EPA 6000/7000 Series Methods***This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-11D

SC44624-07

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 13:03

Received

09-Mar-18

| <u>CAS No.</u> | <u>Analyte(s)</u> | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
|----------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |        |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|----------|--------|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050 | U      | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 19-Mar-18 | 20-Mar-18 | SJR/T | 1803635 | X |
| 7429-90-5 | Aluminum  | 0.0159   | J      | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | 0.00175  | J      | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0124   |        | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020 | U      | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 32.2     |        | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | 0.0012   | J      | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | < 0.0050 | U      | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | < 0.0050 | U      | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | 0.0033   | J      | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 0.353    |        | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 12.4     |        | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 27.3     |        | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.748    |        | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 290      | GS1, D | mg/l | 1.25    | 0.196   | 5 | "           | "         | 22-Mar-18 | "     | "       | X |
| 7440-02-0 | Nickel    | < 0.0050 | U      | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | 20-Mar-18 | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075 | U      | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060 | U      | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150 | U      | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050 | U      | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | < 0.0050 | U      | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0218   |        | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |       |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|-------|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U,HTA | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 19-Mar-18 | 20-Mar-18 | ABW | 1803636 | X |
|-----------|---------|-----------|-------|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|            |                      |      |        |      |       |       |    |                     |                    |                    |     |         |   |
|------------|----------------------|------|--------|------|-------|-------|----|---------------------|--------------------|--------------------|-----|---------|---|
| 16887-00-6 | Chloride             | 458  | GS1, D | mg/l | 19.0  | 1.89  | 19 | EPA 300.0           | 09-Mar-18          | 13-Mar-18          | TN  | 1803330 | X |
| 14797-55-8 | Nitrate as N         | 1.18 | O09    | mg/l | 0.100 | 0.007 | 1  | "                   | 09-Mar-18<br>16:51 | 13-Mar-18<br>05:49 | "   | "       | X |
| 14808-79-8 | Sulfate as SO4       | 80.5 | GS1, D | mg/l | 19.0  | 15.2  | 19 | "                   | "                  | 13-Mar-18          | "   | "       | X |
|            | Total Organic Carbon | 2.11 |        | mg/l | 1.00  | 0.238 | 1  | SM5310B (00,<br>11) | 20-Mar-18          | 20-Mar-18          | RLT | 1803769 | X |

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 19-Mar-18 | 19-Mar-18 | SAD | 1803813 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422645-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |         |        |    |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 | U1 | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 13-Mar-18 | 13-Mar-18<br>14:22 | 11301 | 422645A |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

130110-MW-11S

SC44624-08

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 12:12

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | 0.36          | J           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-11S

SC44624-08

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 12:12

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            | X            |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-butene       | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 94  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 96  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 100 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 94  |  | 70-130 % |  | " | " | " | " | " |

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

|              |               |     |   |                      |           |    |         |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|
| Preservation | Lab Preserved | N/A | 1 | EPA 200/6000 methods | 09-Mar-18 | JS | 1803317 |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|

**Total Metals by EPA 6000/7000 Series Methods***This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-MW-11S

SC44624-08

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 12:12

Received

09-Mar-18

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---------|------------|--------|------|-------|------|-----|----------|-------------|----------|----------|---------|-------|-------|
|---------|------------|--------|------|-------|------|-----|----------|-------------|----------|----------|---------|-------|-------|

**Total Metals by EPA 6000/7000 Series Methods**Prepared by method SW846 3005A

|           |           |          |   |      |         |         |   |             |           |           |       |         |   |
|-----------|-----------|----------|---|------|---------|---------|---|-------------|-----------|-----------|-------|---------|---|
| 7440-22-4 | Silver    | < 0.0050 | U | mg/l | 0.0050  | 0.0006  | 1 | SW846 6010C | 19-Mar-18 | 20-Mar-18 | SJR/T | 1803635 | X |
| 7429-90-5 | Aluminum  | 0.0290   |   | mg/l | 0.0250  | 0.0103  | 1 | "           | "         | "         | "     | "       | X |
| 7440-38-2 | Arsenic   | 0.00250  | J | mg/l | 0.00400 | 0.00138 | 1 | "           | "         | "         | "     | "       | X |
| 7440-39-3 | Barium    | 0.0196   |   | mg/l | 0.0050  | 0.0007  | 1 | "           | "         | "         | "     | "       | X |
| 7440-41-7 | Beryllium | < 0.0020 | U | mg/l | 0.0020  | 0.0003  | 1 | "           | "         | "         | "     | "       | X |
| 7440-70-2 | Calcium   | 41.3     |   | mg/l | 0.100   | 0.0071  | 1 | "           | "         | "         | "     | "       | X |
| 7440-43-9 | Cadmium   | 0.0022   | J | mg/l | 0.0025  | 0.0004  | 1 | "           | "         | "         | "     | "       | X |
| 7440-48-4 | Cobalt    | 0.0010   | J | mg/l | 0.0050  | 0.0008  | 1 | "           | "         | "         | "     | "       | X |
| 7440-47-3 | Chromium  | < 0.0050 | U | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7440-50-8 | Copper    | < 0.0050 | U | mg/l | 0.0050  | 0.0023  | 1 | "           | "         | "         | "     | "       | X |
| 7439-89-6 | Iron      | 25.6     |   | mg/l | 0.0150  | 0.0045  | 1 | "           | "         | "         | "     | "       | X |
| 7440-09-7 | Potassium | 6.44     |   | mg/l | 0.500   | 0.0600  | 1 | "           | "         | "         | "     | "       | X |
| 7439-95-4 | Magnesium | 18.4     |   | mg/l | 0.0100  | 0.0044  | 1 | "           | "         | "         | "     | "       | X |
| 7439-96-5 | Manganese | 0.549    |   | mg/l | 0.0020  | 0.0019  | 1 | "           | "         | "         | "     | "       | X |
| 7440-23-5 | Sodium    | 121      |   | mg/l | 0.250   | 0.0392  | 1 | "           | "         | "         | "     | "       | X |
| 7440-02-0 | Nickel    | < 0.0050 | U | mg/l | 0.0050  | 0.0009  | 1 | "           | "         | "         | "     | "       | X |
| 7439-92-1 | Lead      | < 0.0075 | U | mg/l | 0.0075  | 0.0062  | 1 | "           | "         | "         | "     | "       | X |
| 7440-36-0 | Antimony  | < 0.0060 | U | mg/l | 0.0060  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |
| 7782-49-2 | Selenium  | < 0.0150 | U | mg/l | 0.0150  | 0.0042  | 1 | "           | "         | "         | "     | "       | X |
| 7440-28-0 | Thallium  | < 0.0050 | U | mg/l | 0.0050  | 0.0021  | 1 | "           | "         | "         | "     | "       | X |
| 7440-62-2 | Vanadium  | < 0.0050 | U | mg/l | 0.0050  | 0.0011  | 1 | "           | "         | "         | "     | "       | X |
| 7440-66-6 | Zinc      | 0.0028   | J | mg/l | 0.0050  | 0.0016  | 1 | "           | "         | "         | "     | "       | X |

**Total Metals by EPA 200 Series Methods**

|           |         |           |       |      |         |         |   |                    |           |           |     |         |   |
|-----------|---------|-----------|-------|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|
| 7439-97-6 | Mercury | < 0.00020 | U,HTA | mg/l | 0.00020 | 0.00013 | 1 | EPA<br>245.1/7470A | 19-Mar-18 | 20-Mar-18 | ABW | 1803636 | X |
|-----------|---------|-----------|-------|------|---------|---------|---|--------------------|-----------|-----------|-----|---------|---|

**General Chemistry Parameters**

|            |                      |         |        |      |       |       |   |                     |                    |                    |     |         |   |
|------------|----------------------|---------|--------|------|-------|-------|---|---------------------|--------------------|--------------------|-----|---------|---|
| 16887-00-6 | Chloride             | 187     | GS1, D | mg/l | 8.00  | 0.795 | 8 | EPA 300.0           | 09-Mar-18          | 13-Mar-18          | TN  | 1803330 | X |
| 14797-55-8 | Nitrate as N         | < 0.100 | O09, U | mg/l | 0.100 | 0.007 | 1 | "                   | 09-Mar-18<br>16:51 | 13-Mar-18<br>06:05 | "   | "       | X |
| 14808-79-8 | Sulfate as SO4       | 20.3    |        | mg/l | 1.00  | 0.798 | 1 | "                   | "                  | "                  | "   | "       | X |
|            | Total Organic Carbon | 4.10    |        | mg/l | 1.00  | 0.238 | 1 | SM5310B (00,<br>11) | 20-Mar-18          | 20-Mar-18          | RLT | 1803769 | X |

**Dissolved Gas Analysis**Dissolved GasesPrepared by method General Air Prep

|         |         |        |   |      |      |      |   |         |           |           |     |         |  |
|---------|---------|--------|---|------|------|------|---|---------|-----------|-----------|-----|---------|--|
| 74-82-8 | Methane | < 2.20 | U | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 19-Mar-18 | 19-Mar-18 | SAD | 1803813 |  |
| 74-84-0 | Ethane  | < 5.00 | U | µg/l | 5.00 | 3.48 | 1 | "       | "         | "         | "   | "       |  |
| 74-85-1 | Ethene  | < 5.00 | U | µg/l | 5.00 | 4.58 | 1 | "       | "         | "         | "   | "       |  |

**Subcontracted Analyses**Prepared by method 422645-SM4500S-D

Analysis performed by Phoenix Environmental Labs, Inc. \* - CT007

|            |         |        |    |      |      |      |   |                      |           |                    |       |         |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|
| 18496-25-8 | Sulfide | < 0.05 | U1 | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-00,-<br>11 | 13-Mar-18 | 13-Mar-18<br>14:23 | 11301 | 422645A |  |
|------------|---------|--------|----|------|------|------|---|----------------------|-----------|--------------------|-------|---------|--|

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Sample Identification

130110-DUP-0318

SC44624-09

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 00:00

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | 0.37          | J           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-DUP-0318

SC44624-09

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 00:00

Received

09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-butene       | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |     |  |          |  |   |   |   |   |   |
|------------|-----------------------|-----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 94  |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 95  |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 100 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 94  |  | 70-130 % |  | " | " | " | " | " |

**Total Metals by EPA 200/6000 Series Methods**Prepared by method General Prep-Metal

|              |               |     |   |                      |           |    |         |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|
| Preservation | Lab Preserved | N/A | 1 | EPA 200/6000 methods | 09-Mar-18 | JS | 1803317 |
|--------------|---------------|-----|---|----------------------|-----------|----|---------|

**Total Metals by EPA 6000/7000 Series Methods***This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

130110-DUP-0318

SC44624-09

Client Project #

1490709

Matrix

Ground Water

Collection Date/Time

07-Mar-18 00:00

Received

09-Mar-18

| <i>CAS No.</i>                                      | <i>Analyte(s)</i> | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-----------------------------------------------------|-------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Total Metals by EPA 6000/7000 Series Methods</b> |                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 3005A</u>               |                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 7440-22-4                                           | Silver            | < 0.0050      | U           | mg/l         | 0.0050      | 0.0006     | 1               | SW846 6010C        | 19-Mar-18       | 20-Mar-18       | SJR/T          | 1803635      | X            |
| 7429-90-5                                           | Aluminum          | 0.0258        |             | mg/l         | 0.0250      | 0.0103     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-38-2                                           | Arsenic           | 0.00320       | J           | mg/l         | 0.00400     | 0.00138    | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-39-3                                           | Barium            | 0.0200        |             | mg/l         | 0.0050      | 0.0007     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-41-7                                           | Beryllium         | < 0.0020      | U           | mg/l         | 0.0020      | 0.0003     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-70-2                                           | Calcium           | 41.9          |             | mg/l         | 0.100       | 0.0071     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-43-9                                           | Cadmium           | 0.0024        | J           | mg/l         | 0.0025      | 0.0004     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-48-4                                           | Cobalt            | 0.0011        | J           | mg/l         | 0.0050      | 0.0008     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-47-3                                           | Chromium          | < 0.0050      | U           | mg/l         | 0.0050      | 0.0009     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-50-8                                           | Copper            | < 0.0050      | U           | mg/l         | 0.0050      | 0.0023     | 1               | "                  | "               | "               | "              | "            | X            |
| 7439-89-6                                           | Iron              | 29.7          |             | mg/l         | 0.0150      | 0.0045     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-09-7                                           | Potassium         | 6.26          |             | mg/l         | 0.500       | 0.0600     | 1               | "                  | "               | "               | "              | "            | X            |
| 7439-95-4                                           | Magnesium         | 18.1          |             | mg/l         | 0.0100      | 0.0044     | 1               | "                  | "               | "               | "              | "            | X            |
| 7439-96-5                                           | Manganese         | 0.577         |             | mg/l         | 0.0020      | 0.0019     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-23-5                                           | Sodium            | 117           |             | mg/l         | 0.250       | 0.0392     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-02-0                                           | Nickel            | < 0.0050      | U           | mg/l         | 0.0050      | 0.0009     | 1               | "                  | "               | "               | "              | "            | X            |
| 7439-92-1                                           | Lead              | < 0.0075      | U           | mg/l         | 0.0075      | 0.0062     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-36-0                                           | Antimony          | < 0.0060      | U           | mg/l         | 0.0060      | 0.0016     | 1               | "                  | "               | "               | "              | "            | X            |
| 7782-49-2                                           | Selenium          | < 0.0150      | U           | mg/l         | 0.0150      | 0.0042     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-28-0                                           | Thallium          | < 0.0050      | U           | mg/l         | 0.0050      | 0.0021     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-62-2                                           | Vanadium          | < 0.0050      | U           | mg/l         | 0.0050      | 0.0011     | 1               | "                  | "               | "               | "              | "            | X            |
| 7440-66-6                                           | Zinc              | 0.0042        | J           | mg/l         | 0.0050      | 0.0016     | 1               | "                  | "               | "               | "              | "            | X            |
| <b>Total Metals by EPA 200 Series Methods</b>       |                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 7439-97-6                                           | Mercury           | < 0.00020     | U,HTA       | mg/l         | 0.00020     | 0.00013    | 1               | EPA<br>245.1/7470A | 19-Mar-18       | 20-Mar-18       | ABW            | 1803636      | X            |

This laboratory report is not valid without an authorized signature on the cover page.



Sample Identification

Trip Blank

SC44624-10

Client Project #

1490709

Matrix

Aqueous

Collection Date/Time

07-Mar-18 00:00

Received

09-Mar-18

| <u>CAS No.</u>                                  | <u>Analyte(s)</u>                          | <u>Result</u> | <u>Flag</u> | <u>Units</u> | <u>*RDL</u> | <u>MDL</u> | <u>Dilution</u> | <u>Method Ref.</u> | <u>Prepared</u> | <u>Analyzed</u> | <u>Analyst</u> | <u>Batch</u> | <u>Cert.</u> |
|-------------------------------------------------|--------------------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Volatile Organic Compounds by SW846 8260</u> |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <u>Prepared by method SW846 5030 Water MS</u>   |                                            |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 76-13-1                                         | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00        | U           | µg/l         | 1.00        | 0.53       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 67-64-1                                         | Acetone                                    | < 10.0        | U           | µg/l         | 10.0        | 0.80       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-13-1                                        | Acrylonitrile                              | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 71-43-2                                         | Benzene                                    | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-86-1                                        | Bromobenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-97-5                                         | Bromochloromethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-27-4                                         | Bromodichloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-25-2                                         | Bromoform                                  | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-83-9                                         | Bromomethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-93-3                                         | 2-Butanone (MEK)                           | < 2.00        | U           | µg/l         | 2.00        | 1.07       | 1               | "                  | "               | "               | "              | "            | X            |
| 104-51-8                                        | n-Butylbenzene                             | < 1.00        | U           | µg/l         | 1.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 135-98-8                                        | sec-Butylbenzene                           | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 98-06-6                                         | tert-Butylbenzene                          | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-15-0                                         | Carbon disulfide                           | < 2.00        | U           | µg/l         | 2.00        | 0.41       | 1               | "                  | "               | "               | "              | "            | X            |
| 56-23-5                                         | Carbon tetrachloride                       | < 1.00        | U           | µg/l         | 1.00        | 0.44       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-90-7                                        | Chlorobenzene                              | < 1.00        | U           | µg/l         | 1.00        | 0.25       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-00-3                                         | Chloroethane                               | < 2.00        | U           | µg/l         | 2.00        | 0.59       | 1               | "                  | "               | "               | "              | "            | X            |
| 67-66-3                                         | Chloroform                                 | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-87-3                                         | Chloromethane                              | < 2.00        | U           | µg/l         | 2.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-49-8                                         | 2-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-43-4                                        | 4-Chlorotoluene                            | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-12-8                                         | 1,2-Dibromo-3-chloropropane                | < 2.00        | U           | µg/l         | 2.00        | 0.86       | 1               | "                  | "               | "               | "              | "            | X            |
| 124-48-1                                        | Dibromochloromethane                       | < 0.50        | U           | µg/l         | 0.50        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-93-4                                        | 1,2-Dibromoethane (EDB)                    | < 0.50        | U           | µg/l         | 0.50        | 0.20       | 1               | "                  | "               | "               | "              | "            | X            |
| 74-95-3                                         | Dibromomethane                             | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-50-1                                         | 1,2-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 541-73-1                                        | 1,3-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.31       | 1               | "                  | "               | "               | "              | "            | X            |
| 106-46-7                                        | 1,4-Dichlorobenzene                        | < 1.00        | U           | µg/l         | 1.00        | 0.27       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-71-8                                         | Dichlorodifluoromethane (Freon12)          | < 2.00        | U           | µg/l         | 2.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-34-3                                         | 1,1-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.32       | 1               | "                  | "               | "               | "              | "            | X            |
| 107-06-2                                        | 1,2-Dichloroethane                         | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-35-4                                         | 1,1-Dichloroethene                         | < 1.00        | U           | µg/l         | 1.00        | 0.69       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-59-2                                        | cis-1,2-Dichloroethene                     | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 156-60-5                                        | trans-1,2-Dichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 78-87-5                                         | 1,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 142-28-9                                        | 1,3-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.21       | 1               | "                  | "               | "               | "              | "            | X            |
| 594-20-7                                        | 2,2-Dichloropropane                        | < 1.00        | U           | µg/l         | 1.00        | 0.42       | 1               | "                  | "               | "               | "              | "            | X            |
| 563-58-6                                        | 1,1-Dichloropropene                        | < 1.00        | U           | µg/l         | 1.00        | 0.58       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-01-5                                      | cis-1,3-Dichloropropene                    | < 0.50        | U           | µg/l         | 0.50        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 10061-02-6                                      | trans-1,3-Dichloropropene                  | < 0.50        | U           | µg/l         | 0.50        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-41-4                                        | Ethylbenzene                               | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-68-3                                         | Hexachlorobutadiene                        | < 0.50        | U           | µg/l         | 0.50        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 591-78-6                                        | 2-Hexanone (MBK)                           | < 2.00        | U           | µg/l         | 2.00        | 0.53       | 1               | "                  | "               | "               | "              | "            | X            |

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

**Trip Blank**  
SC44624-10

Client Project #  
1490709

Matrix  
Aqueous

Collection Date/Time  
07-Mar-18 00:00

Received  
09-Mar-18

| <i>CAS No.</i>                                  | <i>Analyte(s)</i>                 | <i>Result</i> | <i>Flag</i> | <i>Units</i> | <i>*RDL</i> | <i>MDL</i> | <i>Dilution</i> | <i>Method Ref.</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Analyst</i> | <i>Batch</i> | <i>Cert.</i> |
|-------------------------------------------------|-----------------------------------|---------------|-------------|--------------|-------------|------------|-----------------|--------------------|-----------------|-----------------|----------------|--------------|--------------|
| <b>Volatile Organic Compounds</b>               |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| <b>Volatile Organic Compounds by SW846 8260</b> |                                   |               |             |              |             |            |                 |                    |                 |                 |                |              |              |
| 98-82-8                                         | Isopropylbenzene                  | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | SW846 8260C        | 12-Mar-18       | 13-Mar-18       | GMA            | 1803373      | X            |
| 99-87-6                                         | 4-Isopropyltoluene                | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 1634-04-4                                       | Methyl tert-butyl ether           | < 1.00        | U           | µg/l         | 1.00        | 0.24       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-10-1                                        | 4-Methyl-2-pentanone (MIBK)       | < 2.00        | U           | µg/l         | 2.00        | 0.52       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-09-2                                         | Methylene chloride                | < 2.00        | U           | µg/l         | 2.00        | 0.66       | 1               | "                  | "               | "               | "              | "            | X            |
| 91-20-3                                         | Naphthalene                       | < 1.00        | U           | µg/l         | 1.00        | 0.35       | 1               | "                  | "               | "               | "              | "            | X            |
| 103-65-1                                        | n-Propylbenzene                   | < 1.00        | U           | µg/l         | 1.00        | 0.34       | 1               | "                  | "               | "               | "              | "            | X            |
| 100-42-5                                        | Styrene                           | < 1.00        | U           | µg/l         | 1.00        | 0.40       | 1               | "                  | "               | "               | "              | "            | X            |
| 630-20-6                                        | 1,1,1,2-Tetrachloroethane         | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-34-5                                         | 1,1,2,2-Tetrachloroethane         | < 0.50        | U           | µg/l         | 0.50        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 127-18-4                                        | Tetrachloroethene                 | < 1.00        | U           | µg/l         | 1.00        | 0.57       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-88-3                                        | Toluene                           | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            | X            |
| 87-61-6                                         | 1,2,3-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 120-82-1                                        | 1,2,4-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-70-3                                        | 1,3,5-Trichlorobenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.30       | 1               | "                  | "               | "               | "              | "            |              |
| 71-55-6                                         | 1,1,1-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.51       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-00-5                                         | 1,1,2-Trichloroethane             | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 79-01-6                                         | Trichloroethene                   | < 1.00        | U           | µg/l         | 1.00        | 0.50       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-69-4                                         | Trichlorofluoromethane (Freon 11) | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 96-18-4                                         | 1,2,3-Trichloropropane            | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-63-6                                         | 1,2,4-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.36       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-67-8                                        | 1,3,5-Trimethylbenzene            | < 1.00        | U           | µg/l         | 1.00        | 0.43       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-01-4                                         | Vinyl chloride                    | < 1.00        | U           | µg/l         | 1.00        | 0.47       | 1               | "                  | "               | "               | "              | "            | X            |
| 179601-23-1                                     | m,p-Xylene                        | < 2.00        | U           | µg/l         | 2.00        | 0.38       | 1               | "                  | "               | "               | "              | "            | X            |
| 95-47-6                                         | o-Xylene                          | < 1.00        | U           | µg/l         | 1.00        | 0.28       | 1               | "                  | "               | "               | "              | "            | X            |
| 109-99-9                                        | Tetrahydrofuran                   | < 2.00        | U           | µg/l         | 2.00        | 1.06       | 1               | "                  | "               | "               | "              | "            |              |
| 60-29-7                                         | Ethyl ether                       | < 1.00        | U           | µg/l         | 1.00        | 0.37       | 1               | "                  | "               | "               | "              | "            | X            |
| 994-05-8                                        | Tert-amyl methyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.49       | 1               | "                  | "               | "               | "              | "            | X            |
| 637-92-3                                        | Ethyl tert-butyl ether            | < 1.00        | U           | µg/l         | 1.00        | 0.33       | 1               | "                  | "               | "               | "              | "            | X            |
| 108-20-3                                        | Di-isopropyl ether                | < 1.00        | U           | µg/l         | 1.00        | 0.29       | 1               | "                  | "               | "               | "              | "            | X            |
| 75-65-0                                         | Tert-Butanol / butyl alcohol      | < 10.0        | U           | µg/l         | 10.0        | 5.90       | 1               | "                  | "               | "               | "              | "            | X            |
| 123-91-1                                        | 1,4-Dioxane                       | < 20.0        | U           | µg/l         | 20.0        | 11.4       | 1               | "                  | "               | "               | "              | "            | X            |
| 110-57-6                                        | trans-1,4-Dichloro-2-buten<br>e   | < 5.00        | U           | µg/l         | 5.00        | 0.82       | 1               | "                  | "               | "               | "              | "            | X            |
| 64-17-5                                         | Ethanol                           | < 200         | U           | µg/l         | 200         | 30.9       | 1               | "                  | "               | "               | "              | "            | X            |

Surrogate recoveries:

|            |                       |    |  |          |  |   |   |   |   |   |
|------------|-----------------------|----|--|----------|--|---|---|---|---|---|
| 460-00-4   | 4-Bromofluorobenzene  | 95 |  | 70-130 % |  | " | " | " | " | " |
| 2037-26-5  | Toluene-d8            | 96 |  | 70-130 % |  | " | " | " | " | " |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 99 |  | 70-130 % |  | " | " | " | " | " |
| 1868-53-7  | Dibromofluoromethane  | 92 |  | 70-130 % |  | " | " | " | " | " |

# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803373-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Acetone                                    | < 10.0 | U    | µg/l  | 10.0 |                                           |               |      |             |     |           |
| Acrylonitrile                              | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Benzene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromobenzene                               | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromochloromethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromodichloromethane                       | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Bromoform                                  | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Bromomethane                               | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 2-Butanone (MEK)                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| n-Butylbenzene                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| sec-Butylbenzene                           | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| tert-Butylbenzene                          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Carbon disulfide                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Carbon tetrachloride                       | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chlorobenzene                              | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chloroethane                               | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Chloroform                                 | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Chloromethane                              | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 2-Chlorotoluene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Chlorotoluene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Dibromochloromethane                       | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                    | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Dibromomethane                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,4-Dichlorobenzene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)          | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| 1,1-Dichloroethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichloroethane                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1-Dichloroethene                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| cis-1,2-Dichloroethene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| trans-1,2-Dichloroethene                   | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 2,2-Dichloropropane                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1-Dichloropropene                        | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| cis-1,3-Dichloropropene                    | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Ethylbenzene                               | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Isopropylbenzene                           | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Methylene chloride                         | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Naphthalene                                | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| n-Propylbenzene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>Blank (1803373-BLK1)</b>                |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| Styrene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |     |           |
| Tetrachloroethene                          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Toluene                                    | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Trichloroethene                            | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Vinyl chloride                             | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| m,p-Xylene                                 | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| o-Xylene                                   | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tetrahydrofuran                            | < 2.00 | U    | µg/l  | 2.00 |                                           |               |      |             |     |           |
| Ethyl ether                                | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Di-isopropyl ether                         | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 10.0 | U    | µg/l  | 10.0 |                                           |               |      |             |     |           |
| 1,4-Dioxane                                | < 20.0 | U    | µg/l  | 20.0 |                                           |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 5.00 | U    | µg/l  | 5.00 |                                           |               |      |             |     |           |
| Ethanol                                    | < 200  | U    | µg/l  | 200  |                                           |               |      |             |     |           |
| <hr/>                                      |        |      |       |      |                                           |               |      |             |     |           |
| Surrogate: 4-Bromofluorobenzene            | 46.6   |      | µg/l  |      | 50.0                                      |               | 93   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 48.4   |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 55.4   |      | µg/l  |      | 50.0                                      |               | 111  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.1   |      | µg/l  |      | 50.0                                      |               | 96   | 70-130      |     |           |
| <b>LCS (1803373-BS1)</b>                   |        |      |       |      | <u>Prepared &amp; Analyzed: 12-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      |     |           |
| Acetone                                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Acrylonitrile                              | 16.3   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      |     |           |
| Benzene                                    | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      |     |           |
| Bromobenzene                               | 18.9   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      |     |           |
| Bromochloromethane                         | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      |     |           |
| Bromodichloromethane                       | 19.7   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      |     |           |
| Bromoform                                  | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      |     |           |
| Bromomethane                               | 23.7   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      |     |           |
| n-Butylbenzene                             | 16.3   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      |     |           |
| sec-Butylbenzene                           | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      |     |           |
| tert-Butylbenzene                          | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Carbon disulfide                           | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      |     |           |
| Carbon tetrachloride                       | 18.5   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |
| Chlorobenzene                              | 17.9   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      |     |           |
| Chloroethane                               | 22.7   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      |     |           |
| Chloroform                                 | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                    | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|-------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                                           |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |                                           |      |       |      |             |               |      |             |     |           |
| <b>LCS (1803373-BS1)</b>                   | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |      |       |      |             |               |      |             |     |           |
| Chloromethane                              | 15.1                                      |      | µg/l  |      | 20.0        |               | 76   | 70-130      |     |           |
| 2-Chlorotoluene                            | 18.9                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 4-Chlorotoluene                            | 18.9                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,2-Dibromo-3-chloropropane                | 20.7                                      |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| Dibromochloromethane                       | 20.0                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 18.7                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Dibromomethane                             | 18.8                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 18.9                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 19.0                                      |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 18.5                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 14.4                                      |      | µg/l  |      | 20.0        |               | 72   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 17.5                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 19.6                                      |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| 1,1-Dichloroethene                         | 16.1                                      |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 16.9                                      |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 15.9                                      |      | µg/l  |      | 20.0        |               | 79   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 16.8                                      |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 17.8                                      |      | µg/l  |      | 20.0        |               | 89   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 14.6                                      |      | µg/l  |      | 20.0        |               | 73   | 70-130      |     |           |
| 1,1-Dichloropropene                        | 15.5                                      |      | µg/l  |      | 20.0        |               | 77   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 16.2                                      |      | µg/l  |      | 20.0        |               | 81   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 18.3                                      |      | µg/l  |      | 20.0        |               | 91   | 70-130      |     |           |
| Ethylbenzene                               | 17.5                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| Hexachlorobutadiene                        | 17.0                                      |      | µg/l  |      | 20.0        |               | 85   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 16.5                                      |      | µg/l  |      | 20.0        |               | 82   | 70-130      |     |           |
| Isopropylbenzene                           | 17.5                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 17.4                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 17.2                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.1                                      |      | µg/l  |      | 20.0        |               | 85   | 70-130      |     |           |
| Methylene chloride                         | 17.2                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| Naphthalene                                | 22.6                                      |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| n-Propylbenzene                            | 17.6                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| Styrene                                    | 18.5                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 21.0                                      |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.1                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| Tetrachloroethene                          | 16.1                                      |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| Toluene                                    | 17.1                                      |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 20.1                                      |      | µg/l  |      | 20.0        |               | 100  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 19.4                                      |      | µg/l  |      | 20.0        |               | 97   | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 19.3                                      |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 18.8                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Trichloroethene                            | 17.7                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 20.5                                      |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 19.8                                      |      | µg/l  |      | 20.0        |               | 99   | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 18.7                                      |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Vinyl chloride                             | 18.6                                      |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| m,p-Xylene                                 | 17.4                                      |      | µg/l  |      | 20.0        |               | 87   | 70-130      |     |           |
| o-Xylene                                   | 17.6                                      |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                                      | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|--------------------------------------------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |        |      |       |      |                                                  |               |      |             |     |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                                  |               |      |             |     |           |
| <b><u>LCS (1803373-BS1)</u></b>            |        |      |       |      | <b><u>Prepared &amp; Analyzed: 12-Mar-18</u></b> |               |      |             |     |           |
| Tetrahydrofuran                            | 15.6   |      | µg/l  |      | 20.0                                             |               | 78   | 70-130      |     |           |
| Ethyl ether                                | 20.9   |      | µg/l  |      | 20.0                                             |               | 105  | 70-130      |     |           |
| Tert-amyl methyl ether                     | 17.0   |      | µg/l  |      | 20.0                                             |               | 85   | 70-130      |     |           |
| Ethyl tert-butyl ether                     | 16.7   |      | µg/l  |      | 20.0                                             |               | 84   | 70-130      |     |           |
| Di-isopropyl ether                         | 15.8   |      | µg/l  |      | 20.0                                             |               | 79   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 161    |      | µg/l  |      | 200                                              |               | 80   | 70-130      |     |           |
| 1,4-Dioxane                                | 166    |      | µg/l  |      | 200                                              |               | 83   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 21.6   |      | µg/l  |      | 20.0                                             |               | 108  | 70-130      |     |           |
| Ethanol                                    | 341    |      | µg/l  |      | 400                                              |               | 85   | 70-130      |     |           |
| Surrogate: 4-Bromofluorobenzene            | 48.8   |      | µg/l  |      | 50.0                                             |               | 98   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.0   |      | µg/l  |      | 50.0                                             |               | 98   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 54.4   |      | µg/l  |      | 50.0                                             |               | 109  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 48.8   |      | µg/l  |      | 50.0                                             |               | 98   | 70-130      |     |           |
| <b><u>LCS Dup (1803373-BSD1)</u></b>       |        |      |       |      | <b><u>Prepared &amp; Analyzed: 12-Mar-18</u></b> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 16.0   |      | µg/l  |      | 20.0                                             |               | 80   | 70-130      | 3   | 20        |
| Acetone                                    | 18.4   |      | µg/l  |      | 20.0                                             |               | 92   | 70-130      | 1   | 20        |
| Acrylonitrile                              | 17.1   |      | µg/l  |      | 20.0                                             |               | 85   | 70-130      | 5   | 20        |
| Benzene                                    | 16.3   |      | µg/l  |      | 20.0                                             |               | 82   | 70-130      | 3   | 20        |
| Bromobenzene                               | 18.3   |      | µg/l  |      | 20.0                                             |               | 91   | 70-130      | 3   | 20        |
| Bromochloromethane                         | 17.9   |      | µg/l  |      | 20.0                                             |               | 90   | 70-130      | 3   | 20        |
| Bromodichloromethane                       | 19.2   |      | µg/l  |      | 20.0                                             |               | 96   | 70-130      | 3   | 20        |
| Bromoform                                  | 19.6   |      | µg/l  |      | 20.0                                             |               | 98   | 70-130      | 2   | 20        |
| Bromomethane                               | 22.3   |      | µg/l  |      | 20.0                                             |               | 112  | 70-130      | 6   | 20        |
| 2-Butanone (MEK)                           | 17.4   |      | µg/l  |      | 20.0                                             |               | 87   | 70-130      | 5   | 20        |
| n-Butylbenzene                             | 15.9   |      | µg/l  |      | 20.0                                             |               | 79   | 70-130      | 3   | 20        |
| sec-Butylbenzene                           | 16.9   |      | µg/l  |      | 20.0                                             |               | 85   | 70-130      | 2   | 20        |
| tert-Butylbenzene                          | 17.2   |      | µg/l  |      | 20.0                                             |               | 86   | 70-130      | 4   | 20        |
| Carbon disulfide                           | 15.5   |      | µg/l  |      | 20.0                                             |               | 78   | 70-130      | 8   | 20        |
| Carbon tetrachloride                       | 17.7   |      | µg/l  |      | 20.0                                             |               | 89   | 70-130      | 4   | 20        |
| Chlorobenzene                              | 17.4   |      | µg/l  |      | 20.0                                             |               | 87   | 70-130      | 3   | 20        |
| Chloroethane                               | 20.4   |      | µg/l  |      | 20.0                                             |               | 102  | 70-130      | 11  | 20        |
| Chloroform                                 | 17.9   |      | µg/l  |      | 20.0                                             |               | 90   | 70-130      | 4   | 20        |
| Chloromethane                              | 14.8   |      | µg/l  |      | 20.0                                             |               | 74   | 70-130      | 2   | 20        |
| 2-Chlorotoluene                            | 18.0   |      | µg/l  |      | 20.0                                             |               | 90   | 70-130      | 5   | 20        |
| 4-Chlorotoluene                            | 18.2   |      | µg/l  |      | 20.0                                             |               | 91   | 70-130      | 3   | 20        |
| 1,2-Dibromo-3-chloropropane                | 21.2   |      | µg/l  |      | 20.0                                             |               | 106  | 70-130      | 3   | 20        |
| Dibromochloromethane                       | 19.8   |      | µg/l  |      | 20.0                                             |               | 99   | 70-130      | 0.8 | 20        |
| 1,2-Dibromoethane (EDB)                    | 18.6   |      | µg/l  |      | 20.0                                             |               | 93   | 70-130      | 0.4 | 20        |
| Dibromomethane                             | 18.8   |      | µg/l  |      | 20.0                                             |               | 94   | 70-130      | 0.3 | 20        |
| 1,2-Dichlorobenzene                        | 18.3   |      | µg/l  |      | 20.0                                             |               | 92   | 70-130      | 3   | 20        |
| 1,3-Dichlorobenzene                        | 18.2   |      | µg/l  |      | 20.0                                             |               | 91   | 70-130      | 4   | 20        |
| 1,4-Dichlorobenzene                        | 18.1   |      | µg/l  |      | 20.0                                             |               | 91   | 70-130      | 2   | 20        |
| Dichlorodifluoromethane (Freon12)          | 13.8   |      | µg/l  |      | 20.0                                             |               | 69   | 70-130      | 4   | 20        |
| 1,1-Dichloroethane                         | 16.8   |      | µg/l  |      | 20.0                                             |               | 84   | 70-130      | 4   | 20        |
| 1,2-Dichloroethane                         | 19.3   |      | µg/l  |      | 20.0                                             |               | 97   | 70-130      | 1   | 20        |
| 1,1-Dichloroethene                         | 15.7   |      | µg/l  |      | 20.0                                             |               | 79   | 70-130      | 2   | 20        |
| cis-1,2-Dichloroethene                     | 16.1   |      | µg/l  |      | 20.0                                             |               | 81   | 70-130      | 4   | 20        |
| trans-1,2-Dichloroethene                   | 15.3   |      | µg/l  |      | 20.0                                             |               | 77   | 70-130      | 3   | 20        |
| 1,2-Dichloropropane                        | 16.5   |      | µg/l  |      | 20.0                                             |               | 82   | 70-130      | 2   | 20        |
| 1,3-Dichloropropane                        | 17.4   |      | µg/l  |      | 20.0                                             |               | 87   | 70-130      | 2   | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803373 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>LCS Dup (1803373-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 12-Mar-18</b> |               |      |             |      |           |
| 2,2-Dichloropropane                        | 13.8   | QM9  | µg/l  |      | 20.0                                      |               | 69   | 70-130      | 5    | 20        |
| 1,1-Dichloropropene                        | 14.9   |      | µg/l  |      | 20.0                                      |               | 75   | 70-130      | 4    | 20        |
| cis-1,3-Dichloropropene                    | 16.2   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      | 0.06 | 20        |
| trans-1,3-Dichloropropene                  | 17.7   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      | 3    | 20        |
| Ethylbenzene                               | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 4    | 20        |
| Hexachlorobutadiene                        | 17.5   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      | 3    | 20        |
| 2-Hexanone (MBK)                           | 17.0   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 3    | 20        |
| Isopropylbenzene                           | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 4    | 20        |
| 4-Isopropyltoluene                         | 17.0   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 3    | 20        |
| Methyl tert-butyl ether                    | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 3    | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 17.3   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 1    | 20        |
| Methylene chloride                         | 16.6   |      | µg/l  |      | 20.0                                      |               | 83   | 70-130      | 4    | 20        |
| Naphthalene                                | 23.0   |      | µg/l  |      | 20.0                                      |               | 115  | 70-130      | 2    | 20        |
| n-Propylbenzene                            | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 4    | 20        |
| Styrene                                    | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      | 4    | 20        |
| 1,1,1,2-Tetrachloroethane                  | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 4    | 20        |
| 1,1,2,2-Tetrachloroethane                  | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 0.5  | 20        |
| Tetrachloroethene                          | 15.4   |      | µg/l  |      | 20.0                                      |               | 77   | 70-130      | 4    | 20        |
| Toluene                                    | 16.4   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 4    | 20        |
| 1,2,3-Trichlorobenzene                     | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 1    | 20        |
| 1,2,4-Trichlorobenzene                     | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 1    | 20        |
| 1,3,5-Trichlorobenzene                     | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 1    | 20        |
| 1,1,1-Trichloroethane                      | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 5    | 20        |
| 1,1,2-Trichloroethane                      | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 3    | 20        |
| Trichloroethene                            | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 4    | 20        |
| Trichlorofluoromethane (Freon 11)          | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 5    | 20        |
| 1,2,3-Trichloropropane                     | 20.3   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 3    | 20        |
| 1,2,4-Trimethylbenzene                     | 17.9   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      | 5    | 20        |
| 1,3,5-Trimethylbenzene                     | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 3    | 20        |
| Vinyl chloride                             | 17.6   |      | µg/l  |      | 20.0                                      |               | 88   | 70-130      | 5    | 20        |
| m,p-Xylene                                 | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 4    | 20        |
| o-Xylene                                   | 16.9   |      | µg/l  |      | 20.0                                      |               | 85   | 70-130      | 4    | 20        |
| Tetrahydrofuran                            | 15.9   |      | µg/l  |      | 20.0                                      |               | 80   | 70-130      | 2    | 20        |
| Ethyl ether                                | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 0.1  | 20        |
| Tert-amyl methyl ether                     | 16.8   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 1    | 20        |
| Ethyl tert-butyl ether                     | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 1    | 20        |
| Di-isopropyl ether                         | 15.4   |      | µg/l  |      | 20.0                                      |               | 77   | 70-130      | 2    | 20        |
| Tert-Butanol / butyl alcohol               | 162    |      | µg/l  |      | 200                                       |               | 81   | 70-130      | 0.8  | 20        |
| 1,4-Dioxane                                | 159    |      | µg/l  |      | 200                                       |               | 80   | 70-130      | 4    | 20        |
| trans-1,4-Dichloro-2-butene                | 21.8   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      | 0.9  | 20        |
| Ethanol                                    | 344    |      | µg/l  |      | 400                                       |               | 86   | 70-130      | 0.9  | 20        |
| Surrogate: 4-Bromofluorobenzene            | 49.2   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |      |           |
| Surrogate: Toluene-d8                      | 48.6   |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |      |           |
| Surrogate: 1,2-Dichloroethane-d4           | 53.9   |      | µg/l  |      | 50.0                                      |               | 108  | 70-130      |      |           |
| Surrogate: Dibromofluoromethane            | 48.4   |      | µg/l  |      | 50.0                                      |               | 97   | 70-130      |      |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>Blank (1803567-BLK1)</b>                |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |      |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | U    | µg/l  | 1.00 |                                           |               |      |             |      |           |
| Acetone                                    | 1.94   | J    | µg/l  | 10.0 |                                           |               |      |             |      |           |
| Acrylonitrile                              | < 0.50 | U    | µg/l  | 0.50 |                                           |               |      |             |      |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                    | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|-------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |                                           |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |                                           |      |       |      |             |               |      |             |     |           |
| <b>Blank (1803567-BLK1)</b>                | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |      |       |      |             |               |      |             |     |           |
| Benzene                                    | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Bromobenzene                               | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Bromochloromethane                         | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Bromodichloromethane                       | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| Bromoform                                  | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Bromomethane                               | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| 2-Butanone (MEK)                           | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| n-Butylbenzene                             | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| sec-Butylbenzene                           | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| tert-Butylbenzene                          | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Carbon disulfide                           | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Carbon tetrachloride                       | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Chlorobenzene                              | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Chloroethane                               | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Chloroform                                 | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Chloromethane                              | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| 2-Chlorotoluene                            | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 4-Chlorotoluene                            | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Dibromochloromethane                       | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| 1,2-Dibromoethane (EDB)                    | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| Dibromomethane                             | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2-Dichlorobenzene                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,3-Dichlorobenzene                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,4-Dichlorobenzene                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Dichlorodifluoromethane (Freon12)          | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| 1,1-Dichloroethane                         | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2-Dichloroethane                         | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1-Dichloroethene                         | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| cis-1,2-Dichloroethene                     | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| trans-1,2-Dichloroethene                   | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2-Dichloropropane                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,3-Dichloropropane                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 2,2-Dichloropropane                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1-Dichloropropene                        | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| cis-1,3-Dichloropropene                    | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| trans-1,3-Dichloropropene                  | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| Ethylbenzene                               | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Hexachlorobutadiene                        | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |
| 2-Hexanone (MBK)                           | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Isopropylbenzene                           | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 4-Isopropyltoluene                         | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Methyl tert-butyl ether                    | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 4-Methyl-2-pentanone (MIBK)                | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Methylene chloride                         | < 2.00                                    | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Naphthalene                                | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| n-Propylbenzene                            | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Styrene                                    | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1,1,2-Tetrachloroethane                  | < 1.00                                    | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1,2,2-Tetrachloroethane                  | < 0.50                                    | U    | µg/l  | 0.50 |             |               |      |             |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                           | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |                                                  |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |                                                  |      |       |      |             |               |      |             |     |           |
| <b><u>Blank (1803567-BLK1)</u></b>         | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |       |      |             |               |      |             |     |           |
| Tetrachloroethene                          | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Toluene                                    | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2,3-Trichlorobenzene                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2,4-Trichlorobenzene                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,3,5-Trichlorobenzene                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1,1-Trichloroethane                      | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,1,2-Trichloroethane                      | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Trichloroethene                            | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Trichlorofluoromethane (Freon 11)          | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2,3-Trichloropropane                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,2,4-Trimethylbenzene                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| 1,3,5-Trimethylbenzene                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Vinyl chloride                             | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| m,p-Xylene                                 | < 2.00                                           | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| o-Xylene                                   | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Tetrahydrofuran                            | < 2.00                                           | U    | µg/l  | 2.00 |             |               |      |             |     |           |
| Ethyl ether                                | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Tert-amyl methyl ether                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Ethyl tert-butyl ether                     | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Di-isopropyl ether                         | < 1.00                                           | U    | µg/l  | 1.00 |             |               |      |             |     |           |
| Tert-Butanol / butyl alcohol               | < 10.0                                           | U    | µg/l  | 10.0 |             |               |      |             |     |           |
| 1,4-Dioxane                                | < 20.0                                           | U    | µg/l  | 20.0 |             |               |      |             |     |           |
| trans-1,4-Dichloro-2-butene                | < 5.00                                           | U    | µg/l  | 5.00 |             |               |      |             |     |           |
| Ethanol                                    | < 200                                            | U    | µg/l  | 200  |             |               |      |             |     |           |
| <i>Surrogate: 4-Bromofluorobenzene</i>     | 47.5                                             |      | µg/l  |      | 50.0        |               | 95   | 70-130      |     |           |
| <i>Surrogate: Toluene-d8</i>               | 49.5                                             |      | µg/l  |      | 50.0        |               | 99   | 70-130      |     |           |
| <i>Surrogate: 1,2-Dichloroethane-d4</i>    | 58.1                                             |      | µg/l  |      | 50.0        |               | 116  | 70-130      |     |           |
| <i>Surrogate: Dibromofluoromethane</i>     | 50.2                                             |      | µg/l  |      | 50.0        |               | 100  | 70-130      |     |           |
| <b><u>LCS (1803567-BS1)</u></b>            | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |       |      |             |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 18.7                                             |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| Acetone                                    | 19.6                                             |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| Acrylonitrile                              | 16.9                                             |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| Benzene                                    | 18.4                                             |      | µg/l  |      | 20.0        |               | 92   | 70-130      |     |           |
| Bromobenzene                               | 20.2                                             |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| Bromochloromethane                         | 20.7                                             |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| Bromodichloromethane                       | 22.1                                             |      | µg/l  |      | 20.0        |               | 111  | 70-130      |     |           |
| Bromoform                                  | 21.7                                             |      | µg/l  |      | 20.0        |               | 108  | 70-130      |     |           |
| Bromomethane                               | 20.7                                             |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| 2-Butanone (MEK)                           | 17.5                                             |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| n-Butylbenzene                             | 17.6                                             |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| sec-Butylbenzene                           | 18.7                                             |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| tert-Butylbenzene                          | 19.2                                             |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| Carbon disulfide                           | 18.8                                             |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| Carbon tetrachloride                       | 22.6                                             |      | µg/l  |      | 20.0        |               | 113  | 70-130      |     |           |
| Chlorobenzene                              | 19.2                                             |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| Chloroethane                               | 29.7                                             | QC2  | µg/l  |      | 20.0        |               | 148  | 70-130      |     |           |
| Chloroform                                 | 21.0                                             |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| Chloromethane                              | 15.9                                             |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| 2-Chlorotoluene                            | 20.5                                             |      | µg/l  |      | 20.0        |               | 102  | 70-130      |     |           |
| 4-Chlorotoluene                            | 20.6                                             |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result                                           | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------------------------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SW846 8260C</u></b>                  |                                                  |      |       |      |             |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |                                                  |      |       |      |             |               |      |             |     |           |
| <b><u>LCS (1803567-BS1)</u></b>            | <b><u>Prepared &amp; Analyzed: 16-Mar-18</u></b> |      |       |      |             |               |      |             |     |           |
| 1,2-Dibromo-3-chloropropane                | 23.1                                             |      | µg/l  |      | 20.0        |               | 116  | 70-130      |     |           |
| Dibromochloromethane                       | 23.0                                             |      | µg/l  |      | 20.0        |               | 115  | 70-130      |     |           |
| 1,2-Dibromoethane (EDB)                    | 20.2                                             |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| Dibromomethane                             | 20.6                                             |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| 1,2-Dichlorobenzene                        | 19.7                                             |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| 1,3-Dichlorobenzene                        | 20.4                                             |      | µg/l  |      | 20.0        |               | 102  | 70-130      |     |           |
| 1,4-Dichlorobenzene                        | 19.9                                             |      | µg/l  |      | 20.0        |               | 99   | 70-130      |     |           |
| Dichlorodifluoromethane (Freon12)          | 17.5                                             |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| 1,1-Dichloroethane                         | 19.0                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 1,2-Dichloroethane                         | 22.2                                             |      | µg/l  |      | 20.0        |               | 111  | 70-130      |     |           |
| 1,1-Dichloroethene                         | 17.5                                             |      | µg/l  |      | 20.0        |               | 88   | 70-130      |     |           |
| cis-1,2-Dichloroethene                     | 17.7                                             |      | µg/l  |      | 20.0        |               | 89   | 70-130      |     |           |
| trans-1,2-Dichloroethene                   | 17.8                                             |      | µg/l  |      | 20.0        |               | 89   | 70-130      |     |           |
| 1,2-Dichloropropane                        | 18.0                                             |      | µg/l  |      | 20.0        |               | 90   | 70-130      |     |           |
| 1,3-Dichloropropane                        | 18.9                                             |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| 2,2-Dichloropropane                        | 20.5                                             |      | µg/l  |      | 20.0        |               | 103  | 70-130      |     |           |
| 1,1-Dichloropropene                        | 17.3                                             |      | µg/l  |      | 20.0        |               | 86   | 70-130      |     |           |
| cis-1,3-Dichloropropene                    | 18.6                                             |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| trans-1,3-Dichloropropene                  | 20.9                                             |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| Ethylbenzene                               | 19.0                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| Hexachlorobutadiene                        | 18.6                                             |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| 2-Hexanone (MBK)                           | 16.8                                             |      | µg/l  |      | 20.0        |               | 84   | 70-130      |     |           |
| Isopropylbenzene                           | 19.1                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 4-Isopropyltoluene                         | 18.9                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| Methyl tert-butyl ether                    | 18.4                                             |      | µg/l  |      | 20.0        |               | 92   | 70-130      |     |           |
| 4-Methyl-2-pentanone (MIBK)                | 17.7                                             |      | µg/l  |      | 20.0        |               | 89   | 70-130      |     |           |
| Methylene chloride                         | 18.6                                             |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Naphthalene                                | 22.9                                             |      | µg/l  |      | 20.0        |               | 114  | 70-130      |     |           |
| n-Propylbenzene                            | 19.2                                             |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| Styrene                                    | 19.2                                             |      | µg/l  |      | 20.0        |               | 96   | 70-130      |     |           |
| 1,1,1,2-Tetrachloroethane                  | 22.9                                             |      | µg/l  |      | 20.0        |               | 114  | 70-130      |     |           |
| 1,1,2,2-Tetrachloroethane                  | 20.9                                             |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| Tetrachloroethene                          | 18.4                                             |      | µg/l  |      | 20.0        |               | 92   | 70-130      |     |           |
| Toluene                                    | 19.1                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| 1,2,3-Trichlorobenzene                     | 21.0                                             |      | µg/l  |      | 20.0        |               | 105  | 70-130      |     |           |
| 1,2,4-Trichlorobenzene                     | 20.4                                             |      | µg/l  |      | 20.0        |               | 102  | 70-130      |     |           |
| 1,3,5-Trichlorobenzene                     | 20.9                                             |      | µg/l  |      | 20.0        |               | 104  | 70-130      |     |           |
| 1,1,1-Trichloroethane                      | 21.8                                             |      | µg/l  |      | 20.0        |               | 109  | 70-130      |     |           |
| 1,1,2-Trichloroethane                      | 20.2                                             |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| Trichloroethene                            | 19.5                                             |      | µg/l  |      | 20.0        |               | 98   | 70-130      |     |           |
| Trichlorofluoromethane (Freon 11)          | 25.1                                             |      | µg/l  |      | 20.0        |               | 125  | 70-130      |     |           |
| 1,2,3-Trichloropropane                     | 21.2                                             |      | µg/l  |      | 20.0        |               | 106  | 70-130      |     |           |
| 1,2,4-Trimethylbenzene                     | 20.2                                             |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| 1,3,5-Trimethylbenzene                     | 20.1                                             |      | µg/l  |      | 20.0        |               | 101  | 70-130      |     |           |
| Vinyl chloride                             | 19.0                                             |      | µg/l  |      | 20.0        |               | 95   | 70-130      |     |           |
| m,p-Xylene                                 | 18.9                                             |      | µg/l  |      | 20.0        |               | 94   | 70-130      |     |           |
| o-Xylene                                   | 18.7                                             |      | µg/l  |      | 20.0        |               | 93   | 70-130      |     |           |
| Tetrahydrofuran                            | 15.9                                             |      | µg/l  |      | 20.0        |               | 80   | 70-130      |     |           |
| Ethyl ether                                | 22.0                                             |      | µg/l  |      | 20.0        |               | 110  | 70-130      |     |           |
| Tert-amyl methyl ether                     | 18.0                                             |      | µg/l  |      | 20.0        |               | 90   | 70-130      |     |           |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|-----|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |     |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |     |           |
| <b>LCS (1803567-BS1)</b>                   |        |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| Ethyl tert-butyl ether                     | 17.8   |      | µg/l  |      | 20.0                                      |               | 89   | 70-130      |     |           |
| Di-isopropyl ether                         | 16.3   |      | µg/l  |      | 20.0                                      |               | 81   | 70-130      |     |           |
| Tert-Butanol / butyl alcohol               | 176    |      | µg/l  |      | 200                                       |               | 88   | 70-130      |     |           |
| 1,4-Dioxane                                | 161    |      | µg/l  |      | 200                                       |               | 81   | 70-130      |     |           |
| trans-1,4-Dichloro-2-butene                | 25.0   |      | µg/l  |      | 20.0                                      |               | 125  | 70-130      |     |           |
| Ethanol                                    | 346    |      | µg/l  |      | 400                                       |               | 86   | 70-130      |     |           |
| Surrogate: 4-Bromofluorobenzene            | 49.3   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: Toluene-d8                      | 49.5   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |     |           |
| Surrogate: 1,2-Dichloroethane-d4           | 58.4   |      | µg/l  |      | 50.0                                      |               | 117  | 70-130      |     |           |
| Surrogate: Dibromofluoromethane            | 50.2   |      | µg/l  |      | 50.0                                      |               | 100  | 70-130      |     |           |
| <b>LCS Dup (1803567-BSD1)</b>              |        |      |       |      | <u>Prepared &amp; Analyzed: 16-Mar-18</u> |               |      |             |     |           |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 11  | 20        |
| Acetone                                    | 19.5   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 0.5 | 20        |
| Acrylonitrile                              | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2   | 20        |
| Benzene                                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 1   | 20        |
| Bromobenzene                               | 20.4   |      | µg/l  |      | 20.0                                      |               | 102  | 70-130      | 1   | 20        |
| Bromochloromethane                         | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1   | 20        |
| Bromodichloromethane                       | 22.5   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 2   | 20        |
| Bromoform                                  | 21.7   |      | µg/l  |      | 20.0                                      |               | 109  | 70-130      | 0.3 | 20        |
| Bromomethane                               | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1   | 20        |
| 2-Butanone (MEK)                           | 18.1   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3   | 20        |
| n-Butylbenzene                             | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 4   | 20        |
| sec-Butylbenzene                           | 19.5   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 4   | 20        |
| tert-Butylbenzene                          | 19.9   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4   | 20        |
| Carbon disulfide                           | 20.0   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 6   | 20        |
| Carbon tetrachloride                       | 23.7   |      | µg/l  |      | 20.0                                      |               | 118  | 70-130      | 4   | 20        |
| Chlorobenzene                              | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 0.3 | 20        |
| Chloroethane                               | 27.8   | QC2  | µg/l  |      | 20.0                                      |               | 139  | 70-130      | 6   | 20        |
| Chloroform                                 | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 0.4 | 20        |
| Chloromethane                              | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 8   | 20        |
| 2-Chlorotoluene                            | 20.8   |      | µg/l  |      | 20.0                                      |               | 104  | 70-130      | 2   | 20        |
| 4-Chlorotoluene                            | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 3   | 20        |
| 1,2-Dibromo-3-chloropropane                | 23.2   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 0.1 | 20        |
| Dibromochloromethane                       | 23.1   |      | µg/l  |      | 20.0                                      |               | 116  | 70-130      | 0.4 | 20        |
| 1,2-Dibromoethane (EDB)                    | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 0.5 | 20        |
| Dibromomethane                             | 20.9   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 1   | 20        |
| 1,2-Dichlorobenzene                        | 20.2   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 3   | 20        |
| 1,3-Dichlorobenzene                        | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 3   | 20        |
| 1,4-Dichlorobenzene                        | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 3   | 20        |
| Dichlorodifluoromethane (Freon12)          | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 11  | 20        |
| 1,1-Dichloroethane                         | 19.6   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 3   | 20        |
| 1,2-Dichloroethane                         | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      | 0.8 | 20        |
| 1,1-Dichloroethene                         | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 10  | 20        |
| cis-1,2-Dichloroethene                     | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3   | 20        |
| trans-1,2-Dichloroethene                   | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 3   | 20        |
| 1,2-Dichloropropane                        | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 1   | 20        |
| 1,3-Dichloropropane                        | 19.1   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 1   | 20        |
| 2,2-Dichloropropane                        | 21.0   |      | µg/l  |      | 20.0                                      |               | 105  | 70-130      | 2   | 20        |
| 1,1-Dichloropropene                        | 18.4   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 6   | 20        |
| cis-1,3-Dichloropropene                    | 18.7   |      | µg/l  |      | 20.0                                      |               | 94   | 70-130      | 0.8 | 20        |

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# Volatile Organic Compounds - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL | Spike Level                               | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------------|--------|------|-------|------|-------------------------------------------|---------------|------|-------------|------|-----------|
| <b>SW846 8260C</b>                         |        |      |       |      |                                           |               |      |             |      |           |
| <b>Batch 1803567 - SW846 5030 Water MS</b> |        |      |       |      |                                           |               |      |             |      |           |
| <b>LCS Dup (1803567-BSD1)</b>              |        |      |       |      | <b>Prepared &amp; Analyzed: 16-Mar-18</b> |               |      |             |      |           |
| trans-1,3-Dichloropropene                  | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 1    | 20        |
| Ethylbenzene                               | 19.3   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 2    | 20        |
| Hexachlorobutadiene                        | 19.2   |      | µg/l  |      | 20.0                                      |               | 96   | 70-130      | 3    | 20        |
| 2-Hexanone (MBK)                           | 17.2   |      | µg/l  |      | 20.0                                      |               | 86   | 70-130      | 2    | 20        |
| Isopropylbenzene                           | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 2    | 20        |
| 4-Isopropyltoluene                         | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 2    | 20        |
| Methyl tert-butyl ether                    | 18.6   |      | µg/l  |      | 20.0                                      |               | 93   | 70-130      | 1    | 20        |
| 4-Methyl-2-pentanone (MIBK)                | 18.2   |      | µg/l  |      | 20.0                                      |               | 91   | 70-130      | 3    | 20        |
| Methylene chloride                         | 18.9   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 2    | 20        |
| Naphthalene                                | 24.0   |      | µg/l  |      | 20.0                                      |               | 120  | 70-130      | 5    | 20        |
| n-Propylbenzene                            | 19.8   |      | µg/l  |      | 20.0                                      |               | 99   | 70-130      | 3    | 20        |
| Styrene                                    | 20.1   |      | µg/l  |      | 20.0                                      |               | 100  | 70-130      | 4    | 20        |
| 1,1,1,2-Tetrachloroethane                  | 22.8   |      | µg/l  |      | 20.0                                      |               | 114  | 70-130      | 0.3  | 20        |
| 1,1,2,2-Tetrachloroethane                  | 21.1   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 1    | 20        |
| Tetrachloroethene                          | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 5    | 20        |
| Toluene                                    | 19.1   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 0.05 | 20        |
| 1,2,3-Trichlorobenzene                     | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 2    | 20        |
| 1,2,4-Trichlorobenzene                     | 21.2   |      | µg/l  |      | 20.0                                      |               | 106  | 70-130      | 4    | 20        |
| 1,3,5-Trichlorobenzene                     | 21.6   |      | µg/l  |      | 20.0                                      |               | 108  | 70-130      | 3    | 20        |
| 1,1,1-Trichloroethane                      | 22.5   |      | µg/l  |      | 20.0                                      |               | 112  | 70-130      | 3    | 20        |
| 1,1,2-Trichloroethane                      | 19.7   |      | µg/l  |      | 20.0                                      |               | 98   | 70-130      | 2    | 20        |
| Trichloroethene                            | 20.1   |      | µg/l  |      | 20.0                                      |               | 101  | 70-130      | 3    | 20        |
| Trichlorofluoromethane (Freon 11)          | 27.3   | QM9  | µg/l  |      | 20.0                                      |               | 136  | 70-130      | 8    | 20        |
| 1,2,3-Trichloropropane                     | 21.4   |      | µg/l  |      | 20.0                                      |               | 107  | 70-130      | 0.9  | 20        |
| 1,2,4-Trimethylbenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 2    | 20        |
| 1,3,5-Trimethylbenzene                     | 20.6   |      | µg/l  |      | 20.0                                      |               | 103  | 70-130      | 3    | 20        |
| Vinyl chloride                             | 22.0   |      | µg/l  |      | 20.0                                      |               | 110  | 70-130      | 15   | 20        |
| m,p-Xylene                                 | 19.4   |      | µg/l  |      | 20.0                                      |               | 97   | 70-130      | 3    | 20        |
| o-Xylene                                   | 19.0   |      | µg/l  |      | 20.0                                      |               | 95   | 70-130      | 1    | 20        |
| Tetrahydrofuran                            | 16.5   |      | µg/l  |      | 20.0                                      |               | 82   | 70-130      | 3    | 20        |
| Ethyl ether                                | 22.2   |      | µg/l  |      | 20.0                                      |               | 111  | 70-130      | 1    | 20        |
| Tert-amyl methyl ether                     | 18.3   |      | µg/l  |      | 20.0                                      |               | 92   | 70-130      | 2    | 20        |
| Ethyl tert-butyl ether                     | 18.0   |      | µg/l  |      | 20.0                                      |               | 90   | 70-130      | 2    | 20        |
| Di-isopropyl ether                         | 16.7   |      | µg/l  |      | 20.0                                      |               | 84   | 70-130      | 3    | 20        |
| Tert-Butanol / butyl alcohol               | 182    |      | µg/l  |      | 200                                       |               | 91   | 70-130      | 3    | 20        |
| 1,4-Dioxane                                | 162    |      | µg/l  |      | 200                                       |               | 81   | 70-130      | 0.3  | 20        |
| trans-1,4-Dichloro-2-butene                | 24.4   |      | µg/l  |      | 20.0                                      |               | 122  | 70-130      | 3    | 20        |
| Ethanol                                    | 350    |      | µg/l  |      | 400                                       |               | 87   | 70-130      | 1    | 20        |
| Surrogate: 4-Bromofluorobenzene            | 48.9   |      | µg/l  |      | 50.0                                      |               | 98   | 70-130      |      |           |
| Surrogate: Toluene-d8                      | 49.5   |      | µg/l  |      | 50.0                                      |               | 99   | 70-130      |      |           |
| Surrogate: 1,2-Dichloroethane-d4           | 56.8   |      | µg/l  |      | 50.0                                      |               | 114  | 70-130      |      |           |
| Surrogate: Dibromofluoromethane            | 50.1   |      | µg/l  |      | 50.0                                      |               | 100  | 70-130      |      |           |

# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                           | Result    | Flag | Units | *RDL    | Spike Level                                    | Source Result | %REC | %REC Limits | RPD  | RPD Limit |
|--------------------------------------|-----------|------|-------|---------|------------------------------------------------|---------------|------|-------------|------|-----------|
| <b><u>SW846 6010C</u></b>            |           |      |       |         |                                                |               |      |             |      |           |
| <b>Batch 1803635 - SW846 3005A</b>   |           |      |       |         |                                                |               |      |             |      |           |
| <b><u>Blank (1803635-BLK1)</u></b>   |           |      |       |         | <u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |               |      |             |      |           |
| Potassium                            | 0.0623    | J    | mg/l  | 0.500   |                                                |               |      |             |      |           |
| Iron                                 | < 0.0150  | U    | mg/l  | 0.0150  |                                                |               |      |             |      |           |
| Manganese                            | < 0.0020  | U    | mg/l  | 0.0020  |                                                |               |      |             |      |           |
| Sodium                               | 0.0401    | J    | mg/l  | 0.250   |                                                |               |      |             |      |           |
| Selenium                             | < 0.0150  | U    | mg/l  | 0.0150  |                                                |               |      |             |      |           |
| Magnesium                            | < 0.0100  | U    | mg/l  | 0.0100  |                                                |               |      |             |      |           |
| Nickel                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Antimony                             | < 0.0060  | U    | mg/l  | 0.0060  |                                                |               |      |             |      |           |
| Thallium                             | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Vanadium                             | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Cobalt                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Lead                                 | < 0.0075  | U    | mg/l  | 0.0075  |                                                |               |      |             |      |           |
| Calcium                              | < 0.100   | U    | mg/l  | 0.100   |                                                |               |      |             |      |           |
| Zinc                                 | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Chromium                             | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Arsenic                              | < 0.00400 | U    | mg/l  | 0.00400 |                                                |               |      |             |      |           |
| Beryllium                            | < 0.0020  | U    | mg/l  | 0.0020  |                                                |               |      |             |      |           |
| Cadmium                              | < 0.0025  | U    | mg/l  | 0.0025  |                                                |               |      |             |      |           |
| Aluminum                             | < 0.0250  | U    | mg/l  | 0.0250  |                                                |               |      |             |      |           |
| Silver                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Copper                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| Barium                               | < 0.0050  | U    | mg/l  | 0.0050  |                                                |               |      |             |      |           |
| <b><u>LCS (1803635-BS1)</u></b>      |           |      |       |         | <u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |               |      |             |      |           |
| Iron                                 | 1.31      |      | mg/l  | 0.0150  | 1.25                                           |               | 105  | 85-115      |      |           |
| Manganese                            | 1.30      |      | mg/l  | 0.0020  | 1.25                                           |               | 104  | 85-115      |      |           |
| Potassium                            | 12.0      |      | mg/l  | 0.500   | 12.5                                           |               | 96   | 85-115      |      |           |
| Sodium                               | 5.97      |      | mg/l  | 0.250   | 6.25                                           |               | 96   | 85-115      |      |           |
| Lead                                 | 1.28      |      | mg/l  | 0.0075  | 1.25                                           |               | 103  | 85-115      |      |           |
| Zinc                                 | 1.27      |      | mg/l  | 0.0050  | 1.25                                           |               | 101  | 85-115      |      |           |
| Arsenic                              | 1.241     |      | mg/l  | 0.00400 | 1.25                                           |               | 99   | 85-115      |      |           |
| Vanadium                             | 1.24      |      | mg/l  | 0.0050  | 1.25                                           |               | 100  | 85-115      |      |           |
| Selenium                             | 1.30      |      | mg/l  | 0.0150  | 1.25                                           |               | 104  | 85-115      |      |           |
| Thallium                             | 1.25      |      | mg/l  | 0.0050  | 1.25                                           |               | 100  | 85-115      |      |           |
| Silver                               | 1.23      |      | mg/l  | 0.0050  | 1.25                                           |               | 98   | 85-115      |      |           |
| Antimony                             | 1.23      |      | mg/l  | 0.0060  | 1.25                                           |               | 98   | 85-115      |      |           |
| Nickel                               | 1.29      |      | mg/l  | 0.0050  | 1.25                                           |               | 103  | 85-115      |      |           |
| Beryllium                            | 1.35      |      | mg/l  | 0.0020  | 1.25                                           |               | 108  | 85-115      |      |           |
| Magnesium                            | 1.30      |      | mg/l  | 0.0100  | 1.25                                           |               | 104  | 85-115      |      |           |
| Aluminum                             | 1.19      |      | mg/l  | 0.0250  | 1.25                                           |               | 95   | 85-115      |      |           |
| Barium                               | 1.32      |      | mg/l  | 0.0050  | 1.25                                           |               | 106  | 85-115      |      |           |
| Calcium                              | 6.51      |      | mg/l  | 0.100   | 6.25                                           |               | 104  | 85-115      |      |           |
| Cadmium                              | 1.29      |      | mg/l  | 0.0025  | 1.25                                           |               | 103  | 85-115      |      |           |
| Chromium                             | 1.24      |      | mg/l  | 0.0050  | 1.25                                           |               | 99   | 85-115      |      |           |
| Copper                               | 1.26      |      | mg/l  | 0.0050  | 1.25                                           |               | 101  | 85-115      |      |           |
| Cobalt                               | 1.24      |      | mg/l  | 0.0050  | 1.25                                           |               | 99   | 85-115      |      |           |
| <b><u>LCS Dup (1803635-BSD1)</u></b> |           |      |       |         | <u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |               |      |             |      |           |
| Sodium                               | 5.97      |      | mg/l  | 0.250   | 6.25                                           |               | 96   | 85-115      | 0    | 20        |
| Iron                                 | 1.32      |      | mg/l  | 0.0150  | 1.25                                           |               | 106  | 85-115      | 0.6  | 20        |
| Potassium                            | 12.0      |      | mg/l  | 0.500   | 12.5                                           |               | 96   | 85-115      | 0.04 | 20        |
| Manganese                            | 1.28      |      | mg/l  | 0.0020  | 1.25                                           |               | 103  | 85-115      | 1    | 20        |

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte(s)                               | Result   | Flag   | Units | *RDL                             | Spike Level                                    | Source Result                                  | %REC | %REC Limits | RPD  | RPD Limit |
|------------------------------------------|----------|--------|-------|----------------------------------|------------------------------------------------|------------------------------------------------|------|-------------|------|-----------|
| <b><u>SW846 6010C</u></b>                |          |        |       |                                  |                                                |                                                |      |             |      |           |
| <b>Batch 1803635 - SW846 3005A</b>       |          |        |       |                                  |                                                |                                                |      |             |      |           |
| <b><u>LCS Dup (1803635-BSD1)</u></b>     |          |        |       |                                  | <b>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</b> |                                                |      |             |      |           |
| Magnesium                                | 1.30     |        | mg/l  | 0.0100                           | 1.25                                           |                                                | 104  | 85-115      | 0.3  | 20        |
| Vanadium                                 | 1.25     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 100  | 85-115      | 0.08 | 20        |
| Lead                                     | 1.28     |        | mg/l  | 0.0075                           | 1.25                                           |                                                | 102  | 85-115      | 0.6  | 20        |
| Thallium                                 | 1.24     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 99   | 85-115      | 1    | 20        |
| Copper                                   | 1.25     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 100  | 85-115      | 1    | 20        |
| Selenium                                 | 1.29     |        | mg/l  | 0.0150                           | 1.25                                           |                                                | 103  | 85-115      | 0.8  | 20        |
| Barium                                   | 1.33     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 106  | 85-115      | 0.2  | 20        |
| Antimony                                 | 1.22     |        | mg/l  | 0.0060                           | 1.25                                           |                                                | 98   | 85-115      | 0.6  | 20        |
| Nickel                                   | 1.29     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 103  | 85-115      | 0.4  | 20        |
| Chromium                                 | 1.22     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 98   | 85-115      | 0.9  | 20        |
| Cobalt                                   | 1.23     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 98   | 85-115      | 0.9  | 20        |
| Cadmium                                  | 1.29     |        | mg/l  | 0.0025                           | 1.25                                           |                                                | 103  | 85-115      | 0.2  | 20        |
| Beryllium                                | 1.35     |        | mg/l  | 0.0020                           | 1.25                                           |                                                | 108  | 85-115      | 0.09 | 20        |
| Arsenic                                  | 1.233    |        | mg/l  | 0.00400                          | 1.25                                           |                                                | 99   | 85-115      | 0.6  | 20        |
| Aluminum                                 | 1.19     |        | mg/l  | 0.0250                           | 1.25                                           |                                                | 95   | 85-115      | 0.1  | 20        |
| Silver                                   | 1.22     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 98   | 85-115      | 0.3  | 20        |
| Zinc                                     | 1.26     |        | mg/l  | 0.0050                           | 1.25                                           |                                                | 101  | 85-115      | 0.4  | 20        |
| Calcium                                  | 6.54     |        | mg/l  | 0.100                            | 6.25                                           |                                                | 105  | 85-115      | 0.4  | 20        |
| <b><u>Duplicate (1803635-DUP1)</u></b>   |          |        |       | <b><u>Source: SC44624-09</u></b> |                                                | <b>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</b> |      |             |      |           |
| Sodium                                   | 122      |        | mg/l  | 0.250                            |                                                | 117                                            |      |             | 5    | 20        |
| Manganese                                | 0.572    |        | mg/l  | 0.0020                           |                                                | 0.577                                          |      |             | 0.8  | 20        |
| Iron                                     | 29.9     |        | mg/l  | 0.0150                           |                                                | 29.7                                           |      |             | 0.9  | 20        |
| Potassium                                | 6.61     |        | mg/l  | 0.500                            |                                                | 6.26                                           |      |             | 5    | 20        |
| Cobalt                                   | 0.0011   | J      | mg/l  | 0.0050                           |                                                | 0.0011                                         |      |             | 0    | 20        |
| Cadmium                                  | 0.0025   |        | mg/l  | 0.0025                           |                                                | 0.0024                                         |      |             | 2    | 20        |
| Copper                                   | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Selenium                                 | < 0.0150 | U      | mg/l  | 0.0150                           |                                                | BRL                                            |      |             |      | 20        |
| Antimony                                 | < 0.0060 | U      | mg/l  | 0.0060                           |                                                | BRL                                            |      |             |      | 20        |
| Lead                                     | < 0.0075 | U      | mg/l  | 0.0075                           |                                                | BRL                                            |      |             |      | 20        |
| Nickel                                   | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Magnesium                                | 18.6     |        | mg/l  | 0.0100                           |                                                | 18.1                                           |      |             | 3    | 20        |
| Thallium                                 | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Chromium                                 | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Vanadium                                 | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Calcium                                  | 42.4     |        | mg/l  | 0.100                            |                                                | 41.9                                           |      |             | 1    | 20        |
| Beryllium                                | < 0.0020 | U      | mg/l  | 0.0020                           |                                                | BRL                                            |      |             |      | 20        |
| Barium                                   | 0.0209   |        | mg/l  | 0.0050                           |                                                | 0.0200                                         |      |             | 4    | 20        |
| Arsenic                                  | 0.0032   | J      | mg/l  | 0.00400                          |                                                | 0.0032                                         |      |             | 2    | 20        |
| Aluminum                                 | 0.0260   |        | mg/l  | 0.0250                           |                                                | 0.0258                                         |      |             | 0.4  | 20        |
| Silver                                   | < 0.0050 | U      | mg/l  | 0.0050                           |                                                | BRL                                            |      |             |      | 20        |
| Zinc                                     | 0.0028   | QR8, J | mg/l  | 0.0050                           |                                                | 0.0042                                         |      |             | 41   | 20        |
| <b><u>Matrix Spike (1803635-MS1)</u></b> |          |        |       | <b><u>Source: SC44624-09</u></b> |                                                | <b>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</b> |      |             |      |           |
| Potassium                                | 19.2     |        | mg/l  | 0.500                            | 12.5                                           | 6.26                                           | 104  | 75-125      |      |           |
| Sodium                                   | 132      | QM2    | mg/l  | 0.250                            | 6.25                                           | 117                                            | 242  | 75-125      |      |           |
| Manganese                                | 1.78     |        | mg/l  | 0.0020                           | 1.25                                           | 0.577                                          | 96   | 75-125      |      |           |
| Iron                                     | 30.2     | QM2    | mg/l  | 0.0150                           | 1.25                                           | 29.7                                           | 47   | 75-125      |      |           |
| Cadmium                                  | 1.24     |        | mg/l  | 0.0025                           | 1.25                                           | 0.0024                                         | 99   | 75-125      |      |           |
| Cobalt                                   | 1.19     |        | mg/l  | 0.0050                           | 1.25                                           | 0.0011                                         | 95   | 75-125      |      |           |
| Beryllium                                | 1.37     |        | mg/l  | 0.0020                           | 1.25                                           | BRL                                            | 109  | 75-125      |      |           |
| Chromium                                 | 1.20     |        | mg/l  | 0.0050                           | 1.25                                           | BRL                                            | 96   | 75-125      |      |           |

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# Total Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                                    | Result | Flag | Units | *RDL                             | Spike Level | Source Result                                         | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|--------|------|-------|----------------------------------|-------------|-------------------------------------------------------|------|-------------|-----|-----------|
| <b>SW846 6010C</b>                            |        |      |       |                                  |             |                                                       |      |             |     |           |
| <b>Batch 1803635 - SW846 3005A</b>            |        |      |       |                                  |             |                                                       |      |             |     |           |
| <b><u>Matrix Spike (1803635-MS1)</u></b>      |        |      |       | <b><u>Source: SC44624-09</u></b> |             | <b><u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u></b> |      |             |     |           |
| Copper                                        | 1.30   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 104  | 75-125      |     |           |
| Barium                                        | 1.37   |      | mg/l  | 0.0050                           | 1.25        | 0.0200                                                | 108  | 75-125      |     |           |
| Zinc                                          | 1.21   |      | mg/l  | 0.0050                           | 1.25        | 0.0042                                                | 97   | 75-125      |     |           |
| Arsenic                                       | 1.309  |      | mg/l  | 0.00400                          | 1.25        | 0.0032                                                | 104  | 75-125      |     |           |
| Calcium                                       | 47.5   |      | mg/l  | 0.100                            | 6.25        | 41.9                                                  | 90   | 75-125      |     |           |
| Aluminum                                      | 1.29   |      | mg/l  | 0.0250                           | 1.25        | 0.0258                                                | 101  | 75-125      |     |           |
| Magnesium                                     | 19.9   | QM2  | mg/l  | 0.0100                           | 1.25        | 18.1                                                  | 144  | 75-125      |     |           |
| Nickel                                        | 1.23   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 98   | 75-125      |     |           |
| Lead                                          | 1.20   |      | mg/l  | 0.0075                           | 1.25        | BRL                                                   | 96   | 75-125      |     |           |
| Silver                                        | 1.27   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 102  | 75-125      |     |           |
| Vanadium                                      | 1.26   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 101  | 70-130      |     |           |
| Thallium                                      | 1.20   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 96   | 75-125      |     |           |
| Selenium                                      | 1.35   |      | mg/l  | 0.0150                           | 1.25        | BRL                                                   | 108  | 75-125      |     |           |
| Antimony                                      | 1.28   |      | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 102  | 75-125      |     |           |
| <b><u>Matrix Spike Dup (1803635-MSD1)</u></b> |        |      |       | <b><u>Source: SC44624-09</u></b> |             | <b><u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u></b> |      |             |     |           |
| Sodium                                        | 125    | QM2  | mg/l  | 0.250                            | 6.25        | 117                                                   | 132  | 75-125      | 5   | 20        |
| Potassium                                     | 18.5   |      | mg/l  | 0.500                            | 12.5        | 6.26                                                  | 98   | 75-125      | 4   | 20        |
| Iron                                          | 29.5   | QM2  | mg/l  | 0.0150                           | 1.25        | 29.7                                                  | -16  | 75-125      | 3   | 20        |
| Manganese                                     | 1.78   |      | mg/l  | 0.0020                           | 1.25        | 0.577                                                 | 97   | 75-125      | 0.4 | 20        |
| Chromium                                      | 1.20   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 96   | 75-125      | 0.8 | 20        |
| Lead                                          | 1.21   |      | mg/l  | 0.0075                           | 1.25        | BRL                                                   | 97   | 75-125      | 0.7 | 20        |
| Zinc                                          | 1.22   |      | mg/l  | 0.0050                           | 1.25        | 0.0042                                                | 97   | 75-125      | 0.2 | 20        |
| Vanadium                                      | 1.24   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 99   | 70-130      | 2   | 20        |
| Thallium                                      | 1.20   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 96   | 75-125      | 0.3 | 20        |
| Cadmium                                       | 1.25   |      | mg/l  | 0.0025                           | 1.25        | 0.0024                                                | 100  | 75-125      | 0.7 | 20        |
| Antimony                                      | 1.29   |      | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 103  | 75-125      | 0.7 | 20        |
| Silver                                        | 1.26   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 101  | 75-125      | 0.6 | 20        |
| Nickel                                        | 1.24   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 99   | 75-125      | 0.7 | 20        |
| Magnesium                                     | 19.2   |      | mg/l  | 0.0100                           | 1.25        | 18.1                                                  | 83   | 75-125      | 4   | 20        |
| Copper                                        | 1.32   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 105  | 75-125      | 2   | 20        |
| Cobalt                                        | 1.19   |      | mg/l  | 0.0050                           | 1.25        | 0.0011                                                | 95   | 75-125      | 0   | 20        |
| Calcium                                       | 46.2   | QM4X | mg/l  | 0.100                            | 6.25        | 41.9                                                  | 69   | 75-125      | 3   | 20        |
| Beryllium                                     | 1.35   |      | mg/l  | 0.0020                           | 1.25        | BRL                                                   | 108  | 75-125      | 2   | 20        |
| Barium                                        | 1.35   |      | mg/l  | 0.0050                           | 1.25        | 0.0200                                                | 106  | 75-125      | 2   | 20        |
| Arsenic                                       | 1.314  |      | mg/l  | 0.00400                          | 1.25        | 0.0032                                                | 105  | 75-125      | 0.4 | 20        |
| Aluminum                                      | 1.29   |      | mg/l  | 0.0250                           | 1.25        | 0.0258                                                | 101  | 75-125      | 0.1 | 20        |
| Selenium                                      | 1.35   |      | mg/l  | 0.0150                           | 1.25        | BRL                                                   | 108  | 75-125      | 0.6 | 20        |
| <b><u>Post Spike (1803635-PS1)</u></b>        |        |      |       | <b><u>Source: SC44624-09</u></b> |             | <b><u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u></b> |      |             |     |           |
| Iron                                          | 27.0   | QM2  | mg/l  | 0.0150                           | 1.25        | 29.7                                                  | -209 | 80-120      |     |           |
| Potassium                                     | 17.8   |      | mg/l  | 0.500                            | 12.5        | 6.26                                                  | 92   | 80-120      |     |           |
| Manganese                                     | 1.70   |      | mg/l  | 0.0020                           | 1.25        | 0.577                                                 | 90   | 80-120      |     |           |
| Sodium                                        | 117    | QM2  | mg/l  | 0.250                            | 6.25        | 117                                                   | 11   | 80-120      |     |           |
| Selenium                                      | 1.27   |      | mg/l  | 0.0150                           | 1.25        | BRL                                                   | 102  | 80-120      |     |           |
| Chromium                                      | 1.19   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 95   | 80-120      |     |           |
| Silver                                        | 1.22   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 98   | 80-120      |     |           |
| Lead                                          | 1.17   |      | mg/l  | 0.0075                           | 1.25        | BRL                                                   | 93   | 80-120      |     |           |
| Zinc                                          | 1.20   |      | mg/l  | 0.0050                           | 1.25        | 0.0042                                                | 96   | 80-120      |     |           |
| Vanadium                                      | 1.21   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 97   | 80-120      |     |           |
| Thallium                                      | 1.18   |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 94   | 80-120      |     |           |
| Antimony                                      | 1.20   |      | mg/l  | 0.0060                           | 1.25        | BRL                                                   | 96   | 80-120      |     |           |

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

| Analyte(s)                             | Result       | Flag | Units | *RDL                             | Spike Level | Source Result                                         | %REC | %REC Limits | RPD | RPD Limit |
|----------------------------------------|--------------|------|-------|----------------------------------|-------------|-------------------------------------------------------|------|-------------|-----|-----------|
| <b><u>SW846 6010C</u></b>              |              |      |       |                                  |             |                                                       |      |             |     |           |
| <b>Batch 1803635 - SW846 3005A</b>     |              |      |       |                                  |             |                                                       |      |             |     |           |
| <b><u>Post Spike (1803635-PS1)</u></b> |              |      |       | <b><u>Source: SC44624-09</u></b> |             | <b><u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u></b> |      |             |     |           |
| Nickel                                 | <b>1.18</b>  |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 95   | 80-120      |     |           |
| Copper                                 | <b>1.24</b>  |      | mg/l  | 0.0050                           | 1.25        | BRL                                                   | 100  | 80-120      |     |           |
| Cobalt                                 | <b>1.16</b>  |      | mg/l  | 0.0050                           | 1.25        | 0.0011                                                | 93   | 80-120      |     |           |
| Cadmium                                | <b>1.21</b>  |      | mg/l  | 0.0025                           | 1.25        | 0.0024                                                | 96   | 80-120      |     |           |
| Calcium                                | <b>42.9</b>  | QM4X | mg/l  | 0.100                            | 6.25        | 41.9                                                  | 17   | 80-120      |     |           |
| Beryllium                              | <b>1.32</b>  |      | mg/l  | 0.0020                           | 1.25        | BRL                                                   | 106  | 80-120      |     |           |
| Barium                                 | <b>1.29</b>  |      | mg/l  | 0.0050                           | 1.25        | 0.0200                                                | 102  | 80-120      |     |           |
| Arsenic                                | <b>1.253</b> |      | mg/l  | 0.00400                          | 1.25        | 0.0032                                                | 100  | 80-120      |     |           |
| Aluminum                               | <b>1.22</b>  |      | mg/l  | 0.0250                           | 1.25        | 0.0258                                                | 96   | 80-120      |     |           |
| Magnesium                              | <b>17.5</b>  | QM2  | mg/l  | 0.0100                           | 1.25        | 18.1                                                  | -50  | 80-120      |     |           |



# **Total Metals by EPA 200 Series Methods - Quality Control**

| Analyte(s)                                    | Result                                                            | Flag | Units | *RDL    | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------------|-------------------------------------------------------------------|------|-------|---------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>EPA 245.1/7470A</u></b>                 |                                                                   |      |       |         |             |               |      |             |     |           |
| <b>Batch 1803636 - EPA200/SW7000 Series</b>   |                                                                   |      |       |         |             |               |      |             |     |           |
| <b><u>Blank (1803636-BLK1)</u></b>            | <u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u>                    |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00020                                                         | U    | mg/l  | 0.00020 |             |               |      |             |     |           |
| <b><u>LCS (1803636-BS1)</u></b>               | <u>Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u>                    |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00458</b>                                                    |      | mg/l  | 0.00020 | 0.00500     |               | 92   | 85-115      |     |           |
| <b><u>Duplicate (1803636-DUP1)</u></b>        | <u>Source: SC44624-08 Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | < 0.00020                                                         | U    | mg/l  | 0.00020 |             | BRL           |      |             |     | 20        |
| <b><u>Matrix Spike (1803636-MS1)</u></b>      | <u>Source: SC44624-08 Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00460</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 92   | 80-120      |     |           |
| <b><u>Matrix Spike Dup (1803636-MSD1)</u></b> | <u>Source: SC44624-08 Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00445</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 89   | 80-120      | 3   | 20        |
| <b><u>Post Spike (1803636-PS1)</u></b>        | <u>Source: SC44624-08 Prepared: 19-Mar-18 Analyzed: 20-Mar-18</u> |      |       |         |             |               |      |             |     |           |
| Mercury                                       | <b>0.00436</b>                                                    |      | mg/l  | 0.00020 | 0.00500     | BRL           | 87   | 85-115      |     |           |

# General Chemistry Parameters - Quality Control

| Analyte(s)                                     | Result  | Flag | Units | *RDL  | Spike Level                                                       | Source Result | %REC | %REC Limits | RPD   | RPD Limit |
|------------------------------------------------|---------|------|-------|-------|-------------------------------------------------------------------|---------------|------|-------------|-------|-----------|
| <b><u>EPA 300.0</u></b>                        |         |      |       |       |                                                                   |               |      |             |       |           |
| <b>Batch 1803330 - General Preparation</b>     |         |      |       |       |                                                                   |               |      |             |       |           |
| <b><u>Blank (1803330-BLK1)</u></b>             |         |      |       |       | <u>Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u>                    |               |      |             |       |           |
| Sulfate as SO4                                 | < 1.00  | U    | mg/l  | 1.00  |                                                                   |               |      |             |       |           |
| Chloride                                       | 0.216   | J    | mg/l  | 1.00  |                                                                   |               |      |             |       |           |
| Nitrate as N                                   | < 0.100 | U    | mg/l  | 0.100 |                                                                   |               |      |             |       |           |
| <b><u>LCS (1803330-BS1)</u></b>                |         |      |       |       | <u>Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u>                    |               |      |             |       |           |
| Chloride                                       | 19.6    |      | mg/l  | 1.00  | 20.0                                                              |               | 98   | 90-110      |       |           |
| Sulfate as SO4                                 | 20.4    |      | mg/l  | 1.00  | 20.0                                                              |               | 102  | 90-110      |       |           |
| Nitrate as N                                   | 1.98    |      | mg/l  | 0.100 | 2.00                                                              |               | 99   | 90-110      |       |           |
| <b><u>Duplicate (1803330-DUP2)</u></b>         |         |      |       |       | <u>Source: SC44624-03 Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u> |               |      |             |       |           |
| Sulfate as SO4                                 | 16.0    |      | mg/l  | 1.00  |                                                                   | 15.8          |      |             | 2     | 20        |
| Chloride                                       | 15.8    |      | mg/l  | 1.00  |                                                                   | 15.7          |      |             | 0.8   | 20        |
| Nitrate as N                                   | 0.291   |      | mg/l  | 0.100 |                                                                   | 0.285         |      |             | 2     | 20        |
| <b><u>Matrix Spike (1803330-MS2)</u></b>       |         |      |       |       | <u>Source: SC44624-03 Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u> |               |      |             |       |           |
| Chloride                                       | 22.7    | QM7  | mg/l  | 1.00  | 8.00                                                              | 15.7          | 88   | 90-110      |       |           |
| Sulfate as SO4                                 | 23.9    |      | mg/l  | 1.00  | 8.00                                                              | 15.8          | 101  | 90-110      |       |           |
| Nitrate as N                                   | 1.09    |      | mg/l  | 0.100 | 0.800                                                             | 0.285         | 100  | 90-110      |       |           |
| <b><u>Matrix Spike Dup (1803330-MSD2)</u></b>  |         |      |       |       | <u>Source: SC44624-03 Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u> |               |      |             |       |           |
| Sulfate as SO4                                 | 23.9    |      | mg/l  | 1.00  | 8.00                                                              | 15.8          | 102  | 90-110      | 0.1   | 20        |
| Chloride                                       | 22.7    | QM7  | mg/l  | 1.00  | 8.00                                                              | 15.7          | 88   | 90-110      | 0.004 | 20        |
| Nitrate as N                                   | 1.09    |      | mg/l  | 0.100 | 0.800                                                             | 0.285         | 101  | 90-110      | 0.5   | 20        |
| <b><u>Reference (1803330-SRM1)</u></b>         |         |      |       |       | <u>Prepared: 09-Mar-18 Analyzed: 13-Mar-18</u>                    |               |      |             |       |           |
| Chloride                                       | 25.9    |      | mg/l  | 1.00  | 25.0                                                              |               | 104  | 90-110      |       |           |
| Sulfate as SO4                                 | 26.3    |      | mg/l  | 1.00  | 25.0                                                              |               | 105  | 90-110      |       |           |
| Nitrate as N                                   | 2.69    |      | mg/l  | 0.100 | 2.50                                                              |               | 107  | 90-110      |       |           |
| <b><u>SM5310B (00, 11)</u></b>                 |         |      |       |       |                                                                   |               |      |             |       |           |
| <b>Batch 1803769 - General Preparation</b>     |         |      |       |       |                                                                   |               |      |             |       |           |
| <b><u>Blank (1803769-BLK1)</u></b>             |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | < 1.00  | U    | mg/l  | 1.00  |                                                                   |               |      |             |       |           |
| <b><u>LCS (1803769-BS1)</u></b>                |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 15.7    |      | mg/l  | 1.00  | 15.0                                                              |               | 104  | 85-115      |       |           |
| <b><u>Calibration Blank (1803769-CCB1)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 0.179   |      | mg/l  |       |                                                                   |               |      |             |       |           |
| <b><u>Calibration Blank (1803769-CCB2)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 0.215   |      | mg/l  |       |                                                                   |               |      |             |       |           |
| <b><u>Calibration Blank (1803769-CCB3)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 0.193   |      | mg/l  |       |                                                                   |               |      |             |       |           |
| <b><u>Calibration Check (1803769-CCV1)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 15.7    |      | mg/l  | 1.00  | 15.0                                                              |               | 105  | 85-115      |       |           |
| <b><u>Calibration Check (1803769-CCV2)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 16.0    |      | mg/l  | 1.00  | 15.0                                                              |               | 106  | 85-115      |       |           |
| <b><u>Calibration Check (1803769-CCV3)</u></b> |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |
| Total Organic Carbon                           | 15.8    |      | mg/l  | 1.00  | 15.0                                                              |               | 106  | 85-115      |       |           |
| <b><u>Duplicate (1803769-DUP1)</u></b>         |         |      |       |       | <u>Source: SC44624-07 Prepared &amp; Analyzed: 20-Mar-18</u>      |               |      |             |       |           |
| Total Organic Carbon                           | 2.16    |      | mg/l  | 1.00  |                                                                   | 2.11          |      |             | 2     | 20        |
| <b><u>Matrix Spike (1803769-MS1)</u></b>       |         |      |       |       | <u>Source: SC44624-07 Prepared &amp; Analyzed: 20-Mar-18</u>      |               |      |             |       |           |
| Total Organic Carbon                           | 7.03    |      | mg/l  | 1.00  | 5.00                                                              | 2.11          | 98   | 70-130      |       |           |
| <b><u>Matrix Spike Dup (1803769-MSD1)</u></b>  |         |      |       |       | <u>Source: SC44624-07 Prepared &amp; Analyzed: 20-Mar-18</u>      |               |      |             |       |           |
| Total Organic Carbon                           | 7.01    |      | mg/l  | 1.00  | 5.00                                                              | 2.11          | 98   | 70-130      | 0.2   | 30        |
| <b><u>Reference (1803769-SRM1)</u></b>         |         |      |       |       | <u>Prepared &amp; Analyzed: 20-Mar-18</u>                         |               |      |             |       |           |

This laboratory report is not valid without an authorized signature on the cover page.

# General Chemistry Parameters - Quality Control

| Analyte(s)                                 | Result | Flag | Units | *RDL                      | Spike Level                               | Source Result                             | %REC | %REC Limits | RPD | RPD Limit |
|--------------------------------------------|--------|------|-------|---------------------------|-------------------------------------------|-------------------------------------------|------|-------------|-----|-----------|
| <b>SM5310B (00, 11)</b>                    |        |      |       |                           |                                           |                                           |      |             |     |           |
| <b>Batch 1803769 - General Preparation</b> |        |      |       |                           |                                           |                                           |      |             |     |           |
| <b>Reference (1803769-SRM1)</b>            |        |      |       |                           | <u>Prepared &amp; Analyzed: 20-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 15.5   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 104  | 85-115      |     |           |
| <b>Batch 1803825 - General Preparation</b> |        |      |       |                           |                                           |                                           |      |             |     |           |
| <b>Blank (1803825-BLK1)</b>                |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | < 1.00 | U    | mg/l  | 1.00                      |                                           |                                           |      |             |     |           |
| <b>LCS (1803825-BS1)</b>                   |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 15.1   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 101  | 85-115      |     |           |
| <b>Calibration Blank (1803825-CCB1)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 0.112  |      | mg/l  |                           |                                           |                                           |      |             |     |           |
| <b>Calibration Blank (1803825-CCB2)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 0.154  |      | mg/l  |                           |                                           |                                           |      |             |     |           |
| <b>Calibration Blank (1803825-CCB3)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 0.185  |      | mg/l  |                           |                                           |                                           |      |             |     |           |
| <b>Calibration Check (1803825-CCV1)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 15.4   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 103  | 85-115      |     |           |
| <b>Calibration Check (1803825-CCV2)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 15.2   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 101  | 85-115      |     |           |
| <b>Calibration Check (1803825-CCV3)</b>    |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 15.5   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 103  | 85-115      |     |           |
| <b>Duplicate (1803825-DUP1)</b>            |        |      |       | <b>Source: SC44624-02</b> |                                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |             |     |           |
| Total Organic Carbon                       | 17.9   | D    | mg/l  | 10.0                      |                                           | 17.0                                      |      |             | 5   | 20        |
| <b>Matrix Spike (1803825-MS1)</b>          |        |      |       | <b>Source: SC44624-02</b> |                                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |             |     |           |
| Total Organic Carbon                       | 74.0   | D    | mg/l  | 10.0                      | 50.0                                      | 17.0                                      | 114  | 70-130      |     |           |
| <b>Matrix Spike Dup (1803825-MSD1)</b>     |        |      |       | <b>Source: SC44624-02</b> |                                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |      |             |     |           |
| Total Organic Carbon                       | 74.2   | D    | mg/l  | 10.0                      | 50.0                                      | 17.0                                      | 114  | 70-130      | 0.2 | 30        |
| <b>Reference (1803825-SRM1)</b>            |        |      |       |                           | <u>Prepared &amp; Analyzed: 21-Mar-18</u> |                                           |      |             |     |           |
| Total Organic Carbon                       | 14.8   |      | mg/l  | 1.00                      | 15.0                                      |                                           | 99   | 85-115      |     |           |

## Dissolved Gas Analysis - Quality Control

| Analyte(s)                              | Result      | Flag | Units | *RDL                             | Spike Level                               | Source Result                             | %REC | %REC Limits | RPD | RPD Limit |
|-----------------------------------------|-------------|------|-------|----------------------------------|-------------------------------------------|-------------------------------------------|------|-------------|-----|-----------|
| <b><u>RSK-175</u></b>                   |             |      |       |                                  |                                           |                                           |      |             |     |           |
| <b>Batch 1803813 - General Air Prep</b> |             |      |       |                                  |                                           |                                           |      |             |     |           |
| <b><u>Blank (1803813-BLK1)</u></b>      |             |      |       |                                  | <u>Prepared &amp; Analyzed: 19-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | < 2.20      | U    | µg/l  | 2.20                             |                                           |                                           |      |             |     |           |
| Ethane                                  | < 5.00      | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| Ethene                                  | < 5.00      | U    | µg/l  | 5.00                             |                                           |                                           |      |             |     |           |
| <b><u>LCS (1803813-BS1)</u></b>         |             |      |       |                                  | <u>Prepared &amp; Analyzed: 19-Mar-18</u> |                                           |      |             |     |           |
| Methane                                 | <b>469</b>  |      | mg/l  |                                  | 500                                       |                                           | 94   | 70-130      |     |           |
| Ethane                                  | <b>496</b>  |      | mg/l  |                                  | 500                                       |                                           | 99   | 70-130      |     |           |
| Ethene                                  | <b>497</b>  |      | mg/l  |                                  | 500                                       |                                           | 99   | 70-130      |     |           |
| <b><u>Duplicate (1803813-DUP1)</u></b>  |             |      |       | <b><u>Source: SC44624-01</u></b> |                                           | <u>Prepared &amp; Analyzed: 19-Mar-18</u> |      |             |     |           |
| Methane                                 | <b>59.0</b> |      | µg/l  | 2.20                             |                                           | 56.0                                      |      |             | 5   | 30        |
| Ethane                                  | < 5.00      | U    | µg/l  | 5.00                             |                                           | BRL                                       |      |             |     | 30        |
| Ethene                                  | < 5.00      | U    | µg/l  | 5.00                             |                                           | BRL                                       |      |             |     | 30        |

## Subcontracted Analyses - Quality Control

| Analyte(s)                       | Result                         | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|----------------------------------|--------------------------------|------|-------|------|-------------|---------------|------|-------------|-----|-----------|
| <b><u>SM4500S-D-00,-11</u></b>   |                                |      |       |      |             |               |      |             |     |           |
| Batch 422645A - 422645-SM4500S-D |                                |      |       |      |             |               |      |             |     |           |
| <b><u>BLK (CA01365-BLK)</u></b>  | Prepared & Analyzed: 13-Mar-18 |      |       |      |             |               |      |             |     |           |
| Sulfide                          | < 0.05                         |      | mg/l  | 0.05 |             |               |      | -           |     |           |
| <b><u>DUP (CA01365-DUP)</u></b>  | Prepared & Analyzed: 13-Mar-18 |      |       |      |             |               |      |             |     |           |
| Sulfide                          | < 0.05                         |      | mg/l  | 0.05 |             | BRL           |      | -           | NC  | 20        |
| <b><u>LCS (CA01365-LCS)</u></b>  | Prepared & Analyzed: 13-Mar-18 |      |       |      |             |               |      |             |     |           |
| Sulfide                          | <b>0.2132</b>                  |      | mg/l  | 0.05 | 0.2         |               | 107  | 90-110      |     | 20        |
| <b><u>MS (CA01365-MS)</u></b>    | Prepared & Analyzed: 13-Mar-18 |      |       |      |             |               |      |             |     |           |
| Sulfide                          | <b>0.2171</b>                  |      | mg/l  | 0.05 | 0.2         | BRL           | 109  | 75-125      |     | 20        |

## Notes and Definitions

|      |                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D    | Data reported from a dilution                                                                                                                                                                                                                            |
| GS1  | Sample dilution required for high concentration of target analytes to be within the instrument calibration range.                                                                                                                                        |
| J    | Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).                                                                                                                   |
| O09  | This sample was analyzed outside the EPA recommended holding time per client request.                                                                                                                                                                    |
| QC2  | Analyte out of acceptance range in QC spike but no reportable concentration present in sample.                                                                                                                                                           |
| QM2  | The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.                                                                                                |
| QM4X | The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits. |
| QM7  | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.                                                                                                                         |
| QM9  | The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.                                                        |
| QR8  | Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.      |
| R01  | The Reporting Limit has been raised to account for matrix interference.                                                                                                                                                                                  |
| U    | Analyte included in the analysis, but not detected at or above the MDL.                                                                                                                                                                                  |
| U1   |                                                                                                                                                                                                                                                          |
| dry  | Sample results reported on a dry weight basis                                                                                                                                                                                                            |
| NR   | Not Reported                                                                                                                                                                                                                                             |
| RPD  | Relative Percent Difference                                                                                                                                                                                                                              |
| HTA  | In accordance with 40 CFR 136.3, preserve samples within 15 minutes of collection. Samples not preserved in the field within 15 minutes of collection are not within method requirements.                                                                |

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.



Spectrum Analytical

## CHAIN OF CUSTODY RECORD

Page \_\_\_\_ of \_\_\_\_

## Special Handling:

- ☒ Standard TAT - 7 to 10 business days  
☐ Rush TAT - Date Needed: \_\_\_\_\_  
All TATs subject to laboratory approval  
Min. 24-hr notification needed for rushes  
Samples disposed after 30 days unless otherwise instructed.

Report To: Megan MillerInvoice To: SandProject No: 149070912712 Brooklyn Pkwy Selden  
Sydney, NY 13721Site Name: NYSDEC Metal Etching  
Location: Freeport  
Sample(s): Megan Miller, Stephen SoldnerTelephone #: 315-655-6557  
Project Mgr: Megan MillerP.O. No: 1490709Quote #: 0002F=Field Filtered 1= $\text{Na}_2\text{S}_2\text{O}_3$  2= $\text{HCl}$  3= $\text{H}_2\text{SO}_4$  4= $\text{HNO}_3$  5= $\text{NaOH}$  6=Ascorbic Acid  
7= $\text{CH}_3\text{OH}$  8= $\text{NaHSO}_4$  9=Deionized Water 10= $\text{H}_3\text{PO}_4$  11= $\text{Zn}(\text{C}_2\text{H}_3\text{O}_2)_2$  12=Ice

List Preservative Code below:

|   |   |   |    |    |    |    |
|---|---|---|----|----|----|----|
| 2 | 4 | 5 | 11 | 12 | 12 | 18 |
|---|---|---|----|----|----|----|

QA/QC Reporting Notes:  
\* additional charges may applyDW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water  
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas  
X1=\_\_\_\_ X2=\_\_\_\_ X3=\_\_\_\_

G=Grab

C=Composite

Lab ID:

Sample ID:

Date:

Time:

Type

Matrix

# of VOA Vials

# of Amber Glass

# of Clear Glass

# of Plastic

Containers

Analysis

Check if chlorinated

☐ MA DEP MCP CAM Report? ☐ Yes ☐ No  
☐ CT DEP RCP Report? ☐ Yes ☐ No  
☐ Standard ☐ No QC  
☐ DQA\* ☐ ASP B\* ☐ ASP A\* ☐ ASP A\*  
☐ Reduced\* ☐ No Full\* ☐ Tier II\* ☐ Tier IV\*  
☐ Other: \_\_\_\_\_  
State-specific reporting standards: \_\_\_\_\_

SC44624

130110 - MW-02

3/7/18

10:30

G

GW

5

2

1

1

X

VOL 8260

Metals + Hg 6010B

2470A

Sulfide SM 4520

82

Chloride, Nitrate

Sulfate SM 4500

3752

Dissolved

gases RSK175

TOC SM 5310C

X

X

X

X

X

X

130110 - MW-04

11:00

G

GW

2

1

1

1

1

X

X

X

X

X

X

X

X

X

X

X

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X

130110 - MW-10S

14:05

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130110 - MW-10D

14:10

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X

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X

X

X

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X

130110 - MW-11D

13:03

G

GW

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X

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130110 - MW-11S

12:12

G

GW

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X

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X

X

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X

130110 - DUP-0318

12:12

G

GW

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Relinquished by:

Received by:

Date:

Time:

Temp °C

E-mail to:

Condition upon receipt:

Custody Seals:

Present

Intact

Broken

Soil Jar Frozen

Megan Miller

UPS

3/7/18

12:00

1.3

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UPS

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Spectrum Analytical

## CHAIN OF CUSTODY RECORD

Special Handling:

- ☒ Standard TAT - 7 to 10 business days  
☐ Rush TAT - Date Needed: \_\_\_\_\_

All TATs subject to laboratory approval  
Min. 24-hr notification needed for rushes  
Samples disposed after 30 days unless otherwise instructed.

Page \_\_\_\_\_ of \_\_\_\_\_

Report To: Megan MillerInvoice To: SandProject No: 149070910712 Brookman Pkwy Ste 104Site Name: NYSDEC Metal EddyTelephone #: 315-565-6357P.O. No.: 1490709

Location:

Sample(s): FreeportProject Mgr: Megan Miller

Quote #: \_\_\_\_\_

State: NY

F=Field Filtered 1= $\text{Na}_2\text{S}_2\text{O}_3$  2= $\text{HCl}$  3= $\text{H}_2\text{SO}_4$  4= $\text{HNO}_3$  5= $\text{NaOH}$  6=Ascorbic Acid  
7= $\text{CH}_3\text{OH}$  8= $\text{NaHSO}_4$  9=Deionized Water 10= $\text{H}_3\text{PO}_4$  11=20 (C14H10N2) 12=Ice

List Preservative Code below:

|   |   |    |    |    |    |    |
|---|---|----|----|----|----|----|
| 2 | 4 | 52 | 11 | 12 | 12 | 18 |
|---|---|----|----|----|----|----|

QA/QC Reporting Notes:  
\* additional charges may apply

DW=Drinking Water GW=Groundwater SW=Surface Water WM=Waste Water  
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= \_\_\_\_\_ X2= \_\_\_\_\_ X3= \_\_\_\_\_

G=Grab C=Composite

Lab ID: Sample ID: Date: Time: Type

# of VOA Vials # of Amber Glass # of Clear Glass # of Plastic

Analysis

Check if chlorinated

MA DEP MCP C&M Report? ☐ Yes ☐ No  
CT DPH RCP Report? ☐ Yes ☐ No  
Standard ☐ No QC  
DQA\* ☐ No  
ASP A\* ☐ ASP B\* ☒  
DU Reduced\* ☐ DU Full\* ☐  
Tier II\* ☐ Tier IV\* ☐  
Other: \_\_\_\_\_  
State-specific reporting standards: \_\_\_\_\_

SC44624

130110 - MW-02

3/7/18 10:30 G GW 5

VOL 8260  
Metals + Hg 60108  
2470A  
Sulfide SM 4520  
52  
Chloride, Nitrate  
Sulfate SM 4520  
3752  
Dissolved  
gases RSK175  
TOC SM 5310CTAL 23 Metals per  
project history

a2

130110 - MW-05R

10:30 G GW 2

X

Dr 3/14

a3

130110 - MW-04

11:00 G GW 2

X

Dr 3/14

a4

130110 - MW-10S

11:00 G GW 2

X

Dr 3/14

a5

130110 - MW-10M

14:05 G GW 1

X

Dr 3/14

a6

130110 - MW-10D

14:10 G GW 1

X

Dr 3/14

a7

130110 - MW-11D

13:03 G GW 7

X

Dr 3/14

a8

130110 - MW-11S

12:12 G GW 7

X

Dr 3/14

a9

130110 - DDP-0318

3 G GW 3

X

Dr 3/14

a10

130110 - DDP-0318

3 G GW 3

X

Dr 3/14

Relinquished by:

Received by:

Date:

Time:

Temp °C

E-mail to:

E-mail to: met.fid. EM

Megan Miller

UPS

3/7/18

17:00

1.3

0

3/11

3/11

UPS CampusShip: View/Print Label

1. Ensure there are no other shipping or tracking labels attached to your package. Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. Fold the printed label at the solid line below. Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

### 3. GETTING YOUR SHIPMENT TO UPS

- Customers with a Daily Pickup  
Your driver will pickup your shipment(s) as usual.

- Customers without a Daily Pickup  
Take your package to any location of The UPS Store®, UPS Access Point™ location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.  
Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.  
Hand the package to any UPS driver in your area.

UPS Access Point™  
452 GRANT BLVD  
CITGO RUNAWAY FOOD MART  
SYRACUSE, NY 13206

UPS Access Point™  
PHONE EXPRESS  
800 BUTTERNUT ST  
SYRACUSE, NY 13208

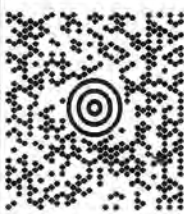
UPS Access Point™  
FAVETTES SUPER MARKET  
1325 E FAVETTE ST  
SYRACUSE, NY 13210

4 OF 4

40 LBS

DAWN LAWLER  
315-431-4610  
BA SYRACUSE  
6712 BROOKLAWN PKWY, STE 104  
SYRACUSE, NY 13212158

SHIP TO:  
EUROFINS SPECTRUM ANALYTICAL  
11 ALMGREN DRIVE  
AGAWAM MA 01001-3831



MA 011 9-06

UPS NEXT DAY AIR

TRACKING #: 1Z.F02.748.01.9411.8481

1



BILLING: P/P

Department Code: 2152  
Project Phase AND Task: 1490709.0003 \*\*\*\*  
CS 20.0 32. WNTNVS0 97.DA.01/2018



FOLD HERE

## Batch Summary

### **1803317**

#### Total Metals by EPA 200/6000 Series Methods

SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)  
SC44624-09 (130110-DUP-0318)

### **1803330**

#### General Chemistry Parameters

1803330-BLK1  
1803330-BS1  
1803330-DUP2  
1803330-MS2  
1803330-MSD2  
1803330-SRM1  
SC44624-01 (130110-MW-06)  
SC44624-02 (130110-MW-05R)  
SC44624-03 (130110-MW-04)  
SC44624-04 (130110-MW-10S)  
SC44624-05 (130110-MW-10M)  
SC44624-06 (130110-MW-10D)  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)

### **1803373**

#### Volatile Organic Compounds

1803373-BLK1  
1803373-BS1  
1803373-BSD1  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)  
SC44624-09 (130110-DUP-0318)  
SC44624-10 (Trip Blank)

### **1803567**

#### Volatile Organic Compounds

1803567-BLK1  
1803567-BS1  
1803567-BSD1  
SC44624-01 (130110-MW-06)

### **1803635**

#### Total Metals by EPA 6000/7000 Series Methods

1803635-BLK1  
1803635-BS1  
1803635-BSD1  
1803635-DUP1  
1803635-MS1  
1803635-MSD1  
1803635-PS1  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)  
SC44624-09 (130110-DUP-0318)

### **1803636**

#### Total Metals by EPA 200 Series Methods

1803636-BLK1  
1803636-BS1  
1803636-DUP1  
1803636-MS1  
1803636-MSD1  
1803636-PS1  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)  
SC44624-09 (130110-DUP-0318)

### **1803769**

#### General Chemistry Parameters

1803769-BLK1  
1803769-BS1  
1803769-CCB1  
1803769-CCB2  
1803769-CCB3  
1803769-CCV1  
1803769-CCV2  
1803769-CCV3  
1803769-DUP1  
1803769-MS1  
1803769-MSD1  
1803769-SRM1  
SC44624-03 (130110-MW-04)  
SC44624-04 (130110-MW-10S)  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)

### **1803813**

#### Dissolved Gas Analysis

1803813-BLK1  
1803813-BS1  
1803813-DUP1  
SC44624-01 (130110-MW-06)  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)

**1803825****General Chemistry Parameters**

1803825-BLK1  
1803825-BS1  
1803825-CCB1  
1803825-CCB2  
1803825-CCB3  
1803825-CCV1  
1803825-CCV2  
1803825-CCV3  
1803825-DUP1  
1803825-MS1  
1803825-MSD1  
1803825-SRM1  
SC44624-02 (130110-MW-05R)

**422645A****Subcontracted Analyses**

CA01365-BLK  
CA01365-DUP  
CA01365-LCS  
CA01365-MS  
SC44624-07 (130110-MW-11D)  
SC44624-08 (130110-MW-11S)

**S815681****General Chemistry Parameters**

S815681-CAL1  
S815681-CAL2  
S815681-CAL3  
S815681-CAL4  
S815681-CAL5  
S815681-CAL6  
S815681-CAL7  
S815681-ICB1  
S815681-ICV1

**S816041****Dissolved Gas Analysis**

S816041-CAL1  
S816041-CAL2  
S816041-CAL3  
S816041-CAL4  
S816041-CAL5  
S816041-CAL6  
S816041-CAL7  
S816041-ICV1  
S816041-LCV1  
S816041-LCV2

**S817144****Volatile Organic Compounds**

S817144-CAL1  
S817144-CAL2

S817144-CAL3  
S817144-CAL4  
S817144-CAL5  
S817144-CAL6  
S817144-CAL7  
S817144-CAL8  
S817144-CAL9  
S817144-ICV1  
S817144-LCV1  
S817144-TUN1

**S817557****Volatile Organic Compounds**

S817557-CCV1  
S817557-TUN1

**S817675****Volatile Organic Compounds**

S817675-CCV1  
S817675-TUN1

**S817816****Dissolved Gas Analysis**

S817816-CCV1  
S817816-CCV2

## **Attachment D**

### **Site Inspection Form**

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**SITE-WIDE INSPECTION**Day: Tuesday Date: 3.6.18

|                        |  |                  |                            |      |    |      |
|------------------------|--|------------------|----------------------------|------|----|------|
| NYSDEC                 |  | Temperature: (F) | 45                         | (am) | 40 | (pm) |
|                        |  | Wind Direction:  |                            | (am) |    | (pm) |
| METAL ETCHING SITE     |  | Weather:         | (am) overcast / mist & fog |      |    |      |
| NYSDEC Site # 130110   |  |                  | (pm) overcast              |      |    |      |
| Contract # D-007624.09 |  | Arrive at site   | 0900                       | (am) |    |      |
| Freeport, New York     |  | Leave site:      | 1430                       | (pm) |    |      |
|                        |  |                  |                            |      |    |      |

**Site Security****Evidence of vandalism (wells, protective cover damage):**

No, wells are in good condition.

**Evidence of cover system intrusion (ruts, burrows, excavations):**

Slight depressions in cover.

**Evidence of penetrations (poles, posts, stakes):**

No

**General site condition (gates, access, storm drains):**

The gate is operational. The concrete around the entrance storm drains is severely broken. There is stormwater ponding and becomes backed up.

**Additional Comments:**

Should repair the site entry way storm drain.



**Asphalt Cover****Evidence of settlement, rutting, potholes:**

Yes, mild rutting in high traffic areas around maintenance building.

**Evidence of cracking, distortion, or disintegration:**

Some breakdown on pad in front of the painting tent and to the left of the office, toward the boat racks.

**Additional Comments:****Drainage System****Evidence of damage to storm drains:**

Yes, the entry way storm drain is damaged due to heavy loads.

**Evidence of stockpiles on porous pavement areas:**

No.

**Evidence of ponding on porous pavement areas:**

Yes.

**Evidence of spilled liquids:**

No.

**Additional Comments:****Sub-Slab Depressurization Systems****Are there any new cracks in the slab that have not been sealed? If so, describe:**

No.

**Are there any new cracks in structure walls? If so, describe:**

No.

**Does system PVC pipe appear to be compromised in any way? If so,**

**describe:** Near the top exhaust pipe, some cracking at the elbow.

**SITE-WIDE INSPECTION**Day: Tuesday Date: 3.6.18**Does manometer read within range marked?**

No color left in manometer liquid.

**Is fan making any abnormal noises?**

No.

**Is contact information on SSDS up to date?**

Yes.

**Has the building use changed since the last inspection?**

No.

**Has building heating, ventilation and air conditioning changed since the last inspection?**

No.

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