



## 2018 PERIODIC REVIEW REPORT

NYSDEC Site Number: C734111

700 Outparcel  
701-709 East Water Street  
Syracuse, NY 13210

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**FIGURES**

FIGURE 1

SITE PLAN

FIGURE 2

GROUNDWATER ELEVATIONS AND CONTOUR PLAN – DECEMBER 2018

**ATTACHMENTS**

ATTACHMENT A SITE INSPECTION FORM

ATTACHMENT B SITE INSPECTION PHOTO LOG

ATTACHMENT C CERTIFICATION FORMS

ATTACHMENT D ANALYTICAL SAMPLING - SUMMARY TABLES

ATTACHMENT E LABORATORY ANALYSIS REPORTS

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**Common Acronyms/Abbreviations**

*BTEX* – Benzene, Toluene, Ethylbenzene, and Xylene

*DUSR* – Data Usability Summary Report

*ECs* – Engineering Controls

*GWS* – Groundwater Standard

*ICs* – Institutional Controls

*IDW* – Investigation Derived Waste

*MNA* – Monitored Natural Attenuation

*N/A* – Not Applicable

*NYSDEC* – New York State Department of Environmental Conservation

*NYSDOH* – New York State Department of Health

*O&M* – *Operations & Maintenance*

*PAH* – Polycyclic Aromatic Hydrocarbons

*ppb* – Parts Per Billion

*ppm* – Parts Per Million

*PRR* – *Periodic Review Report*

*SMP* – Site Management Plan

*SVOC* – Semi-Volatile Organic Compound

*TOGS* – Technical & Operational Guidance Series 1.1.1 (NYSDEC)

*USEPA* – United States Environmental Protection Agency

*UST* – Underground Storage Tank

*VOC* – Volatile Organic Compound

## **1.0 EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

The 700 Outparcel Site is a registered NYSDEC Brownfield, identified by Site # C734111. The Site is currently being managed by a NYSDEC-approved Site Management Plan (SMP), dated December 2016 (revised March 2017). This and future Periodic Review Reports (PRRs) are a required element of the SMP.

The Site formerly supported a gasoline filling station (1949 to 1964) and was afterwards used as a parking lot. Underground storage tanks (USTs), associated with the Site's use as a gasoline filling station, were removed in 2006. Contamination of subsurface soil and groundwater as a result of this history exists at the Site.

Remedial activities, including the implementation of certain Engineering and Institutional Controls, were completed at the site in November 2016.

### **1.2 EFFECTIVENESS OF REMEDIAL PROGRAM**

The remedial strategy that has been adopted at the Site (including all engineering and institutional controls) has thus far been an effective and appropriate method of controlling exposure to remaining contamination in the subsurface. Analytical data has trended in the direction of achieving remedial objectives, but future assessment is necessary.

### **1.3 COMPLIANCE**

To date, the required elements of the SMP have been appropriately observed and the Site remains in compliance.

### **1.4 RECOMMENDATIONS**

At the current time, no changes to the SMP are necessary. The frequency of PRRs will remain on an annual schedule. Monitoring will continue on a quarterly basis, with quarterly monitoring reports submitted to the NYSDEC.

## **2.0 SITE OVERVIEW**

### **2.1 INTRODUCTION**

#### **2.1.1 Site Location**

The Site (currently owned by 700 Out Parcel, LLC) consists of two parcels of land totaling 0.43 acres. The Site is located at the northeast corner of East Water and Almond Streets, in the City of Syracuse, New York (see Figure 1). The parcels have addresses of 701 and 709 East Water Street. The site is bordered to the north by Erie Boulevard East, to the east by a commercial facility, to the south by East Water Street, and to the west by Almond Street.

#### **2.1.2 Site Features**

The Site is currently a gravel-covered parking lot with limited access. A chain link fence extends along the perimeter, and a gravel cover system is in-place (further discussed in Section 4.1.1 of this report).

### **2.1.3 Nature and Extent of Contamination**

From 1949 to 1964, the site operated as a gasoline filling station. Thereafter, it was used as a parking lot.

In 2002, four USTs were identified, and soils on the sides of the tanks exhibited petroleum staining and odors. Upon discovery of the petroleum-impacted soils, the NYSDEC Spill Hotline was called, and spill ID Number 01-11549 (March 7, 2002) was assigned to the site.

In 2006, a total of seven USTs were removed from the Site: four 1,000-gallon gasoline USTs, one 4,200-gallon gasoline UST, and two 550-gallon USTs (one fuel oil and one waste oil). Approximately 1,800 tons of contaminated soil was removed and staged on-site during the removal of the USTs. The NYSDEC Spill Hotline was called, and spill ID Number 06-10014 (December 4, 2006) was assigned to the site.

A Brownfield Cleanup Agreement (Index# B7-0743-07-05, Site # C73411) was executed on October 31, 2007.

As an Interim Remedial Measure, the staged soils associated with the UST removals were removed from the Site and disposed at a regulated landfill in May 2008.

Beardsley Design Associates (BDA) completed a Remedial Investigation (RI) report (dated October 2013). In general, historical fill material up to approximately 5 feet below original ground surface (beneath the cover system described in Section 4.1.1) is contaminated with PAHs and metals, while groundwater and deeper soils are contaminated with VOCs related to gasoline. The contaminants of concern listed below exceeded the applicable NYSDEC Soil Cleanup Guidance Values (SCGs) and groundwater guidance values / standards:

1,2,4-Trimethylbenzene	Benzene
1,3,5-Trimethylbenzene	Ethylbenzene
Isopropylbenzene	Toluene
Xylene (mixed)	n-Propylbenzene
Naphthalene	sec-Butylbenzene
Butylbenzene	Benzo(a)pyrene
Benzo(a)anthracene	Benzo(b)fluoranthene
Benzo[k]fluoranthene	Chrysene
Indeno(1,2,3-CD)pyrene	Dibenz[a,h]anthracene
Arsenic	Barium
Cyanide	

## **2.2 REMEDIAL PROGRAM**

### **2.2.1 Chronology**

Interim remedial measures were performed in accordance with the NYSDEC-approved Interim Remedial Measure Work Plan (dated April 2008). The site was remediated in accordance with the Decision Document (dated February 2016) and the Remedial Action Work Plan (dated August 2015). Remedial activities were completed at the site in November 2016. A certificate of completion was issued in November 2017.

## **2.2.2 Components of the Remedial Program**

The following are the components of the selected remedy:

- Maintenance of a cover system consisting of a one-foot layer of crusher run gravel on top of an orange fabric demarcation barrier to prevent human exposure to contaminated soil/fill remaining at the site.
- Groundwater contamination is being addressed by monitored natural attenuation (MNA).
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
- Implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement.

## **2.2.3 Cleanup Goals and Site Closure Criteria**

Groundwater contamination at the Site is being mitigated via MNA, while chain link fencing and the gravel cover system prevents public exposure to gasoline, PAH, and metals contamination in soils and groundwater.

The composite cover system is a permanent control and the quality and integrity of this system will continue to be inspected at defined, regular intervals in perpetuity.

Groundwater monitoring activities to assess natural attenuation will continue on a quarterly basis until the NYSDEC determines that residual groundwater concentrations in hydraulically-downgradient wells are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level (within an order-of-magnitude, and as compared to hydraulically-upgradient wells due to the potential for contaminants to migrate onto the subject site from adjacent properties). At that point, monitoring will continue on an annual basis for an additional three years or until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC (and as compared to hydraulically-upgradient wells) a provision for treating the groundwater will be evaluated. Selection of the specific remedial technology will consider the monitoring data, but it is currently anticipated that injection of oxygen releasing compounds (ORC) would be used.

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

## **2.2.4 Significant Changes to the Selected Remedy**

No significant changes have been made to the selected remedy since remedial activities were completed in November 2016.

# **3.0 EVALUATION OF REMEDY PERFORMANCE & EFFECTIVENESS**

The Site remedy is currently being evaluated via observations of the gravel cover and monitoring of natural attenuation. Quantitative data to evaluate the performance and effectiveness of the selected remedy comes exclusively from quarterly groundwater monitoring events (thoroughly discussed in Section 5 below).

Groundwater data has shown a generally static or decreased level of contamination as compared to previous data, indicating that the remedial program has been effective. This is most notable at monitoring well MW-9, where Total VOC concentrations have decreased an order of magnitude since the Remedial Investigation sampling in 2012. This observation correlates well with the assumption that MW-9 was located closer to the edge of the plume than MW-8, which (although generally decreasing) does not yet exhibit such a dramatic drop in Total VOC concentrations. Groundwater quality / MNA indicators also appear to be generally favorable for continued natural attenuation (see Section 5.3.3).

Since there are currently no active systems employed at the Site, there are no more quantitative means of correlating and evaluating the effectiveness of the current remedy.

From a qualitative perspective, it is observed that the Site is effectually isolated from the public. The gravel cover system (engineering control) remains in-place and institutional controls continue to be followed (See Section 4 below).

## **4.0 IC/EC PLAN COMPLIANCE**

### **4.1 IC/EC REQUIREMENTS**

The following subsections describe the Engineering and Institutional Controls currently implemented at the Site, their status, and effectiveness.

#### **4.1.1 Description of Controls**

##### **Engineering Controls**

Exposure to remaining contamination in soil/fill at the site is prevented by a gravel cover system placed over a demarcation layer (US Fabric 65HVO ORANGE Warning Barrier) across the entire site. The cover material is comprised of a minimum of 12 inches of clean crusher run gravel meeting the requirements of DER-10 Section 5.5.

On December 5, 2018, AECC personnel visited the Site and determined that the cover system remains in good condition. No significant damage or disturbance to the cover system was noted. As such, it remains an effective engineering control. Refer to Attachment A (Site Inspection Form) and Attachment B (Site Inspection Photograph Log) for further information.

##### **Institutional Controls**

A series of Institutional Controls is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to commercial and industrial uses only. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under the Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns
- All Engineering Controls must be operated and maintained as specified in the SMP

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- All Engineering Controls at the Site must be inspected at a frequency and in a manner defined in the SMP
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP
- Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified in the Environmental Easement

Furthermore, the site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Site are:

- The property may only be used for commercial or industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted, residential, or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Onondaga County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed;
- Vegetable gardens and farming on the property are prohibited;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

*Methods of Evaluation*

The IC/ECs are evaluated by performance of monitoring events and annual site-wide inspections. Site-wide inspections are also to be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form is completed. The inspection collects sufficient information to assess the following:

- Compliance with all ICs, including site usage;

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- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirmation that site records are up to date.

#### **4.1.2 Effectiveness of Controls**

The annual site inspection occurred on December 5, 2018. The completed site inspection forms are included as Attachment A. Photographs taken during the site inspection are included in Attachment B.

No severe condition (erosion, flooding event, or similar) has occurred since the implementation of the SMP. As such, no severe condition inspection has occurred to date.

##### Engineering Controls

The cover appeared to be in good condition. It remains in-place and effective.

##### Institutional Controls

The following table includes a list of all site restrictions that apply to the Site, and an assessment as to their adherence and effectiveness to date:

<b>Site Restriction</b>	<b>Assessment</b>	<b>Compliant / Effective?</b>
The property may only be used for commercial or industrial use provided that the long-term IC/ECs included in the SMP are employed	The property is currently used as an occasional-use parking lot (i.e. – commercial use)	Yes
The property may not be used for a higher level of use, such as unrestricted, residential, or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC	The property is currently used as an occasional-use parking lot (i.e. – commercial use)	Yes
All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP	No disturbance of remaining contaminated material has occurred to date	Yes
The use of the groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Onondaga County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the NYSDEC	Groundwater underlying the property is not being used	Yes

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<b>Site Restriction</b>	<b>Assessment</b>	<b>Compliant / Effective?</b>
Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed	The annual site-wide inspection satisfies this requirement	Yes
Vegetable gardens and farming on the property are prohibited	There are no vegetable gardens or farming occurring at the property	Yes
The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.	The certifications attached to this PRR satisfy this requirement.	Yes

#### **4.1.3 Corrective Measures**

Since no deficiencies were noted in the IC/ECs, no corrective measures are necessary.

#### **4.1.4 Conclusions and Recommendations**

IC/ECs remain compliant and effective.

#### **4.2 IC/EC CERTIFICATION**

The completed forms certified by the Owner, Remedial Party, Designated Representative, and Professional Engineer for the Owner/Remedial Party are presented as Attachment C to this report.

### **5.0 MONITORING PLAN COMPLIANCE**

#### **5.1 COMPONENTS OF THE MONITORING PLAN**

If biofouling or silt accumulation occurs in the monitoring wells included in the monitoring plan, the wells are to be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Groundwater monitoring activities to assess natural attenuation are currently being performed on a quarterly basis, per the SMP. The following table lists the wells and parameters for analysis:

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Well ID	Parameters
MW-5	TCL VOCs + TICs, TCL SVOCs + TICs, and TAL Metals
MW-7	TCL VOCs + TICs, TCL SVOCs + TICs, and TAL Metals
MW-8	TCL VOCs + TICs, TCL SVOCs + TICs, and TAL Metals
MW-9	TCL VOCs + TICs, TCL SVOCs + TICs, and TAL Metals

Analysis of applicable field duplicates, matrix spike / matrix spike duplicates (MS/MSD), and trip blanks is performed according to the protocol defined in the SMP.

Data Usability Summary Reports are required to be completed for each monitoring event, and are included within each respective Quarterly Groundwater Monitoring Report prepared for 2018.

## **5.2 SUMMARY OF MONITORING DURING THE REPORTING PERIOD**

The monitoring wells included in the monitoring plan (MW-5, MW-7, MW-8, and MW-9) were redeveloped using a mini-submersible pump (Whale pump) prior to the Q1 sampling event in March 2018, and prior to the Q3 sampling event in September 2018.

Since the implementation of the SMP, four quarterly groundwater sampling events have occurred. The following table details the timeline of groundwater sampling events at the Site that are encompassed by this PRR:

Sampling Date(s)	Associated / Applicable Report Title & Report Date	Shorthand Report / Sampling Event Reference
March 19 & April 2, 2018	Quarterly Groundwater Monitoring Event – March 2018 (Dated May 2018)	(2018) Q1
June 13, 2018	Quarterly Groundwater Monitoring Event – June 2018 (Dated October 1, 2018)	(2018) Q2
September 6 & 7, 2018	Quarterly Groundwater Monitoring Event – September 2018 (Dated December 18, 2018)	(2018) Q3
December 5, 2018	Quarterly Groundwater Monitoring Event – December 2018 (Dated February 8, 2018)	(2018) Q4

The following table summarizes all exceedances of applicable NYSDEC groundwater standards and guidance values published in the NYSDEC Division of Water Technical and Operations Guidance Series (TOGS) Memorandum 1.1.1 during the past four sampling events:

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Well ID	Well Location / Description	VOC/SVOC Exceedances	Metals Exceedances	Other Exceedances
MW-5	Northwestern perimeter of Site (Upgradient of contaminant plume)	n-Propylbenzene (Q3)	Aluminum (Q2) Antimony (Q1) Iron (Q2, Q3) Sodium (ALL)	None
MW-7	East-Southern portion of Site (Downgradient of contaminant plume)	None	Iron (Q2, Q3) Magnesium (Q2, Q3, Q4) Manganese (Q4) Sodium (Q4)	Di-n-octyl phthalate (Q1)
MW-8	Center-West portion of Site (within contaminant plume)	Benzene (Q1, Q2, Q3) n-Butylbenzene (ALL) sec-Butylbenzene (Q1, Q2, Q3) tert-Butylbenzene (Q2) Ethylbenzene (ALL) Isopropylbenzene (ALL) n-Propylbenzene (ALL) 1,2,4-Trimethylbenzene (ALL) 1,3,5-Trimethylbenzene (ALL) Nitrobenzene (Q1) Naphthalene (ALL) Toluene (ALL) p-Isopropyltoluene (Q2, Q3) Xylenes (ALL)	Antimony (Q1) Barium (Q2) Iron (ALL) Magnesium (Q1, Q2) Manganese (ALL) Sodium (ALL)	2,4-Dinitriphenol (Q1)  Hexachloroethane (Q1)  Bis(2-ethylhexyl)phthalate (Q2)
MW-9	Center-East portion of Site (approximate edge of contaminant plume)	None	Aluminum (Q1, Q2) Antimony (Q1) Iron (ALL) Magnesium (Q1, Q2) Manganese (Q1, Q2, Q3) Sodium (ALL)	None

The laboratory analytical data / reports for all four quarterly groundwater monitoring events are included chronologically as Attachment E of this report. Summary tables for each event are included as Attachment D.

### 5.3 COMPARISONS WITH REMEDIAL OBJECTIVES

#### 5.3.1 Assessment of Analytical Data

##### VOCs / SVOCs

Gasoline-related contamination remains significant at monitoring well location MW-8. The primary contaminants of concern are Benzene, Toluene, Ethylbenzene, Xylene (collectively referred to as "BTEX"), and associated gasoline-related VOC.

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At monitoring well location MW-9, trace detections of BTEX have been documented. However, the detected concentrations do not exceed applicable groundwater standards. As such, it is possible that monitoring well MW-9 is located at the approximate edge of the contaminant plume.

The detection of n-Propylbenzene during the Q3 sampling event is anomalous. It is speculated that the detection is from an off-site source since monitoring well MW-5 is at an upgradient location.

**Metals**

Aluminum, antimony, and barium were detected at concentrations that exceed their applicable groundwater standards. The source of these metals is likely the fill that was historically imported to the Site.

High sodium concentrations have been consistently detected in all groundwater samples collected. It is noted that it is not uncommon for the groundwater in the City of Syracuse to be naturally high in sodium.

Elevated concentrations of iron, magnesium, and manganese are associated with biodegradation processes. These detections were centered within the contaminant plume, and are an indication that biodegradation is occurring.

Elevated concentrations of metals in samples collected from MW-5, MW-8, and MW-9 during the 2018 Q2 and Q3 monitoring events are potentially biased high due to elevated turbidity in the samples (further discussed in Section 5.3.3 – Turbidity, below).

**Other**

The one-time and one-location detections of 2,4-dinitriphenol, hexachloroethane, bis(2-ethylhexyl)phthalate, and di-n-octyl phthalate are abnormal / inconsistent and their respective source is unknown.

**5.3.2 Comparison of Analytical Data to Previous Analytical Results**

BTEX and other gasoline-related VOCs have been consistently detected in samples collected from monitoring wells MW-8 and MW-9. The following tables and graphs depict the trend in total VOCs and BTEX concentration over the course of the four 2018 sampling events, as well as in comparison to the 2012 sampling event, so that a larger overall picture of the trend can be observed. Such tables and graphs are not appropriate for MW-5 and MW-7 as significant VOC contamination has not been discovered at those monitoring well locations.

**Monitoring Well MW-8**

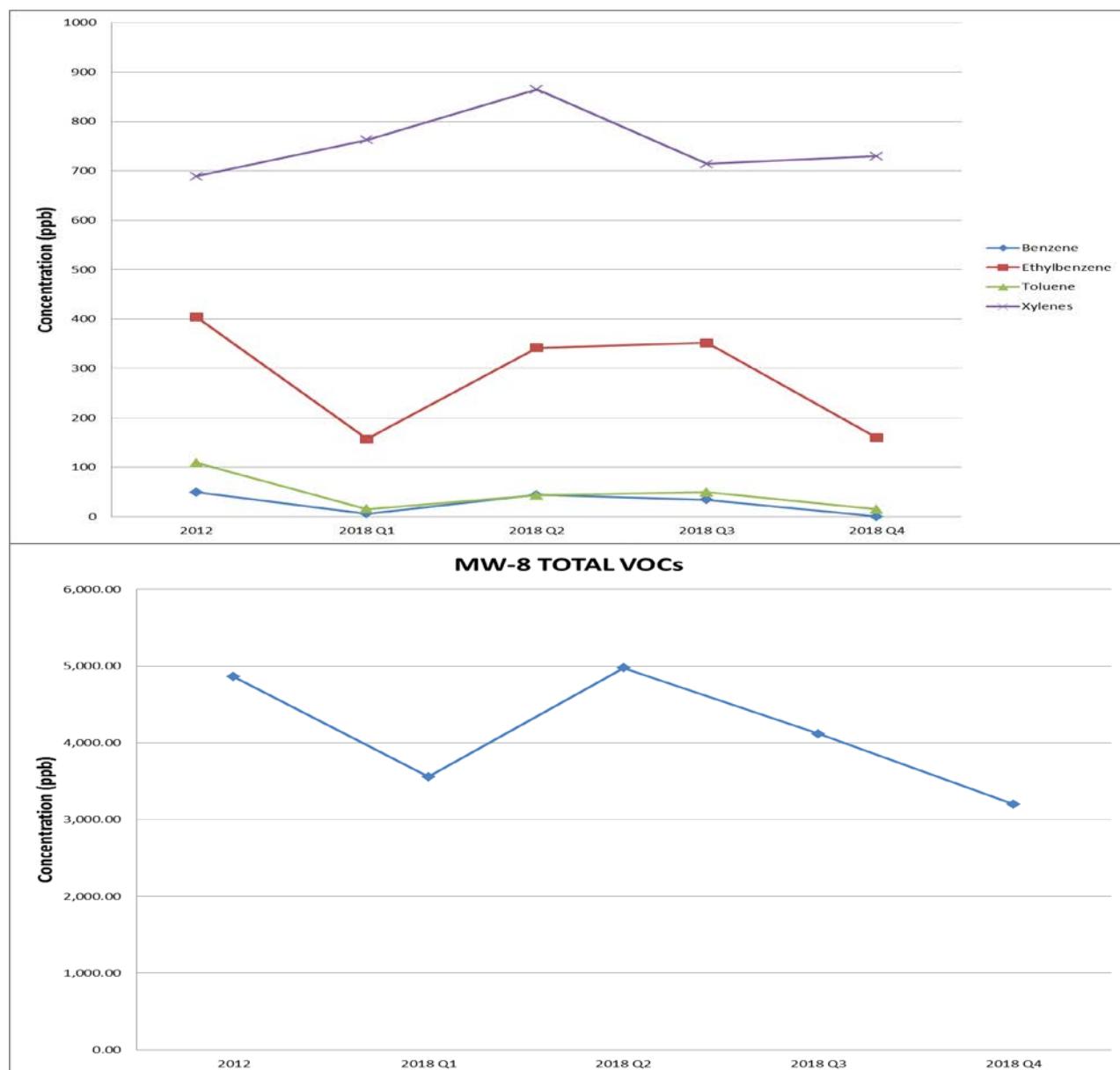
As shown on the following table and charts, the average individual BTEX and total VOC concentrations at MW-8 remained relatively stable during 2018, and have declined slightly since 2012.

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Compound	2012	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Benzene	49.4	5.7	44.1	34.2	BRL
Ethylbenzene	404	157	342	352	160
Toluene	109	15.6	42.9	49.4	15
Xylenes	689	763	865	714	730
Total VOCs	4,861.60	3,559.20	4,975.80	4,118.30	3,201.10

All concentrations are in micrograms per liter (ug/L) or approximate parts per billion (ppb)

BRL = Below Reporting Limit



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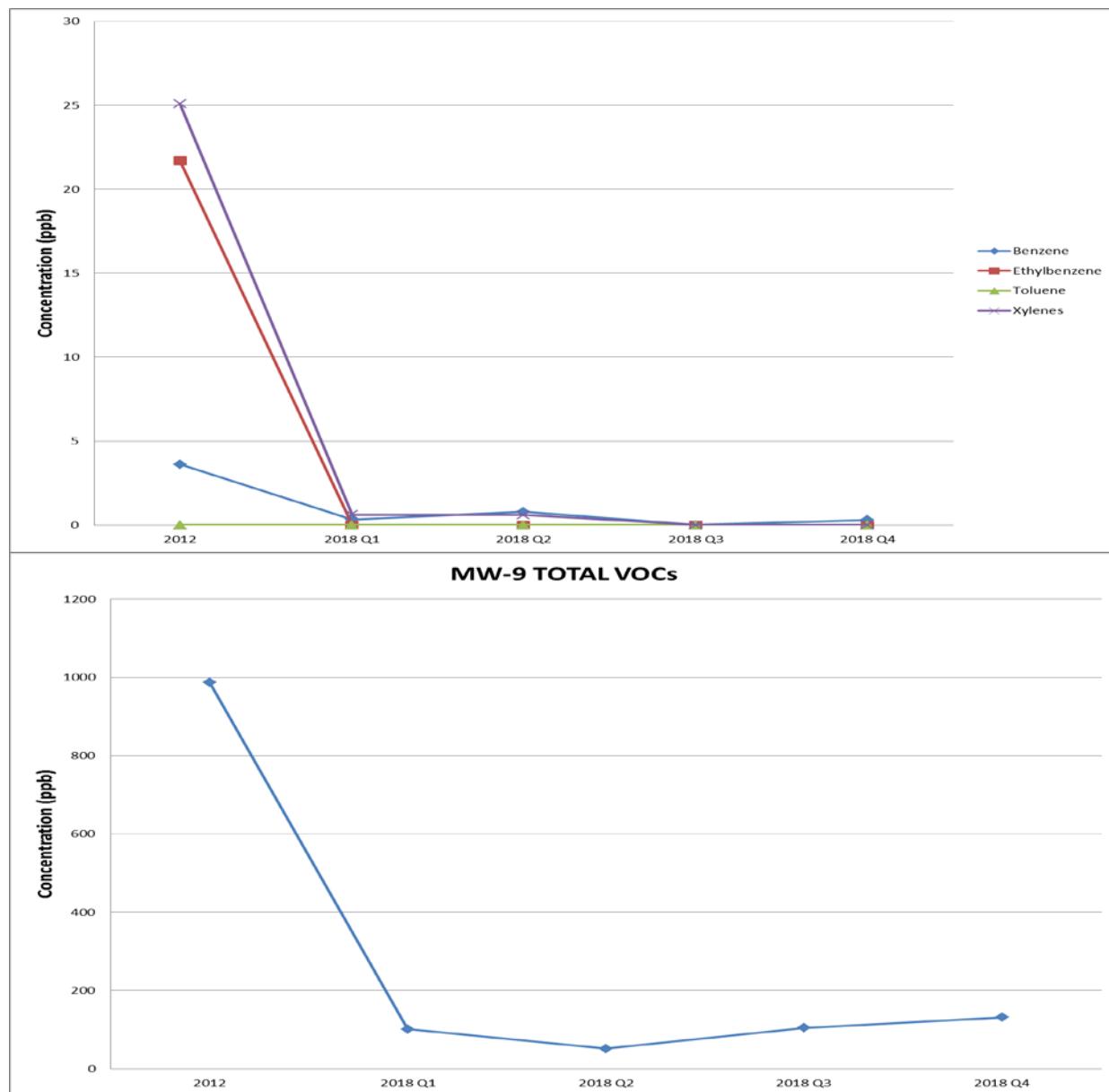
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**Monitoring Well MW-9**

As shown on the following table and charts, the average individual BTEX and total VOC concentrations at MW-9 remained relatively stable during 2018, and have declined by an order of magnitude or more since 2012. All VOC detections identified during the 2018 sampling events have been less than applicable groundwater standards.

Compound	2012	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Benzene	3.62	0.33	0.79	BRL	0.3
Ethylbenzene	21.7	BRL	BRL	BRL	BRL
Toluene	BRL	BRL	BRL	BRL	BRL
Xylenes	25.1	0.62	0.6	BRL	BRL
Total VOCs	987.5	101.1	51.11	104.93	131.6

All concentrations are in micrograms per liter (ug/L) or approximate parts per billion (ppb)  
 BRL = Below Reporting Limit



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### 5.3.3 Assessment of Field-Measured Parameters

Groundwater parameters are evaluated for comparison between different monitoring well locations and across time. Data is also compared to establish MNA indicators and values established by the EPA and discussed in the New Jersey Department of Environmental Protection's Monitored Natural Attenuation Technical Guidance document, dated March 2012.

Groundwater parameters from the past four sampling events are presented in the summary table below:

Parameter	Monitoring Event			
	3/19/2018	6/13/2018	9/6/2018	12/5/2018
<b>Monitoring Well MW-5</b>				
Temperature (°C)	7.35	15.03	17.36	12.30
pH	6.00	7.24	7.00	7.13
Specific Conductance (mS/cm)	5.41	8.07	7.37	2.90
Dissolved Oxygen (mg/L)	9.16	6.13	1.98	2.58
RedOx Potential (mV)	204	104	6	124
Turbidity (NTU)	0.0	275	61	3.9
<b>Monitoring Well MW-7</b>				
Temperature (°C)	10.29	16.27	16.71	13.70
pH	5.80	6.83	6.70	6.67
Specific Conductance (mS/cm)	2.38	7.51	6.42	3.61
Dissolved Oxygen (mg/L)	3.82	0.00	2.82	0.00
RedOx Potential (mV)	83	-73	-54	29
Turbidity (NTU)	0.0	17.4	6.5	2.4
<b>Monitoring Well MW-8</b>				
Temperature (°C)	10.17	19.15	Insufficient groundwater for measurement	12.93
pH	5.90	6.92		6.82
Specific Conductance (mS/cm)	1.23	2.19		1.59
Dissolved Oxygen (mg/L)	2.05	0.00		0.00
RedOx Potential (mV)	-116	-152		-144
Turbidity (NTU)	0.0	101		2.9
<b>Monitoring Well MW-9</b>				
Temperature (°C)	11.10	Insufficient groundwater for measurement	Insufficient groundwater for measurement	13.49
pH	5.92			6.85
Specific Conductance (mS/cm)	2.23			2.82
Dissolved Oxygen (mg/L)	5.50			0.00
RedOx Potential (mV)	-73			-82
Turbidity (NTU)	29.8			4.7

**Temperature**

Groundwater temperature influences the metabolic activity of microorganisms in groundwater, and warmer groundwater can both encourage further bacterial degradation and be a result of the breakdown process.

Groundwater temperatures fluctuated seasonally over the course of 2018. Within specific monitoring events, groundwater tends to be coolest at the upgradient (MW-5) location. It is possible that the down-gradient warming trend is due to exothermic degradation of petroleum compounds (the biodegradation process).

**pH**

The pH influences the presence and activity of the microbial population in groundwater. Microorganisms capable of degrading hydrocarbons generally prefer pH values varying from 6 to 8 standard units, while a range between 5 and 9 is generally necessary for any aerobic or anaerobic process to occur, as they are pH sensitive.

The pH values measured at all four monitoring wells have been relatively neutral (5.80 to 7.24), and are within the preferred range for microbial degradation to occur. The measured pH at the up-gradient location (MW-5) remains highest when compared to the other monitoring wells.

**Specific Conductance**

Groundwater conductivity is directly proportional to the ions in a solution. Significant trends in specific conductance as they relate to the biodegradation process have not been observed to date.

**Dissolved Oxygen**

Biodegradation occurs differently in two environments: anaerobic (less than 0.5 mg/L) or aerobic (greater than 0.5 mg/L) conditions.

Where aerobic biodegradation of fuel constituents is occurring, microorganisms utilize available oxygen as they biodegrade BTEX (and other petroleum compounds), and any oxygen entering this zone is rapidly depleted. Thus, an inverse correlation between DO and BTEX concentrations is an indication that aerobic biodegradation is occurring in the subsurface.

Dissolved oxygen readings greater than 0.5 mg/L have been consistently recorded at the up-gradient location of MW-5. With some exception, dissolved oxygen has generally not been detected at locations MW-7, MW-8, or MW-9, suggesting that aerobic degradation of petroleum compounds is occurring.

**Oxidation Reduction Potential**

The ORP values in groundwater commonly vary from -400 mV to as much as 800 mV, but certain biodegradation processes can only occur within a specific range of ORP conditions. Lower ORP values in groundwater suggest the occurrence of biodegradation.

In general, ORP values less than -100 mV are a strong indicator that biodegradation is occurring, and the ORP values at MW-8 have consistently remained less than -100 mV.

### Turbidity

A turbidity of less than 50 NTU is necessary to ensure that suspended sediment does not influence the analytical results of groundwater analysis.

During the Q2 and Q3 monitoring events the depressed water table (where a poor rate of recovery was also observed) resulted in an inability to obtain turbidity measurements less than 50 NTU. As a result, the metals analytical data from these respective samples should be considered potentially biased high:

- Q2 – MW-5, MW-8, and MW-9
- Q3 – MW-5, MW-8, and MW-9

### **5.4 MONITORING DEFICIENCIES**

During the December 2018 monitoring event, the following deficiencies were noted:

- The top 8" section of PVC riser at monitoring well location MW-7 became dislodged during the most recent groundwater monitoring event (December 2018). This additional section had been added to the original riser when the gravel cover was installed. AECC personnel implemented a temporary fix by temporarily re-connecting the section of riser. Although the integrity of the well is not compromised, the section of dislodged riser should be reconnected. AECC plans to accomplish this repair by using a coupling made of PVC, with sand acting as a friction element (in lieu of glue). If this repair does not hold, AECC will cautiously use PVC glue to join the coupling to the sections of riser.
- One of the bolts that secures the well cover at monitoring well MW-8 is becoming stripped. AECC will replace this bolt.
- The 55-gallon steel drum used to store investigation derived waste (IDW) at the southern perimeter of the Site is full, and is significantly corroded. The drum will be appropriately disposed of and a new drum will be brought to the Site to store future IDW. The new drum will be disposed/replaced when full, or annually, whichever comes last.

### **5.5 CONCLUSIONS AND RECOMMENDATIONS**

As seen in the comparison of analytical data from this 2018 monitoring period to the most recent available previous data (2012), natural attenuation has resulted in a significant reduction of contamination in the area of MW-9. All detected concentrations of VOCs and SVOCs from MW-9 during 2018 monitoring events are below applicable Groundwater Standards and Values.

Continued monitoring with attention paid to trends in BTEX concentrations at MW-8 will shed further light on the overall efficacy of MNA as a viable method of remediating the Site. Another year's worth of data is necessary to identify potential trends at the MW-8 location.

No change to the sampling plan or frequency is scheduled to occur at the current time. The 2019 sampling events are anticipated to occur in the same months as the 2018 sampling events.

The deficiencies noted in Section 5.4 will be corrected during the first monitoring event of 2019.

## **6.0 OPERATIONS & MAINTENANCE PLAN COMPLIANCE**

The remedial program does not include any equipment that is subject to an O&M Plan.

## **7.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 COMPLIANCE WITH SMP**

#### **7.1.1 IC/ECs**

Requirements of the SMP as it pertains to IC/ECs were met during the reporting period. The next PRR report will pertain to the 2019 calendar year, with an anticipated date of completion of March 2020.

#### **7.1.2 Monitoring**

Requirements of the SMP and applicable groundwater monitoring were met during the reporting period. The next monitoring event is scheduled to occur in March 2019.

The resolution of identified deficiencies (see Section 5.4) will be confirmed during the next scheduled monitoring event (March 2019).

#### **7.1.3 O&M**

There are no O&M requirements associated with the remedial program.

### **7.2 PERFORMANCE AND EFFECTIVENESS OF THE REMEDY**

The remedial strategy (including all engineering and institutional controls) continues to be an appropriate method of controlling exposure to remaining contamination in the subsurface.

Continuing performance of the remedy will be documented per the SMP.

### **7.3 FUTURE PRR SUBMITTALS**

The requirements for site closure have not been met, as contamination of subsurface soil and groundwater remains at the Site. At this time, the frequency of PRRs will remain unchanged (Annual). It is anticipated that the next PRR will be completed in March 2020.

## **8.0 CLOSING**

This Periodic Review Report must be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the site is located (Region 7 – Syracuse), and in electronic format to the NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

**2018 PERIODIC REVIEW REPORT**  
700 Outparcel, 701-709 East Water Street, Syracuse, New York

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If you should have any questions regarding the information presented in this report, please feel free to contact our corporate office (315) 432-9400 at your convenience.

Sincerely,  
Asbestos & Environmental Consulting Corporation



H. Nevin Bradford, III, P.E.  
Vice President / Sr. Environmental Engineer



Richard D. McKenna  
Senior Project Manager

## **FIGURES**

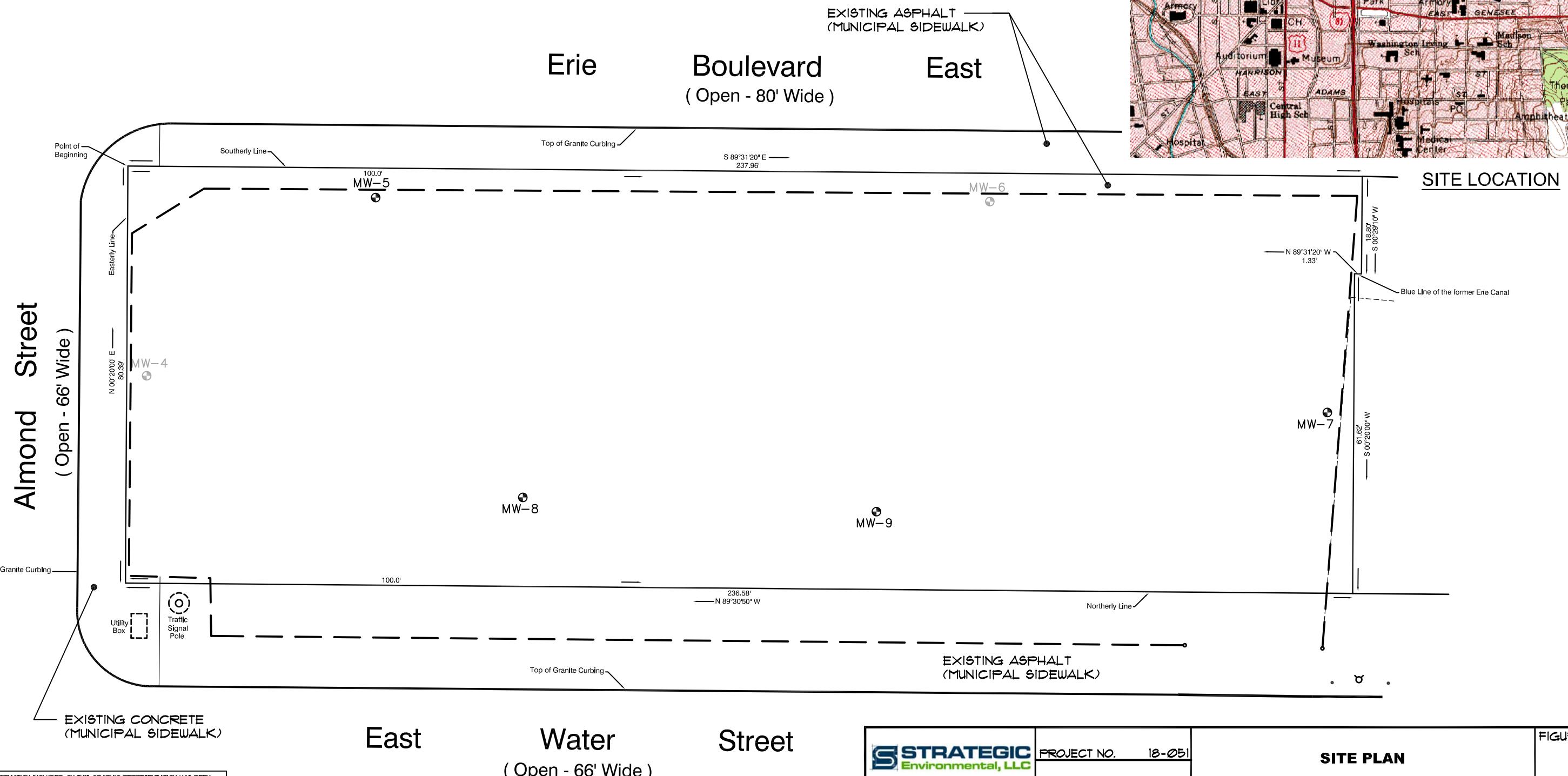
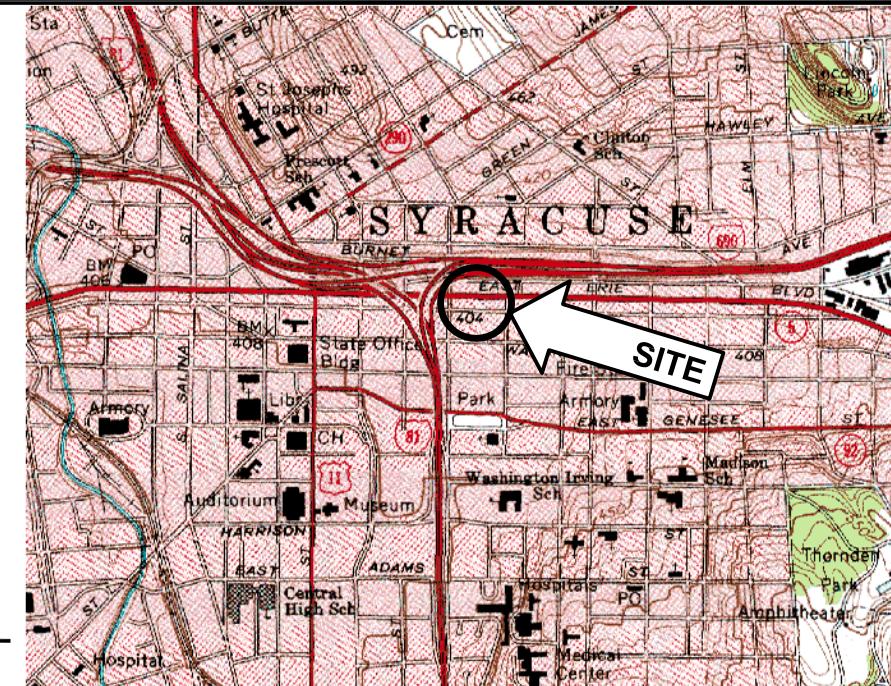
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**FIGURE 1 – SITE PLAN**

**FIGURE 2 – GROUNDWATER ELEVATIONS AND CONTOUR PLAN (DEC 2018)**

**LEGEND:**

- — — CHAIN LINK FENCE
- GATE POST
- ¤ FIRE HYDRANT
- STEEL SAFETY POST
- MW-#¤ MONITORING WELL (SAMPLED)
- MW-#¤ MONITORING WELL (NOT SAMPLED)



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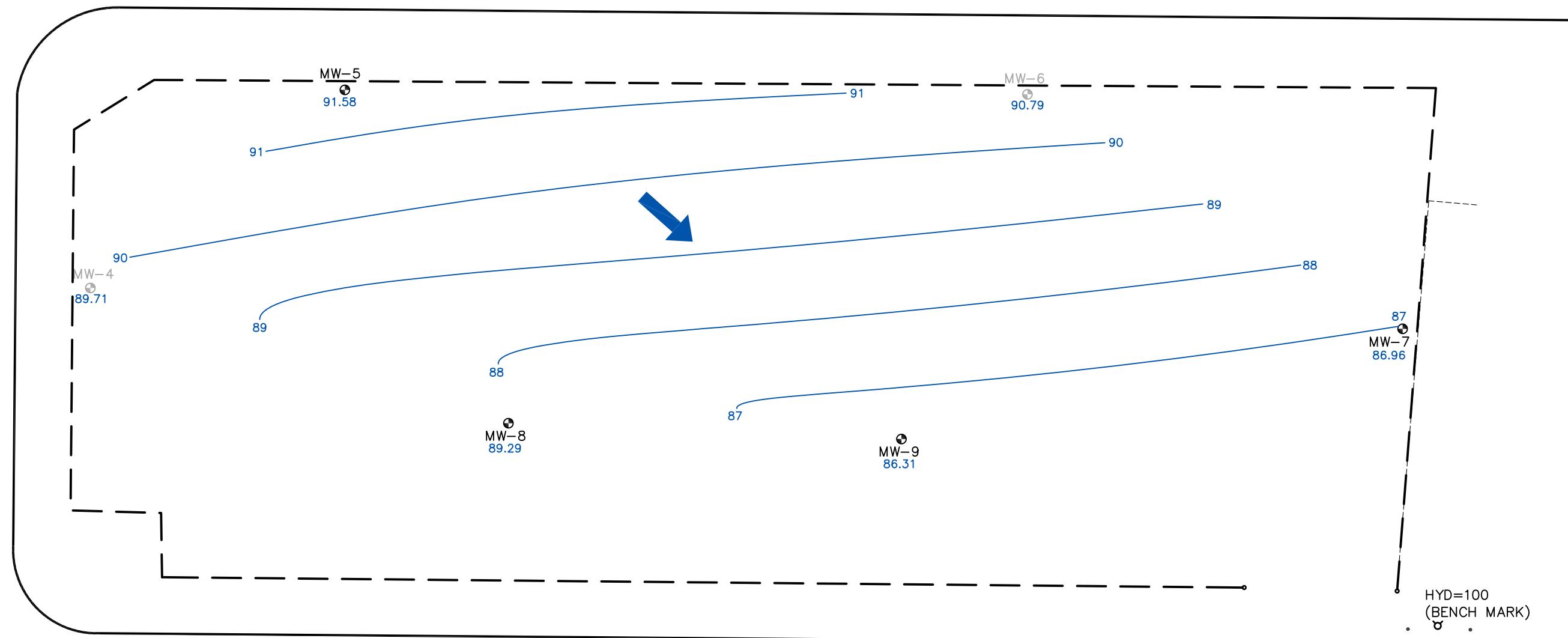
**LEGEND:**

- — — CHAIN LINK FENCE
- GATE POST
- ◎ FIRE HYDRANT
- STEEL SAFETY POST
- MW-#◎ MONITORING WELL (SAMPLED)
- MW-#○ MONITORING WELL (NOT SAMPLED)
- 86.62 — GROUNDWATER ELEVATION  
RELATIVE TO BENCHMARK
- ➡ GROUNDWATER FLOW DIRECTION



Erie Boulevard East

Almond Street



East Water Street

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## NOTES:

1. SURVEY PROVIDED BY J.R.L. LAND SURVEYING, PLLC 7-31-15.
2. ALL LOCATIONS ARE APPROXIMATE.

0 20' 40'  
GRAPHIC SCALE

**STRATEGIC**  
Environmental, LLC

**AECC**  
ENVIRONMENTAL CONSULTING

PROJECT NO. 18-051

DRAWN: DEC. 2018

DRAWN BY: DW

CHECKED BY: RM/DB

**GROUNDWATER CONTOUR**  
100 OUTPARCEL  
101-109 EAST WATER STREET  
SYRACUSE, NEW YORK

FIGURE  
**2**

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**ATTACHMENT A**  
**Site Inspection Form**

# ANNUAL / SEVERE CONDITION SITE INSPECTION FORM

**Site Name:** 700 Outparcel  
**Address:** 701-709 East Water Street  
Syracuse, New York  
**Tax ID:** Section 30, Block 14 - Lots 1.0 & 2.0  
**Area:** 0.43± acres  
**NYSDEC Site #:** C734111

**Inspection Date:** December 5, 2018

**Weather During Inspection:**  
Temperature: 29 °F  
Conditions: Mostly clear/sunny

## Description of Engineering Control(s) to be Inspected:

**Cover System:** One foot of crusher run gravel over an orange fabric demarcation barrier within fenced area. Strips of asphalt pavement outside of fenced area along the northern and eastern borders (municipal sidewalk and U-Haul parking lot). The site is used for occasional vehicular parking.

## Conditions:

*Describe deficiencies/remedies in the Comments section, and mark up Site Plan on Page 2 as needed*

- ✓ Walk and inspect the perimeter of the Site, including the areas outside the fenced area
- ✓ Walk and inspect the cover system within the fenced area

1.	Has there been a change in use of the Site? .....	Y
2.	Has any material been removed? .....	Y
3.	Has anything been constructed on the Site? .....	Y
4.	Are there any signs of significant settlement or deterioration of the cover?.....	Y
5.	Are there any signs of erosion? .....	Y
6.	Is the cover material being tracked onto adjacent sidewalks/streets by vehicular traffic?.....	Y
7.	Has the cover material sloughed onto adjacent sidewalks or parking lots?.....	Y
8.	Are there any signs of intrusive activities (drilling, excavation, etc.)? .....	Y
9.	Are there signs that snow plowing has altered the surface of the cover? .....	Y
10.	Is the perimeter fence damaged? .....	Y
11.	Is the demarcation barrier visible in any locations?.....	Y
12.	Is any staining of the cover material visible (vehicle leaks, etc.)? .....	Y
13.	Are the flush-mounted protective casings of the 6 monitoring wells damaged or compromised?.....	Y
14.	Are the covers of the 6 monitoring wells damaged or compromised? .....	(Y)
15.	Have previous recommended remedies/repairs been implemented? .....	(N/A) Y N

## Comments:

*If an inspection identifies damage to the cover or wells, it shall be reported to the NYSDEC by noon the following business day (if an emergency) or within 5 business days (if a non-emergency)*

Covers remain intact. Top 8" riser of well casing at MW-7 (additional piece added when cover installed) dislodged when removing frozen cap (frozen together). Temporary fix implemented by joining pieces as best able. Integrity of well not compromised.

One bolt at MW-8 is becoming stripped and should be replaced.

## Attachments:

Photographs:  Y  N  
Other (Describe):  Y  (N)

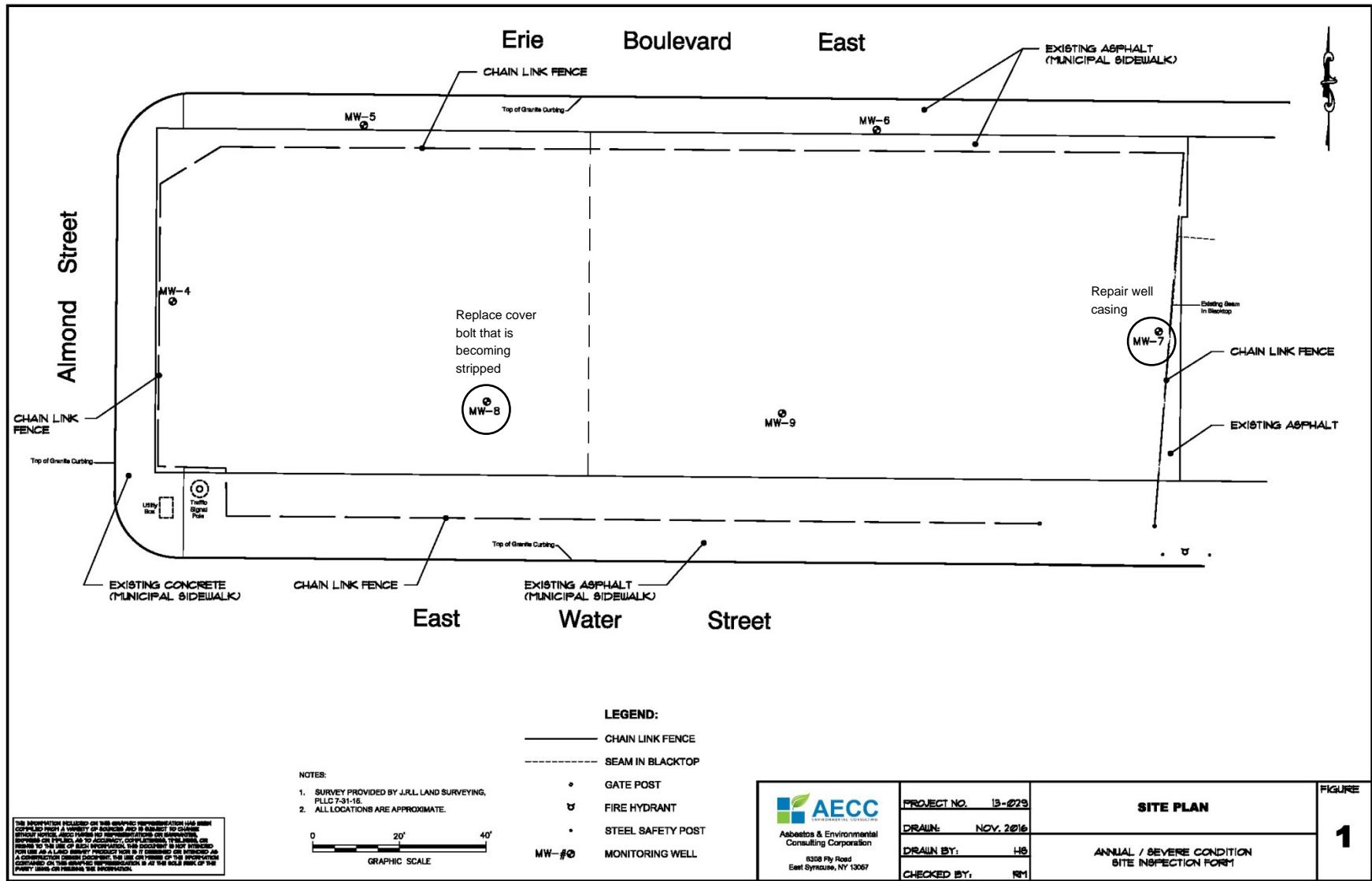
**Name of Inspector (Print):** H. Nevin Bradford III, P.E.

**Signature of Inspector (Environmental Professional)**

December 10, 2018

**Date**

# ANNUAL / SEVERE CONDITION SITE INSPECTION FORM



**ATTACHMENT B**  
**SITE INSPECTION PHOTO LOG**

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	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
<b>Photo No.</b> 1		
<b>Photo Description:</b>		
Access at southeast corner of Site		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
<b>Photo No.</b> 2		
<b>Photo Description:</b>		
Access at southeast corner of Site  Chain on ground (re-secured by AECC personnel upon departing Site)		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 3		
<b>Photo Description:</b>		
Looking West across Site		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 4		
<b>Photo Description:</b>		
Center of Site – Looking West		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 5		
<b>Photo Description:</b>		
Center of Site – Looking North		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 6		
<b>Photo Description:</b>		
Center of Site – Looking East		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 7		
<b>Photo Description:</b>	Center of Site – Looking South	

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 8		
<b>Photo Description:</b>	Western Perimeter of Site  Growing vines / weeds removed from fencing and on ground	

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 9		
<b>Photo Description:</b>		
Looking East across Site		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 10		
<b>Photo Description:</b>		
MW-4 at western perimeter of Site (with cover off)		

 <b>Photo No. 11</b> <b>Photo Description:</b> MW-4 Well intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

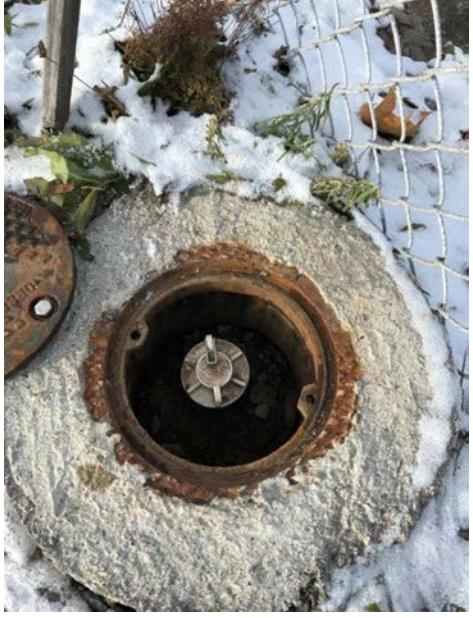
 <b>Photo No. 12</b> <b>Photo Description:</b> MW-4 Well cap intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 13		
<b>Photo Description:</b>		
MW-4		
Well cover intact		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 14		
<b>Photo Description:</b>		
MW-4 at western perimeter of Site (with cover in-place)		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 15		
<b>Photo Description:</b>		
MW-5 at northwestern perimeter of Site (with cover off)		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 16		
<b>Photo Description:</b>		
MW-5  Well intact		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 17		
<b>Photo Description:</b>		
MW-5  Well cap intact		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 18		
<b>Photo Description:</b>		
MW-5  Well cover intact		

 <b>Photo No. 19</b> <b>Photo Description:</b> MW-6 at northeastern perimeter of Site	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 20</b> <b>Photo Description:</b> MW-6 Well intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 21</b> <b>Photo Description:</b> MW-6 Well cap intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 22</b> <b>Photo Description:</b> MW-6 Well cover intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 23</b> <b>Photo Description:</b> MW-7 at eastern perimeter of Site	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 24</b> <b>Photo Description:</b> MW-7 Top 8" of well riser damaged / detached (see photo No. 25)	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
		

 <b>Photo No. 25</b> <b>Photo Description:</b> MW-7 Damaged / detached top 8" of well riser	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018

 <b>Photo No. 26</b> <b>Photo Description:</b> MW-7 Damaged upper 8" of well riser forced back into place and well cap intact	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018

 <b>Photo No.</b> 27 <b>Photo Description:</b> MW-7 Well cover intact	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
		

 <b>Photo No.</b> 28 <b>Photo Description:</b> MW-8 Well intact	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 29		
<b>Photo Description:</b>		
MW-8  Well cap intact		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 30		
<b>Photo Description:</b>		
MW-8  Well cover intact  One bolt becoming stripped and should be replaced		

 <b>Photo No.</b> 31	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
	<b>Photo Description:</b>	
	MW-9	
	Well intact	
		

 <b>Photo No.</b> 32	<b>700 Outparcel</b> <b>701-709 East Water Street, Syracuse, New York</b>	<b>Date:</b> 12/05/2018
	<b>Photo Description:</b>	
	MW-9	
	Well cap intact	
		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 33		
<b>Photo Description:</b>		
MW-9		
Well cover intact		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 34		
<b>Photo Description:</b>		
Drummed sampling material waste (temporary tubing, gloves, etc.)		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 35		
<b>Photo Description:</b>		
Damage / corrosion / holes in waste storage drum		

	<b>700 Outparcel</b> 701-709 East Water Street, Syracuse, New York	<b>Date:</b> 12/05/2018
Photo No. 36		
<b>Photo Description:</b>		
Drum secured at southern perimeter of Site		

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**ATTACHMENT C**  
**CERTIFICATION FORMS**



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**

**Site Details****Box 1**

Site No. C734111

Site Name 700 Out Parcel, LLC

Site Address: 701-709 East Water Street Zip Code: 13202  
City/Town: Syracuse  
County: Onondaga  
Site Acreage: 0.440

Reporting Period: November 03, 2017 to March 03, 2019

YES NO

1. Is the information above correct?

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

**If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.**

5. Is the site currently undergoing development?

**Box 2**

YES NO

6. Is the current site use consistent with the use(s) listed below?    
Commercial and Industrial
7. Are all ICs/ECs in place and functioning as designed?

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative

Date

**Box 2A**

YES      NO  
     

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
 (The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C734111****Box 3****Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
030-14-01.0	700 Out Parcel, LLC c/o Woodbine Group	IC/EC Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan

Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

- allows the use and development of the controlled property for commercial as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

**030-14-02.0**      700 Out Parcel, LLC c/o Woodbine Group

Ground Water Use Restriction  
Soil Management Plan  
Monitoring Plan  
Site Management Plan

Landuse Restriction  
IC/EC Plan

Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

- allows the use and development of the controlled property for commercial as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

**Box 4****Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
<b>030-14-01.0</b>	<p style="text-align: center;"><b>Cover System</b></p> <p>A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).</p>
<b>030-14-02.0</b>	<p style="text-align: center;"><b>Cover System</b></p> <p>A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).</p>

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES      NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES      NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

---

Signature of Owner, Remedial Party or Designated Representative

---

Date

**IC CERTIFICATIONS  
SITE NO. C734111**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Norman E. Swanson at 505 E Fayette St., Syracuse, NY 13210,  
print name print business address

am certifying as Owner of 700 Out Parcel, LLC (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

 MEMBRE  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

March 6, 2019  
Date

## IC/EC CERTIFICATIONS

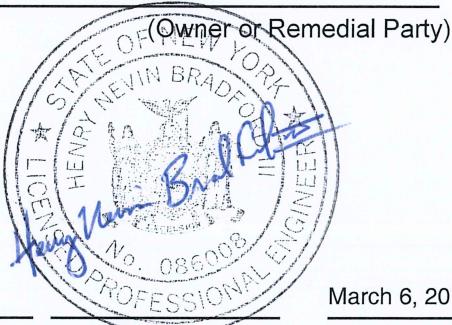
Box 7

### Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I H. Nevin Bradford III at 6308 Fly Road, East Syracuse, NY 13057  
print name print business address

am certifying as a Professional Engineer for the 700 Out Parcel, LLC



*H. Nevin Bradford III*  
Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification

March 6, 2019  
Stamp  
(Required for PE)

## **ATTACHMENT D**

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### **ANALYTICAL SAMPLING – SUMMARY TABLES**

#### **GENERAL NOTES / LEGEND**

**TABLE 1 – Q1 VOCs**

**TABLE 2 – Q1 SVOCS**

**TABLE 3 – Q1 METALS**

**TABLE 4 – Q2 VOCs**

**TABLE 5 – Q2 SVOCS**

**TABLE 6 – Q2 METALS**

**TABLE 7 – Q3 VOCs**

**TABLE 8 – Q3 SVOCS**

**TABLE 9 – Q3 METALS**

**TABLE 10 – Q4 VOCs**

**TABLE 11 – Q4 SVOCS**

**TABLE 12 – Q4 METALS**

**TABLE 13 – SUMMARY OF HISTORICAL EXCEEDANCES**

## GENERAL NOTES / LEGEND

Applicable standard is the groundwater effluent (Class GA) guidance value or standard per NYSDEC Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1)

Acronym	Meaning
BRL	Below Reportable Limit (non-detect)
NS	No TOGS 1.1.1 Guidance Value or Standard for this compound
ND	Any detectable concentration by the approved analytical methods constitutes an exceedance of the GWS
<b>Bold + Shading</b>	Compound concentration exceeds the applicable GWS

Qualifier	Quality Implication
<b>U</b>	Analyte analyzed for, but not detected above the sample's reported quantitation limit
<b>J</b>	Analyte positively identified at a numerical value that is the approximate concentration of the analyte in the sample
<b>J +</b>	Sample likely to have a high bias
<b>J -</b>	Sample likely to have a low bias
<b>UJ</b>	Analyte not detected above the sample quantitation limit; the associated quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample
<b>N</b>	The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."
<b>NJ</b>	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
<b>R</b>	Sample result rejected due to serious deficiency in ability to analyze sample and meet quality control criteria; the presence or absence of the analyte cannot be confirmed. This qualifier also may apply when more than one sample result is generated for a target analyte ( <i>i.e.</i> , dilutions or re-analyses), the most technically acceptable result is considered acceptable.
<b>B   EB</b> <b>TB   BB</b>	An analyte identified in method blank (B), aqueous equipment (EB), trip (TB), or bottle blanks (BB) used to assess field contamination associated with soil or sediment samples mandates these qualifiers for only soil and sediment sample results.
<b>P</b>	Use professional judgment based on data use. It usually has an "M" with it, which indicates that a manual check should be made if the data that are qualified with the "P" are important to the data user. In addition, "PM" also means a decision is necessary from the Project Manager (or a delegate) concerning the need for further review of the data ( <i>see below</i> ).
<b>PM</b>	A manual review of the raw data is recommended to determine if the defect affects data use, as in "R" above. This review should include consideration of potential affects that could result from using the "P" qualified data. For example, in the case of holding-time exceedance, the Project Manager or delegate can decide to use the data with no qualification when analytes of interest are known not to be adversely affected by holding-time exceedances. Another example is the case where soil sample duplicate analyses for metals exceed the precision criteria; because this is likely due to sample non-homogeneity rather than contract laboratory error, then the manager or delegate must decide how to use the data.

**TABLE 1**  
**Groundwater Analyses Summary - VOCs**  
**Method SW-846 8260**

**2018 Q1 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-D (MW-5)	MW-7	MW-8 <sup>D</sup>	MW-9
		03/19/18	03/19/18	03/19/18	03/19/18	03/19/18	03/19/18	03/19/18
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Acetone	67-64-1	NS	50	BRL	BRL	BRL	BRL	BRL
Acrylonitrile	107-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Benzene	71-43-2	1	-	BRL	BRL	BRL	5.7	J
Bromobenzene	108-86-1	5	-	BRL	BRL	BRL	0.33	J
Bromochloromethane	74-97-5	5	-	BRL	BRL	BRL	BRL	BRL
Bromodichloromethane	75-27-4	NS	50	BRL	BRL	BRL	BRL	BRL
Bromoform	75-25-2	NS	50	BRL	BRL	BRL	BRL	BRL
Bromomethane	74-83-9	5	-	BRL	BRL	BRL	BRL	BRL
2-Butanone (MEK)	78-93-3	NS	50	BRL	BRL	BRL	BRL	BRL
n-Butylbenzene	104-51-8	5	-	BRL	BRL	BRL	13.1	J
sec-Butylbenzene	135-98-8	5	-	BRL	BRL	BRL	7.4	J
tert-Butylbenzene	98-06-6	5	-	BRL	BRL	BRL	1.53	J
Carbon disulfide	75-15-0	NS	NS	BRL	BRL	BRL	0.51	J
Carbon tetrachloride	56-23-5	5	-	BRL	UJ	BRL	BRL	BRL
Chlorobenzene	106-90-7	5	-	BRL	BRL	BRL	BRL	BRL
Chloroethane	75-00-3	5	-	BRL	BRL	BRL	BRL	BRL
Chloroform	67-66-3	7	-	BRL	BRL	BRL	BRL	BRL
Chloromethane (methyl chloride)	74-87-3	5	-	BRL	BRL	BRL	BRL	BRL
2-Chlorotoluene	95-49-8	5	-	BRL	BRL	BRL	BRL	BRL
4-Chlorotoluene	106-43-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	BRL	BRL	BRL	BRL	BRL
Dibromochloromethane	124-48-1	NS	50	BRL	BRL	BRL	BRL	BRL
1,2-Dibromoethane (EDB)	106-93-4	0.0006	-	BRL	BRL	BRL	BRL	BRL
Dibromomethane	74-95-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
Dichlorodifluoromethane (Freon12)	75-71-8	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethane	75-34-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloroethane	107-06-2	0.6	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethene	75-35-4	5	-	BRL	BRL	BRL	BRL	BRL
cis-1,2-Dichloroethene	156-59-2	5	-	BRL	BRL	BRL	BRL	BRL
trans-1,2-Dichloroethene	156-60-5	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloropropane	78-87-5	1	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichloropropane	142-28-9	5	-	BRL	BRL	BRL	BRL	BRL
2,2-Dichloropropane	594-20-7	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloropropene	563-58-6	5	-	BRL	BRL	BRL	BRL	BRL
cis-1,3-Dichloropropene	10061-01-5	0.4**	-	BRL	BRL	BRL	BRL	BRL
trans-1,3-Dichloropropene	10061-02-6	-	-	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	100-41-4	5	-	BRL	BRL	BRL	157	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
2-Hexanone (MBK)	591-78-6	NS	50	BRL	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	-	BRL	BRL	BRL	21.9	3.16
4-Isopropyltoluene	99-87-6	5	-	BRL	BRL	BRL	4.5	J
Methyl tert-butyl ether	1634-04-4	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	BRL	BRL	BRL	BRL	BRL
Methylene chloride	75-09-2	5	-	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	BRL	BRL	73.2	0.67
n-Propylbenzene	103-65-1	5	-	BRL	BRL	BRL	67.8	J
Styrene	100-42-5	5	-	BRL	BRL	BRL	BRL	BRL
1,1,1,2-Tetrachloroethane	630-20-6	5	-	BRL	UJ	BRL	BRL	BRL
1,1,2,2-Tetrachloroethane	79-34-5	5	-	BRL	BRL	BRL	BRL	BRL
Tetrachloroethene	127-18-4	5	-	BRL	BRL	BRL	BRL	BRL
Toluene	108-88-3	5	-	BRL	BRL	BRL	15.6	BRL
1,2,3-Trichlorobenzene	87-61-6	5	10*	BRL	BRL	BRL	BRL	BRL
1,2,4-Trichlorobenzene	120-82-1	5	10*	BRL	BRL	BRL	BRL	BRL
1,3,5-Trichlorobenzene	108-70-3	5	10*	BRL	BRL	BRL	BRL	BRL
1,1,1-Trichloroethane	71-55-6	5	-	BRL	UJ	BRL	BRL	BRL
1,1,2-Trichloroethane	79-00-5	1	-	BRL	BRL	BRL	BRL	BRL
Trichloroethene	79-01-6	5	-	BRL	UJ	BRL	UJ	UJ
Trichlorofluoromethane (Freon 11)	75-69-4	5	-	BRL	UJ	BRL	UJ	UJ
1,2,3-Trichloropropane	96-18-4	0.04	-	BRL	BRL	BRL	BRL	BRL
1,2,4-Trimethylbenzene	95-63-6	5	-	BRL	BRL	BRL	486	0.79
1,3,5-Trimethylbenzene	108-67-8	5	-	BRL	BRL	BRL	150	BRL
Vinyl chloride	75-01-4	2	-	BRL	BRL	BRL	BRL	BRL
m,p-xylene	17960123-1	5	-	BRL	BRL	BRL	607	0.62
o-xylene	95-47-6	5	-	BRL	BRL	BRL	156	BRL
Tetrahydrofuran	109-99-9	NS	50	BRL	UJ	BRL	BRL	BRL
Ethyl ether	60-29-7	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-amyl methyl ether	994-05-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Ethyl tert-butyl ether	637-92-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Di-isopropyl ether	108-20-3	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-Butanol / butyl alcohol	75-65-0	NS	NS	BRL	UJ	BRL	BRL	BRL
1,4-Dioxane	123-91-1	NS	NS	BRL	BRL	BRL	BRL	BRL
trans-1,4-Dichloro-2-butene	110-57-6	5	-	BRL	BRL	BRL	BRL	BRL
Ethanol	64-17-5	NS	NS	BRL	BRL	BRL	BRL	BRL
<b>Tentatively Identified Compounds (TICs)</b>								
2-Butene, 2,3-dimethyl-	000563-79-1	NS	NS	-	-	-	87	-
Benzene, 1-ethyl-2-methyl-	611-14-3	NS	NS	-	-	-	280	-
Benzene, 2-ethyl-1,4-dime...	002039-89-6	NS	NS	-	-	-	87	-
Butane, 2-methyl-	78-78-4	NS	NS	-	-	-	340	-
Cyclopentane, methyl-	96-37-7	NS	NS	-	-	-	310	-
Pentane	109-66-0	NS	NS	-	-	-	130	-
Pentane, 2-methyl-	107-83-5	NS	NS	-	-	-	380	-
Pentane, 3-methyl-	96-14-0	NS	NS	-	-	-	180	-
Benzene, 1,4-diethyl-	105-05-5	NS	NS	-	-	-	-	9.6
Cyclohexane, 1,1-dimethyl-	NA	NS	NS	-	-	-	-	12
Cyclopentane, 1,2-dimethyl...	000822-50-4	NS	NS	-	-	-	-	20
Cyclopentene, 1,2,3-trimethyl-	473-91-6	NS	NS	-	-	-	-	23
Indan, 1-methyl-	000767-58-8	NS	NS	-	-	-	-	13
Pentane, 2,3-dimethyl-	565-59-3	NS	NS	-	-	-	-	10
TOTAL VOCs	-	-	-	0	0	0	3559.2	101.07

**Notes:**

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)

\* - Value of 5 ug/L applies to each trichlorobenzene individually. Value of 10 ug/L, applies to the sum of these substances

\*\* - Sum of cis and trans Dichloropropenes

**TABLE 2**  
**Groundwater Analyses Summary - SVOCs**  
**Method SW-846 8270**

**2018 Q1 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Semi-Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-7	MW-D (MW-7)	MW-8	MW-9
				3/19/2018	4/2/2018	4/2/2018	3/19/2018	4/2/2018
Acenaphthene	83-32-9	20	20	BRL UJ	BRL	BRL	BRL	BRL
Acenaphthylene	208-96-8	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
Aniline	62-53-3	5	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Anthracene	120-12-7	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Azobenzene/Diphenyldiazene	103-33-3	5	0.5	BRL UJ	BRL	BRL	BRL	BRL
Benzidine	92-87-5	5	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzo (a) anthracene	56-55-3	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
Benzo (a) pyrene	50-32-8	ND	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzo (b) fluoranthene	205-99-2	NS	0.002	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzo (g,h,i) perylene	191-24-2	NS	NS	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzo (k) fluoranthene	207-08-9	NS	0.002	BRL UJ	BRL	BRL UJ	BRL	BRL
Benzolic acid	65-85-0	NS	1.49	J	BRL	3.07	J	BRL
Benzyl alcohol	100-51-6	NS	NS	BRL UJ	BRL	BRL UJ	BRL	BRL
Bis(2-chloroethoxy)methane	111-91-1	5	-	BRL UJ	BRL	BRL	BRL	BRL
Bis(2-chloroethyl)ether	111-44-4	1	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Bis(2-chloroisopropyl)ether	108-60-1	5	-	BRL UJ	BRL	BRL	BRL	BRL
Bis(2-ethylhexyl)phthalate	117-81-7	5	-	BRL UJ	1.03 J	0.841 J	1.32 J	1.23 J
4-Bromophenyl phenyl ether	101-55-3	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
Butyl benzyl phthalate	85-68-7	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Carbazole	86-74-8	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
4-Chloro-3-methylphenol	59-50-7	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
4-Chloroaniline	106-47-8	5	-	BRL UJ	BRL	BRL	BRL	BRL
2-Chloronaphthalene	91-58-7	NS	10	BRL UJ	BRL	BRL	BRL	BRL
2-Chlorophenol	95-57-8	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
Chrysene	218-01-9	NS	0.002	BRL UJ	BRL	BRL	BRL	BRL
Dibenzo (a,h) anthracene	53-70-3	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
Dibenzofuran	132-64-9	NS	NS	BRL UJ	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL UJ	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL UJ	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL UJ	BRL	BRL	BRL	BRL
3,3'-Dichlorobenzidine	91-94-1	5	-	BRL UJ	BRL	BRL	BRL	BRL
2,4-Dichlorophenol	120-83-2	**	-	BRL UJ	BRL	BRL	BRL	BRL
Diethyl phthalate	84-66-2	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Dimethyl phthalate	131-11-3	NS	50	BRL UJ	BRL	BRL	BRL	BRL
2,4-Dimethylphenol	105-67-9	1**	-	BRL UJ	BRL	BRL	BRL	BRL
Di-n-butyl phthalate	84-74-2	50	-	BRL UJ	9.37 J	8.38 J	8.37 J	8.37 J
4,6-Dinitro-2-methylphenol	534-52-1	NS	NS	BRL UJ	BRL UJ	BRL UJ	1.71 J	BRL UJ
2,4-Dinitrophenol	51-28-5	1**	-	BRL UJ	BRL UJ	BRL UJ	1.15 J	BRL
2,4-Dinitrotoluene	121-14-2	5	-	0.857 J	BRL	0.913 J	BRL	BRL
2,6-Dinitroluene	606-20-2	5	-	1.28 J	BRL	1.93 J	BRL	BRL
Di-n-octyl phthalate	117-84-0	NS	50	35.3 J	54 J	1.59 J	3.62 J	2.36 J
Fluoranthene	206-44-0	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Fluorene	86-73-7	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Hexachlorobenzene	118-74-1	0.04	-	BRL UJ	BRL	BRL	BRL	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL UJ	BRL	BRL	BRL	BRL
Hexachlorocyclopentadiene	77-47-4	5	-	BRL UJ	BRL	BRL	BRL	BRL
Hexachloroethane	67-72-1	5	-	BRL UJ	BRL UJ	BRL UJ	14.8 J	BRL UJ
Indeno (1,2,3-cd) pyrene	193-39-5	NS	0.002	BRL UJ	BRL UJ	BRL UJ	BRL	BRL
Isophorone	78-59-1	NS	50	BRL UJ	BRL	BRL	BRL	BRL
2-Methylphenol	91-57-6	NS	NS	BRL UJ	BRL	BRL	17.3 J	BRL
2-Methyphenol	95-48-7	NS	NS	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
3 & 4-Methylphenol	108-38-4, 106-44-5	NS	NS	BRL UJ	BRL	BRL	8.9 J	BRL
Naphthalene	91-20-3	NS	10	BRL UJ	BRL	BRL	22.4 J	BRL
2-Nitroaniline	88-74-4	5	-	BRL UJ	BRL	BRL	BRL	BRL
3-Nitroaniline	99-09-2	5	-	BRL UJ	BRL	BRL	BRL UJ	BRL
4-Nitroaniline	100-01-6	5	-	BRL UJ	BRL	BRL	BRL	BRL
Nitrobenzene	98-95-3	0.4	-	BRL UJ	BRL	BRL	8.9 J	BRL
2-Nitrophenol	88-75-5	NS	NS	BRL UJ	BRL	BRL	BRL UJ	BRL
4-Nitrophenol	100-02-7	NS	NS	1.21 J	BRL	1.26 J	BRL	BRL
N-Nitrosodimethylamine	62-75-9	NS	NS	BRL UJ	BRL	BRL	2.96 J	BRL UJ
N-Nitrosodi-n-propylamine	621-64-7	NS	NS	1.1 J	BRL UJ	BRL	BRL	BRL UJ
N-Nitrosodiphenylamine	86-30-6	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Pentachlorophenol	87-86-5	1**	-	BRL UJ	BRL	BRL	BRL	BRL
Phenanthrene	85-01-8	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Phenol	108-95-2	1**	-	BRL UJ	BRL	BRL	BRL	BRL
Pyrene	129-00-0	NS	50	BRL UJ	BRL	BRL	BRL	BRL
Pyridine	110-86-1	NS	50	BRL UJ	BRL	BRL	BRL	BRL UJ
1,2,4-Trichlorobenzene	120-82-1	5, 10*	-	BRL UJ	BRL	BRL	BRL	BRL
1-Methylnaphthalene	90-12-0	NS	NS	BRL UJ	BRL	BRL	7.5 J	BRL
2,4,5-Trichlorophenol	95-95-4	1**	-	BRL UJ	BRL	BRL	BRL	BRL
2,4,6-Trichlorophenol	88-06-2	1**	-	BRL UJ	BRL	BRL	BRL	BRL
Pentacloronitrobenzene	82-68-8	ND	-	BRL UJ	BRL	BRL	BRL	BRL
1,2,4,5-Tetrachlorobenzene	95-94-3	5, 10*	-	BRL UJ	BRL	BRL	BRL	BRL
Tentatively Identified Compounds (TICs)								
9-Octadecenamide, (Z)- (01)	000301-02-0	NS	NS	-	8	-	-	-
13-Docosenamide, (2)-	000112-84-5	NS	NS	-	-	5.6	-	-
13-Docosenamide, (2)-	000112-84-5	NS	NS	-	-	-	-	4.8
1H-Indene, 2,3-dihydro-5-me...	NA	NS	NS	-	-	-	12	-
1H-Indene, 2,3-dihydro-2,2-d...	20836-11-7	NS	NS	-	-	-	9.7	-
Benzene, (1-methylethyl)-	NA	NS	NS	-	-	-	5.7	-
Benzene, (3-methyl-2-butenyl)-	NA	NS	NS	-	-	-	4.9	-
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NS	NS	-	-	-	23	-
Benzene, 1,2,3-trimethyl- (01)	000526-73-8	NS	NS	-	-	-	48	-
Benzene, 1,2,4,5-tetramethyl- (01)	000095-93-2	NS	NS	-	-	-	16	-
Benzene, 1,3-dimethyl-	108-38-3	NS	NS	-	-	-	47	-
Benzene, 1-ethyl-3-methyl-	000620-14-4	NS	NS	-	-	-	110	-
Benzene, 1-methyl-3-propyl-	001074-43-7	NS	NS	-	-	-	29	-
Benzene, 1-methyl-4-(1-meth...)	000099-87-6	NS	NS	-	-	-	4.1	-
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NS	NS	-	-	-	7.6	-
Benzene, propyl-	103-65-1	NS	NS	-	-	-	18	-
Cyclic octaatomic sulfur	010544-50-0	NS	NS	-	-	-	47	-
Indane	496-11-7	NS	NS	-	-	-	24	-
n-Hexadecanoic Acid	112-39-0	NS	NS	-	-	-	5.1	-
TOTAL SVOCs	-	-	-	41,237	72.4	16,411	499,933	16,76

**Notes:**

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)

\* - Value of 5 ug/L applies to each trichlorobenzene or tetrachlorobenzene individually. Value of 10 ug/L, applies to the sum of these respective substances

\*\* - Value of 1 ug/L applies to the sum of all phenolic compounds

**TABLE 3**

Groundwater Analyses Summary - Metals  
Method SW846 6010C

**2018 Q1 Groundwater Monitoring**

700 Out Parcel

Syracuse, NY

AECC Project No. 18-051

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE								
Metal	CAS No.	Standard	Guidance Value	MW-5		MW-D (MW-5)		MW-7		MW-8		MW-9
				03/19/18		03/19/18		03/19/18		03/19/18		03/19/18
Aluminum	7429-90-5	2000	-	68.2	J	66.6	J	33	J	BRL		<b>2930</b> J
Antimony	7440-36-0	3	-	<b>6.5</b>		<b>6.2</b>		2.2	J	<b>4.4</b>	J	3.4 J
Arsenic	7440-38-2	25	-	BRL		BRL		BRL		BRL		BRL
Barium	7440-39-3	1000	-	230		230		680		518		537
Beryllium	7440-41-7	3	-	0.4	J	BRL		BRL		BRL		BRL
Cadmium	7440-43-9	5	-	0.4		BRL		BRL		0.4	J	0.4 J
Calcium	7440-70-2	NS	NS	133,000		140,000		176,000		241,000		230,000
Chromium	7440-47-3	50	-	3.2	J	3	J	1.7	J	1.7	J	5.4
Cobalt	7440-48-4	NS	NS	BRL		BRL		BRL		BRL		1 J
Copper	7440-50-8	200	-	6.4		8.2		6.7		BRL		5.8
Iron	7439-89-6	300	-	70.6	J	85.8	J	102	J	<b>6,360</b>		<b>5,520</b>
Lead	7439-92-1	25	-	BRL		BRL		BRL		BRL		BRL
Magnesium	7439-95-4	-	35000	17,700		18,100		30,000		<b>36,400</b>		<b>36,100</b>
Manganese	7439-96-5	300	-	BRL		2	J	15.4		<b>1,340</b>		<b>730</b>
Mercury*	7439-97-5	0.7	-	BRL		BRL		BRL		BRL		BRL
Nickel	7440-02-0	100	-	1	J	1.2	J	1.6	J	BRL		3.4 J
Potassium	7440-09-7	NS	NS	5,900		6,260		9,140		10,300		15,600
Selenium	7782-49-2	10	-	6.6	J	6.4	J	BRL		BRL		BRL
Silver	7440-22-4	50	-	BRL		BRL		BRL		BRL		BRL
Sodium	7440-23-5	20000	-	<b>1,330,000</b>	J	<b>1,400,000</b>	J	<b>409,000</b>	J	<b>60,400</b>	J	<b>449,000</b> J
Thallium	7440-28-0	-	0.5	BRL		BRL		BRL		BRL		BRL
Vanadium	7440-62-2	NS	NS	2.7	J	2.8	J	BRL		BRL		4.7 J
Zinc	7440-66-6	-	2000	13.8		15.4		4.2	J	3.4	J	10.6

**Notes:**

All concentrations in micrograms per liter (ug/L), or approximate parts per billion (ppb)

\*Mercury analyzed by Method EPA 245.1/7470A

**TABLE 4**  
**Groundwater Analyses Summary - VOCs**  
**Method SW-846 8260**

**2018 Q2 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5 06/13/18	MW-7 06/13/18	MW-8 06/13/18	MW-D (MW-8) 06/13/18	MW-9 06/13/18
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Acetone	67-64-1	NS	50	BRL	BRL	BRL	BRL	BRL
Acrylonitrile	107-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Benzene	71-43-2	1	-	BRL	BRL	44.1	42.6	0.79 UJ
Bromobenzene	108-86-1	5	-	BRL	BRL	BRL	BRL	BRL
Bromochloromethane	74-97-5	5	-	BRL	BRL	BRL	BRL	BRL
Bromodichloromethane	75-27-4	NS	50	BRL	BRL	BRL	BRL	BRL
Bromoform	75-25-2	NS	50	BRL	BRL	BRL	BRL	BRL
Bromomethane	74-83-9	5	-	BRL	UJ	BRL	UJ	BRL
2-Butanone (MEK)	78-93-3	NS	50	BRL	BRL	BRL	UJ	BRL
n-Butylbenzene	104-51-8	5	-	BRL	BRL	39.7	38	0.62 UJ
sec-Butylbenzene	135-98-8	5	-	BRL	BRL	17	14.5	1.11
tert-Butylbenzene	98-06-6	5	-	BRL	BRL	6.5	UJ	2.82 0.73 UJ
Carbon disulfide	75-15-0	NS	NS	BRL	BRL	BRL	BRL	BRL
Carbon tetrachloride	56-23-5	5	-	BRL	BRL	BRL	BRL	BRL
Chlorobenzene	108-90-7	5	-	BRL	BRL	BRL	BRL	BRL
Chloroethane	75-00-3	5	-	BRL	BRL	BRL	BRL	BRL
Chloroform	67-66-3	7	-	BRL	BRL	BRL	BRL	BRL
Chloromethane (methyl chloride)	74-87-3	5	-	BRL	UJ	BRL	UJ	BRL
2-Chlorotoluene	95-49-8	5	-	BRL	BRL	BRL	BRL	BRL
4-Chlorotoluene	106-43-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	BRL	BRL	BRL	BRL	BRL
Dibromochloromethane	124-48-1	NS	50	BRL	BRL	BRL	BRL	BRL
1,2-Dibromoethane (EDB)	106-93-4	0.0006	-	BRL	BRL	BRL	BRL	BRL
Dibromomethane	74-95-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
Dichlorodifluoromethane (Freon12)	75-71-8	5	-	BRL	UJ	BRL	UJ	BRL
1,1-Dichloroethane	75-34-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloroethane	107-06-2	0.6	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethene	75-35-4	5	-	BRL	BRL	BRL	BRL	BRL
cis-1,2-Dichloroethene	156-59-2	5	-	BRL	BRL	BRL	BRL	BRL
trans-1,2-Dichloroethene	156-60-5	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloropropane	78-87-5	1	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichloropropane	142-28-9	5	-	BRL	BRL	BRL	BRL	BRL
2,2-Dichloropropane	594-20-7	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloropropene	563-58-6	5	-	BRL	BRL	BRL	BRL	BRL
cis-1,3-Dichloropropene	10061-01-5	-		BRL	BRL	BRL	BRL	BRL
trans-1,3-Dichloropropene	10061-02-6	0.4**	-	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	100-41-4	5	-	BRL	BRL	301	342	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
2-Hexanone (MBK)	591-78-6	NS	50	BRL	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	-	BRL	UJ	37.3	40.1	2.14
4-Isopropyltoluene	99-87-6	5	-	BRL	BRL	16.5	13.8	BRL
Methyl tert-butyl ether	1634-04-4	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	BRL	BRL	BRL	BRL	BRL
Methylene chloride	75-09-2	5	-	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	BRL	171	204	BRL
n-Propylbenzene	103-65-1	5	-	BRL	UJ	116	115	1.92
Styrene	100-42-5	5	-	BRL	BRL	BRL	BRL	BRL
1,1,1,2-Tetrachloroethane	630-20-6	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2,2-Tetrachloroethane	79-34-5	5	-	BRL	BRL	BRL	BRL	BRL
Tetrachloroethene	127-18-4	5	-	BRL	BRL	BRL	BRL	BRL
Toluene	108-88-3	5	-	BRL	BRL	42.7	42.9	BRL
1,2,3-Trichlorobenzene	87-61-6	5	10*	BRL	BRL	BRL	BRL	BRL
1,2,4-Trichlorobenzene	120-82-1	5	10*	BRL	BRL	BRL	BRL	BRL
1,3,5-Trichlorobenzene	108-70-3	5	10*	BRL	BRL	BRL	BRL	BRL
1,1,1-Trichloroethane	71-55-6	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2-Trichloroethane	79-00-5	1	-	BRL	BRL	BRL	BRL	BRL
Trichloroethene	79-01-6	5	-	BRL	BRL	BRL	BRL	BRL
Trichlorofluoromethane (Freon 11)	75-69-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2,3-Trichloropropane	96-18-4	0.04	-	BRL	BRL	BRL	BRL	BRL
1,2,4-Trimethylbenzene	95-63-6	5	-	BRL	BRL	921	J 1120	0.85 UJ
1,3,5-Trimethylbenzene	108-67-8	5	-	BRL	BRL	274	313	0.55 UJ
Vinyl chloride	75-01-4	2	-	BRL	UJ	BRL	UJ	BRL UJ
m,p-xylene	17960123-1	5	-	BRL	BRL	693	739	0.6 UJ
o-xylene	95-47-6	5	-	BRL	BRL	163	126	BRL
Tetrahydrofuran	109-99-9	NS	50	BRL	BRL	BRL	BRL	BRL
Ethyl ether	60-29-7	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-amyl methyl ether	994-05-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Ethyl tert-butyl ether	637-92-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Di-isopropyl ether	108-20-3	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-Butanol / butyl alcohol	75-65-0	NS	NS	BRL	BRL	BRL	BRL	BRL
1,4-Dioxane	123-91-1	NS	NS	BRL	BRL	BRL	BRL	BRL
trans-1,4-Dichloro-2-butene	110-57-6	5	-	BRL	BRL	BRL	BRL	BRL
Ethanol	64-17-5	NS	NS	BRL	BRL	BRL	43.4	UJ
<b>Tentatively Identified Compounds (TICs)</b>								
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NS	NS	-	-	120	J	-
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NS	NS	-	-	120	J	-
Benzene, 1-ethyl-2-methyl-	611-14-3	NS	NS	-	-	410	J	100 J
Benzene, 2-ethyl-4-methyl-	622-96-8	NS	NS	-	-	120	J	-
Benzene, 1-ethyl-3-ethyl-	007525-62-4	NS	NS	-	-	-	-	7.9 J
Benzene, 2-ethyl-1,4-dime...	002039-89-6	NS	NS	-	-	160	J	-
Benzene, 1,4-diethyl-	105-05-5	NS	NS	-	-	-	-	5.5 J
Butane, 2-methyl-	78-78-4	NS	NS	-	-	92	J	-
Cyclobutane, (1-methylethyl)-...	001528-22-9	NS	NS	-	-	64	J	-
Cyclohexane, 1,1-dimethyl-	473-91-6	NS	NS	-	-	-	-	7.2 J
Cyclohexane, 1,3-dimethyl-....	000638-04-0	NS	NS	-	-	-	-	-
Cyclopentane, 1,2-dimethyl-...	008822-50-4	NS	NS	-	-	-	-	-
Cyclopentane, 1,3-dimethyl-	2453-00-1	NS	NS	-	-	-	-	-
Cyclopentane, methyl-	96-37-7	NS	NS	-	-	360	J	220 J
Cyclopentene, 1,2,3-trimethyl-	473-91-6	NS	NS	-	-	-	-	12 J
Pentane, 2-methyl-	107-83-5	NS	NS	-	-	-	-	-
Pentane, 3-methyl-	96-14-0	NS	NS	-	-	140	J	88 J
Isopropylcyclobutane	872-56-0	NS	NS	-	-	-	-	9.2 J
Cyclohexane	110-82-7	NS	NS	-	-	330	J	238 J
Methylcyclohexane	108-87-2	NS	NS	-	-	373	J	285 J
<b>TOTAL VOCs</b>	-	-	-	1.4	0.0	4975.8	4638.1	51.1

**Notes:**

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)

\* - Value of 5 ug/L applies to each trichlorobenzene individually. Value of 10 ug/L, applies to the sum of these substances

\*\* - Sum of cis and trans Dichloropropenes

**TABLE 5**  
**Groundwater Analyses Summary - SVOCs**  
**Method SW-846 8270**

**2018 Q2 Groundwater Monitoring**

**700 Out Parcel**

**Syracuse, NY**

**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Semi-Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-7	MW-8 <sup>D</sup>	MW-D <sup>D'</sup> (MW-8)	MW-9
				6/13/2018	6/13/2018	6/13/2018	6/13/2018	6/13/2018
Acenaphthene	83-32-9	20	20	BRL	BRL	BRL	BRL	BRL
Acenaphthylene	208-96-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Aniline	62-53-3	5	-	BRL	BRL	BRL	BRL	BRL
Anthracene	120-12-7	NS	50	BRL	BRL	BRL	BRL	BRL
Azobenzene/Diphenyliazene	103-33-3	5	0.5	BRL	BRL	BRL	BRL	BRL
Benzidine	92-87-5	5	-	BRL	BRL	BRL	BRL	BRL
Benzo (a) anthracene	56-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Benzo (a) pyrene	50-32-8	ND	-	BRL	BRL	BRL	BRL	BRL
Benzo (b) fluoranthene	205-99-2	NS	0.002	BRL	BRL	BRL	BRL	BRL
Benzo (g,h,i) perylene	191-24-2	NS	NS	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzo (k) fluoranthene	207-08-9	NS	0.002	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzoic acid	65-85-0	NS	NS	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Benzyl alcohol	100-51-6	NS	NS	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroethoxy)methane	111-91-1	5	-	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroethyl)ether	111-44-4	1	-	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroisopropyl)ether	108-60-1	5	-	BRL	BRL	BRL	BRL	BRL
Bis(2-ethylhexyl)phthalate	117-81-7	5	-	BRL	BRL	2.53	5.05 UJ	1.74 UJ
4-Bromophenyl phenyl ether	101-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Butyl benzyl phthalate	85-68-7	NS	50	BRL	BRL	BRL	BRL	BRL
Carbazole	86-74-8	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Chloro-3-methylphenol	59-50-7	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Chloroaniline	106-47-8	5	-	BRL	BRL	BRL	BRL	BRL
2-Chloronaphthalene	91-58-7	NS	10	BRL	BRL	BRL	BRL	BRL
2-Chlorophenol	95-57-8	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Chrysene	218-01-9	NS	0.002	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Dibenz (a,h) anthracene	53-70-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Dibenzofuran	132-64-9	NS	NS	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
3,3'-Dichlorobenzidine	91-94-1	5	-	BRL	BRL	BRL	BRL	BRL
2,4-Dichlorophenol	120-83-2	1**	-	BRL	BRL	BRL	BRL	BRL
Diethyl phthalate	84-66-2	NS	50	BRL	BRL	BRL	BRL	BRL
Dimethyl phthalate	131-11-3	NS	50	BRL	BRL	BRL	BRL	BRL
2,4-Dimethylphenol	105-67-9	1**	-	BRL	BRL	BRL	BRL	BRL
Di-n-butyl phthalate	84-74-2	50	-	BRL	BRL	BRL	BRL	BRL
4,6-Dinitro-2-methylphenol	534-52-1	NS	NS	BRL	BRL	BRL	BRL	BRL
2,4-Dinitrophenol	51-28-5	1**	-	BRL	BRL	BRL	BRL	BRL
2,4-Dinitrotoluene	121-14-2	5	-	BRL	BRL	BRL	BRL	BRL
2,6-Dinitrotoluene	606-20-2	5	-	BRL	BRL UJ	BRL UJ	0.916 UJ	BRL UJ
Di-n-octyl phthalate	117-84-0	NS	50	BRL	BRL	BRL	0.579 UJ	BRL UJ
Fluoranthene	206-44-0	NS	50	BRL	BRL	BRL	BRL	BRL
Fluorene	86-73-7	NS	50	BRL	BRL	BRL	BRL	BRL
Hexachlorobenzene	118-74-1	0.04	-	BRL	BRL	BRL	BRL	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
Hexachlorocyclopentadiene	77-47-4	5	-	BRL	BRL	BRL	BRL	BRL
Hexachloroethane	67-72-1	5	-	BRL	BRL	BRL	BRL	BRL
Indeno (1,2,3-cd) pyrene	193-39-5	NS	0.002	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Isophorone	78-59-1	NS	50	BRL	BRL	BRL	BRL	BRL
2-Methylnaphthalene	91-57-6	NS	NS	BRL	BRL	65.2	162	BRL
2-Methylphenol	95-48-7	NS	NS	BRL	BRL	BRL	BRL	BRL
3 & 4-Methylphenol	108-39-4, 106-44-5	NS	NS	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	BRL	53.9	82.7	BRL
2-Nitroaniline	88-74-4	5	-	BRL	BRL	BRL	BRL	BRL
3-Nitroaniline	99-09-2	5	-	BRL	BRL	BRL	BRL	BRL
4-Nitroaniline	100-01-6	5	-	BRL	BRL	BRL	BRL	BRL
Nitrobenzene	98-95-3	0.4	-	BRL	BRL	BRL	BRL	BRL
2-Nitrophenol	88-75-5	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Nitrophenol	100-02-7	NS	NS	BRL	BRL	BRL	BRL	BRL
N-Nitrosodimethylamine	62-75-9	NS	NS	BRL	UJ	BRL UJ	BRL UJ	BRL UJ
N-Nitrosodim-propylamine	621-64-7	NS	NS	BRL	BRL	BRL	BRL	BRL
N-Nitrosodiphenylamine	86-30-6	NS	50	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Pentachlorophenol	87-86-5	1**	-	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Phenanthrene	85-01-8	NS	50	BRL	BRL	BRL	BRL	BRL
Phenol	108-95-2	1**	-	BRL	UJ	BRL UJ	BRL UJ	BRL UJ
Pyrene	129-00-0	NS	50	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
Pyridine	110-86-1	NS	50	BRL	BRL UJ	BRL UJ	BRL UJ	BRL UJ
1,2,4-Trichlorobenzene	120-82-1	5, 10*	-	BRL	BRL	BRL	BRL	BRL
1-Methylnaphthalene	90-12-0	NS	NS	BRL	BRL	27.8	53.3	BRL
2,4,5-Trichlorophenol	95-95-4	1**	-	BRL	BRL	BRL	BRL	BRL
2,4,6-Trichlorophenol	88-06-2	1**	-	BRL	BRL	BRL	BRL	BRL
Pentachloronitrobenzene	82-68-8	ND	-	BRL	BRL	BRL	BRL	BRL
1,2,4,5-Tetrachlorobenzene	95-94-3	5, 10*	-	BRL	BRL	BRL	BRL	BRL
<b>Tentatively Identified Compounds (TICs)</b>								
5-Eicosene, (E)-	074685-30-6	NS	NS	14	J, B	-	-	-
Benzioic acid, 2,4-dichloro-	000050-84-0	NS	NS	-	-	-	-	8.5 J
1,3-Cyclopentadiene, 1,2,3,...	076089-59-3	NS	NS	-	-	26	J	-
1-Nonadecene	018435-45-5	NS	NS	-	-	19	J	-
1H-Indene, 2,3-dihydro-1,3...	NA	NS	NS	-	-	18	J	57 J
2-Tolyloxane	002783-26-8	NS	NS	-	-	-	300	J
Benzene, (1-methyl-1-butetyl)-	53172-84-2	NS	NS	-	-	-	220	J
Benzene, (1-methylethyl)-		NS	NS	-	-	16	J	-
Benzene, 1,2,3-trimethyl-	95-36-3	NS	NS	-	-	94	J	220 J
Benzene, 1,2,4-tetramethyl-	95-93-2	NS	NS	-	-	24	J	320 J
Benzene, 1,2-diethyl-	135-01-3	NS	NS	-	-	-	170	J
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NS	NS	-	-	-	120	J
Benzene, 1-ethyl-2-methyl-	000611-14-3	NS	NS	-	-	-	320	J
Benzene, 1-ethyl-3-methyl-	000620-14-4	NS	NS	-	-	-	260	J
Benzene, 1,2,4-trimethyl-	95-63-6	NS	NS	-	-	55	J	-
Benzene, 1,3,5-trimethyl-	108-67-8	NS	NS	-	-	85	J	-
Benzene, 1-ethyl-4-methyl-	622-96-8	NS	NS	-	-	140	J	-
Benzene, 1-ethyl-2-(1-meth...)	000527-84-4	NS	NS	-	-	70	J	290 J
Benzene, 1-methyl-3-propyl-	001074-43-7	NS	NS	-	-	59	J	-
Benzene, 1-methyl-4-propyl-	001074-55-1	NS	NS	-	-	14	J	63 J
Benzene, 2-ethoxy-1,4-dime...	002039-89-6	NS	NS	-	-	44	J	-
Benzene, 2-ethyl-1,3-dimethyl-	002870-04-4	NS	NS	-	-	81	J	-
Benzene, propyl-	103-65-1	NS	NS	-	-	22	J	58 J
Cyclic octaatomic sulfur	010544-50-0	NS	NS	-	-	42	J	57 J
Ethylibenzene	100-41-4	NS	NS	-	-	79	J	66 J
Indane	496-11-7	NS	NS	-	-	52	J	110 J
p-Xylene	106-42-3	NS	NS	-	-	200	J	160 J
Undecane	1120-21-4	NS	NS	-	-	-	120	J
n-Hexadecanoic Acid	112-39-0	NS	NS	13	JB	-	24	JB
<b>TOTAL SVOCs</b>		-	-	27	0	1314.9	3214.1	29.2

**Notes:**

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)

\* Value of 5 ug/L applies to each trichlorobenzene or tetrachlorobenzene individually. Value of 10 ug/L applies to the sum of these respective substances

\*\* Value of 1 ug/L applies to the sum of all phenolic compounds

**TABLE 6**

Groundwater Analyses Summary - Metals  
Method SW846 6010C

**2018 Q2 Groundwater Monitoring**

700 Out Parcel

Syracuse, NY

AECC Project No. 18-051

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE							
Metal	CAS No.	Standard	Guidance Value	MW-5		MW-7		MW-8		MW-D (MW-8)	MW-9
				06/13/18	06/13/18	06/13/18	06/13/18	06/13/18	06/13/18	06/13/18	06/13/18
Aluminum	7429-90-5	2,000	-	<b>3,310</b>		287	BRL	BRL		<b>2,190</b>	
Antimony	7440-36-0	3	-	2.4	UJ	BRL	BRL	BRL		BRL	
Arsenic	7440-38-2	25	-	4.55		18.35	15	17.65		5	
Barium	7440-39-3	1,000	-	342		303	<b>1,870</b>	<b>1,870</b>		468	
Beryllium	7440-41-7	3	-	BRL		BRL	UJ	BRL		BRL	
Cadmium	7440-43-9	5	-	0.5	UJ	BRL	BRL	BRL	0.7	UJ	
Calcium	7440-70-2	NS	NS	181,000	J	265,000	J	262,000	J	269,000	J
Chromium	7440-47-3	50	-	5.5		BRL	BRL	BRL	3.9	UJ	
Cobalt	7440-48-4	NS	NS	2.3	UJ	2	UJ	BRL	BRL	1.6	UJ
Copper	7440-50-8	200	-	12.4		BRL	BRL	BRL	BRL	5.4	
Iron	7439-89-6	300	-	<b>3,130</b>		<b>3,710</b>		<b>1,660</b>	<b>1,600</b>	<b>8,720</b>	
Lead	7439-92-1	25	-	9.2		BRL	16.8	16.6		BRL	
Magnesium	7439-95-4	-	35,000	25,200	J	<b>55,200</b>	J	<b>43,400</b>	J	<b>43,300</b>	J
Manganese	7439-96-5	300	-	108	J	41.8	UJ	441	UJ	456	UJ
Mercury*	7439-97-5	0.7	-	BRL		BRL		BRL		BRL	
Nickel	7440-02-0	100	-	4	UJ	2	UJ	BRL	BRL	0.3	UJ
Potassium	7440-09-7	NS	NS	9,380		4,680		5,880		5,860	15,400
Selenium	7782-49-2	10	-	BRL		BRL		BRL		BRL	
Silver	7440-22-4	50	-	BRL		BRL		BRL		BRL	
Sodium	7440-23-5	20,000	-	<b>1,660,000</b>	J	<b>1,310,000</b>	J	<b>141,000</b>	J	<b>140,000</b>	J
Thallium	7440-28-0	-	0.5	BRL	UJ	BRL	UJ	BRL		BRL	
Vanadium	7440-62-2	NS	NS	7		BRL		BRL		BRL	4.8
Zinc	7440-66-6	-	2,000	32.9		4.2	UJ	3.3	UJ	2.6	UJ

**Notes:**

All concentrations in micrograms per liter (ug/L), or approximate parts per billion (ppb)

\*Mercury analyzed by Method EPA 245.1/7470A

**TABLE 7**  
**Groundwater Analyses Summary - VOCs**  
**Method SW-846 8260**

**2018 Q3 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-7	MW-8	MW-9	MW-D (MW-9)
		09/06/18	09/06/18	09/07/18	09/07/18	09/07/18	09/07/18	09/07/18
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Acetone	67-64-1	NS	50	BRL	UJ+	BRL	UJ+	5.01 UJ
Acrylonitrile	107-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Benzene	71-43-2	1	-	BRL	BRL	34.2	BRL	BRL
Bromobenzene	108-86-1	5	-	BRL	BRL	BRL	BRL	BRL
Bromo-chloromethane	74-97-5	5	-	BRL	BRL	BRL	BRL	BRL
Bromo-dichloromethane	75-27-4	NS	50	BRL	BRL	BRL	BRL	BRL
Bromoform	75-25-2	NS	50	BRL	BRL	BRL	BRL	BRL
Bromomethane	74-83-9	5	-	BRL	UJ+	BRL	UJ+	BRL UJ+
2-Butanone (MEK)	78-93-3	NS	50	BRL	BRL	BRL	BRL	BRL
n-Butylbenzene	104-51-8	5	-	2.27	BRL	24.6	1.62	1.82
sec-Butylbenzene	135-98-8	5	-	1.87	BRL	8.1 UJ	0.75 UJ	1.12
tert-Butylbenzene	98-06-6	5	-	0.33	UJ	BRL	0.61 UJ	0.6 UJ
Carbon disulfide	75-15-0	NS	NS	BRL	BRL	BRL	BRL	BRL
Carbon tetrachloride	56-23-5	5	-	BRL	BRL	BRL	BRL	BRL
Chlorobenzene	108-90-7	5	-	BRL	BRL	BRL	BRL	BRL
Chloroethane	75-00-3	5	-	BRL	UJ+	BRL	UJ+	BRL UJ+
Chloroform	67-66-3	7	-	BRL	BRL	BRL	BRL	BRL
Chloromethane (methyl chloride)	74-87-3	5	-	BRL	U B	BRL	U B	BRL U B
2-Chlorotoluene	95-49-8	5	-	BRL	BRL	BRL	BRL	BRL
4-Chlorotoluene	106-43-4	5	-	BRL	UJ	BRL	UJ	BRL UJ
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	BRL	BRL	BRL	BRL	BRL
Dibromochloromethane	124-48-1	NS	50	BRL	BRL	BRL	BRL	BRL
1,2-Dibromoethane (EDB)	106-93-4	0.0006	-	BRL	BRL	BRL	BRL	BRL
Dibromomethane	74-95-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
Dichlorodifluoromethane (Freon12)	75-71-8	5	-	BRL	UJ	BRL	UJ	BRL UJ
1,1-Dichloroethane	75-34-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloroethane	107-06-2	0.6	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethene	75-35-4	5	-	BRL	UJ+	BRL	UJ+	BRL UJ+
cis-1,2-Dichloroethene	156-59-2	5	-	BRL	BRL	BRL	BRL	BRL
trans-1,2-Dichloroethene	156-60-5	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloropropane	78-87-5	1	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichloropropane	142-28-9	5	-	BRL	BRL	BRL	BRL	BRL
2,2-Dichloropropane	594-20-7	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloropropene	563-58-6	5	-	BRL	BRL	BRL	BRL	BRL
cis-1,3-Dichloropropene	10061-01-5	-	-	BRL	BRL	BRL	BRL	BRL
trans-1,3-Dichloropropene	10061-02-6	0.4**	-	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	100-41-4	5	-	BRL	BRL	352	BRL	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
2-Hexanone (MBK)	591-78-6	NS	50	BRL	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	-	4.64	BRL	41.2	1.13	1.56
4-isopropyltoluene	99-87-6	5	-	0.72	UJ	10.3	0.82 UJ	0.81 UJ
Methyl tert-butyl ether	1634-04-4	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	BRL	BRL	BRL	BRL	BRL
Methylene chloride	75-09-2	5	-	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	UJ	BRL	164 J	BRL UJ
n-Propylbenzene	103-65-1	5	-	8.93	BRL	74.9	1.43	2.04
Styrene	100-42-5	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2-Tetrachloroethane	630-20-6	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2,2-Tetrachloroethane	79-34-5	5	-	BRL	BRL	BRL	BRL	BRL
Tetrachloroethene	127-18-4	5	-	BRL	BRL	BRL	BRL	BRL
Toluene	108-88-3	5	-	0.66	UJ	49.4	BRL	BRL
1,2,3-Trichlorobenzene	87-61-6	5	10*	BRL	UJ	BRL	UJ	BRL UJ
1,2,4-Trichlorobenzene	120-82-1	5	10*	BRL	UJ	BRL	UJ	BRL UJ
1,3,5-Trichlorobenzene	108-70-3	5	10*	BRL	UJ	BRL	UJ	BRL UJ
1,1,1-Trichloroethane	71-55-6	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2-Trichloroethane	79-00-5	1	-	BRL	BRL	BRL	BRL	BRL
Trichloroethene	79-01-6	5	-	BRL	BRL	BRL	BRL	BRL
Trichlorofluoromethane (Freon 11)	75-69-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2,3-Trichloropropane	96-18-4	0.04	-	BRL	BRL	BRL	BRL	BRL
1,2,4-Trimethylbenzene	95-63-6	5	-	0.95	UJ	922 J	0.69 UJ	0.68 UJ
1,3,5-Trimethylbenzene	108-67-8	5	-	0.62	UJ	195	BRL	BRL
Vinyl chloride	75-01-4	2	-	BRL	UJ+	BRL	UJ+	BRL UJ+
m,p-xylene	17960123-1	5	-	1.08	UJ	BRL	629 J	BRL UJ
o-xylene	95-47-6	5	-	BRL	BRL	84.6	BRL	BRL
Tetrahydrofuran	109-99-9	NS	50	BRL	BRL	BRL	BRL	BRL
Ethyl ether	60-29-7	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-amyl methyl ether	994-05-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Ethyl tert-butyl ether	637-92-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Di-isopropyl ether	108-20-3	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-Butanol / butyl alcohol	75-65-0	NS	NS	BRL	BRL	BRL	BRL	BRL
1,4-Dioxane	123-91-1	NS	NS	BRL	BRL	BRL	BRL	BRL
trans-1,4-Dichloro-2-butene	110-57-6	5	-	BRL	BRL	BRL	BRL	BRL
Ethanol	64-17-5	NS	NS	BRL	BRL	BRL	BRL	BRL
Tentatively Identified Compounds (TICs)								
1-Phenyl-1-Butene	824-90-8	NS	NS	12	J	-	120 J	12 J
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NS	NS	18	J	-	130 J	-
Butane, 2,3-dimethyl-	79-29-8	NS	NS	35	J	-	9.4 J	9.9 J
Butane, 2-methyl-	78-78-4	NS	NS	31	J	-	180 J	-
Cyclopentane, 1,1-dimethyl-	001638-26-2	NS	NS	14	J	-	-	7.3 J
Cyclopentane, methyl-	96-37-7	NS	NS	19	J	-	250 J	-
Cyclopentene, 1,5-dimethyl-	016491-15-9	NS	NS	13	J	-	-	-
Isopropylcyclobutane	872-56-0	NS	NS	23	J	-	-	15 J
Pentane, 2-methyl-	107-83-5	NS	NS	42	J	-	100 J	-
Pentane, 3-methyl-	96-14-0	NS	NS	32	J	-	-	-
Benzene, 1-ethyl-2-methyl-	611-14-3	NS	NS	-	-	-	220 J	-
Benzene, 1-ethyl-4-methyl-	622-96-8	NS	NS	-	-	-	210 J	-
Indan, 1-methyl-	000767-58-8	NS	NS	-	-	-	99 J	-
Indane	496-11-7	NS	NS	-	-	-	220 J	-
Benzene, 1,3-diethyl-	141-93-5	NS	NS	-	-	-	-	7.4 J
Cyclohexane, 1,2-dimethyl-	NS	NS	-	-	-	-	-	9.9 J
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NS	NS	-	-	-	-	6.6 J
Benzene, 1,3-diethyl-	141-93-5	NS	NS	-	-	-	-	8.2 J
Cyclohexane, 1,1-dimethyl-	NS	NS	-	-	-	-	-	7.8 J
Cyclohexane, 1,3-dimethyl-....	000638-04-0	NS	NS	-	-	-	-	11 J
Cyclopentane, 1,2-dimethyl-	1192-18-3	NS	NS	-	-	-	-	16 J
Cyclopentene, 1,2,3-trimethyl-	473-91-6	NS	NS	-	-	-	-	16 J
TOTAL VOCs	-	-	-	261.07	0	4118.3	65.76	104.93

**Notes:**

All concentrations in micrograms per liter ( $\mu\text{g/L}$ )/parts per billion (ppb)  
 \* - Value of 5  $\mu\text{g/L}$  applies to each trichlorobenzene individually. Value of 10  $\mu\text{g/L}$ , applies to the sum of these substances  
 \*\* - Sum of cis and trans Dichloropropenes

Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 8**  
**Groundwater Analyses Summary - SVOCs**  
**Method SW-846 8270**

**2018 Q3 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE					
Semi-Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5 9/6/2018	MW-7 9/6/2018	MW-8 9/7/2018	MW-9 9/7/2018	MW-D (MW-9) 9/7/2018	
Aceanaphthalene	83-32-9	20	20	BRL	BRL	BRL	BRL	BRL	
Acenaphthylene	208-96-8	NS	NS	BRL	BRL	BRL	BRL	BRL	
Aniline	62-53-3	5	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Anthracene	120-12-7	NS	50	BRL	BRL	BRL	BRL	BRL	
Azobenzene/Diphenylidiazene	103-33-3	5	0.5	BRL UJ	BRL UJ	BRL	BRL	BRL	
Benzidine	92-87-5	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	
Benzo (a) anthracene	56-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL	
Benzo (a) pyrene	50-32-8	ND	-	BRL	BRL	BRL	BRL	BRL	
Benzo (b) fluoranthene	205-99-2	NS	0.002	BRL	BRL	BRL	BRL	BRL	
Benzo (g,h,i) perlylene	191-24-2	NS	NS	BRL	BRL	BRL	BRL	BRL	
Benzo (k) fluoranthene	207-08-9	NS	0.002	BRL	BRL	BRL	BRL	BRL	
Benzoic acid	65-85-0	NS	NS	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Benzyl alcohol	100-51-6	NS	NS	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Bis(2-chloroethoxy)methane	111-91-1	5	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Bis(2-chloroethyl)ether	111-44-4	1	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Bis(2-chloroisopropyl)ether	108-60-1	5	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
Bis(2-ethylhexyl)phthalate	117-81-7	5	-	BRL	BRL	2.67 UJ	4.21 UJ	2.67 UJ	
4-Bromophenyl phenyl ether	101-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL	
Butyl benzyl phthalate	85-68-7	NS	50	BRL	BRL	BRL	BRL	BRL	
Carbazole	86-74-8	NS	NS	BRL	BRL	BRL	BRL	BRL	
4-Chloro-3-methylphenol	59-50-7	NS	NS	BRL	BRL	BRL	BRL	BRL	
4-Chloroaniline	106-47-8	5	-	BRL	BRL	BRL	BRL	BRL	
2-Chloronaphthalene	91-58-7	NS	10	BRL	BRL	BRL	BRL	BRL	
2-Chlorophenol	95-57-8	NS	NS	BRL	BRL	BRL	BRL	BRL	
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	BRL	BRL	BRL	BRL	BRL	
Chrysene	218-01-9	NS	0.002	BRL	BRL	BRL	BRL	BRL	
Dibenz(a,h) anthracene	53-70-3	NS	NS	BRL	BRL	BRL	BRL	BRL	
Dibenzofuran	132-84-9	NS	NS	BRL	BRL	BRL	BRL	BRL	
1,2-Dichlorobenzene	95-50-1	3	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
1,3-Dichlorobenzene	541-73-1	3	-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL	
3,3'-Dichlorobenzidine	91-94-1	5	-	BRL	BRL	BRL	BRL	BRL	
2,4-Dichlorophenol	120-83-2	1**	-	BRL	BRL	BRL	BRL	BRL	
Diethyl phthalate	84-66-2	NS	50	BRL	BRL	BRL	BRL	BRL	
Dimethyl phthalate	131-11-3	NS	50	BRL UJ	BRL UJ	BRL	BRL	BRL	
2,4-Dimethylphenol	105-67-9	1**	-	BRL	BRL	BRL	BRL	BRL	
Di-n-butyl phthalate	84-74-2	50	-	BRL	BRL	BRL	BRL	BRL	
4,6-Dinitro-2-methylphenol	534-52-1	NS	NS	BRL UJ	BRL UJ	BRL	BRL	BRL	
2,4-Dinitrophenol	51-28-5	1**	-	BRL	BRL	BRL	BRL	BRL	
2,4-Dinitrotoluene	121-14-2	5	-	BRL	BRL	BRL	BRL	BRL	
2,6-Dinitrotoluene	606-20-2	5	-	BRL	BRL	BRL	BRL	BRL	
Di-n-octyl phthalate	117-84-0	NS	50	5.45	BRL	BRL	BRL	BRL	
Fluoranthene	206-44-0	NS	50	BRL UJ	BRL UJ	BRL	BRL	BRL	
Fluorene	86-73-7	NS	50	BRL	BRL	BRL	BRL	BRL	
Hexachlorobenzene	118-74-1	0.04	-	BRL	BRL	BRL	BRL	BRL	
Hexachlorobutadiene	87-68-3	0.5	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ	
Hexachlorocyclopentadiene	77-47-4	5	-	BRL	BRL	BRL	BRL	BRL	
Hexachloroethane	67-72-1	5	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ	
Indeno (1,2,3-cd) pyrene	193-39-5	NS	0.002	BRL	BRL	BRL	BRL	BRL	
Isophorone	78-59-1	NS	50	BRL	BRL	BRL	BRL	BRL	
2-Methylnaphthalene	91-57-6	NS	NS	BRL	BRL	11.2	BRL	BRL	
2-Methylphenol	95-48-7	NS	NS	BRL	BRL	BRL	BRL	BRL	
3 & 4-Methylphenol	108-39-4, 106-44-5	NS	NS	BRL	BRL	BRL	BRL	BRL	
Naphthalene	91-20-3	NS	10	BRL	BRL	38.1	BRL	BRL	
2-Nitroaniline	88-74-4	5	-	BRL	BRL	BRL	BRL	BRL	
3-Nitroaniline	99-09-2	5	-	BRL	BRL	BRL	BRL	BRL	
4-Nitroaniline	100-01-6	5	-	BRL	BRL	BRL	BRL	BRL	
Nitrobenzene	98-95-3	0.4	-	BRL	BRL	BRL	BRL	BRL	
2-Nitrophenol	88-75-5	NS	NS	BRL	BRL	BRL	BRL	BRL	
4-Nitrophenol	100-02-7	NS	NS	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
N-Nitrosodimethylamine	62-75-9	NS	NS	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	BRL UJ-	
N-Nitrosod-n-propylamine	621-64-7	NS	NS	BRL	BRL	BRL	BRL	BRL	
N-Nitrosodiphenylamine	86-30-6	NS	50	BRL UJ	BRL UJ	BRL	BRL	BRL	
Pentachlorophenol	87-86-5	1**	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ	
Phenanthrene	85-01-8	NS	50	BRL	BRL	BRL	BRL	BRL	
Phenol	108-95-2	1**	-	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ	
Pyrene	129-00-0	NS	50	BRL	BRL	BRL	BRL	BRL	
Pyridine	110-86-1	NS	50	BRL UJ	BRL UJ	BRL UJ	BRL UJ	BRL UJ	
1,2,4-Trichlorobenzene	120-92-1	5, 10*	-	BRL	BRL	BRL	BRL	BRL	
1-Methylnaphthalene	90-12-0	NS	NS	BRL	BRL	15	BRL	BRL	
2,4,5-Trichlorophenol	95-95-4	1**	-	BRL	BRL	BRL	BRL	BRL	
2,4,6-Trichlorophenol	88-06-2	1**	-	BRL	BRL	BRL	BRL	BRL	
Pentachloronitrobenzene	82-68-8	ND	-	BRL	BRL	BRL	BRL	BRL	
1,2,4,5-Tetrachlorobenzene	95-94-3	5, 10*	-	BRL	BRL	BRL	BRL	BRL	
Tentatively Identified Compounds (TCs)									
1-Docosene	001599-67-3	NS	NS	5.6 J	-	-	-	-	-
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NS	NS	4 J	-	25 J	-	-	-
Benzene, 2-ethyl-1,4-dime...	002039-89-6	NS	NS	4.9 J	-	56 J	-	-	-
1H-Indene, 2,3-dihydro-4,7...	NA	NS	NS	-	-	13 J	-	-	-
1H-Indene, 2,3-dihydro-5-me...	NA	NS	NS	-	-	29 J	-	-	-
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NS	NS	-	-	22 J	-	-	-
Benzene, 1,2,3-trimethyl- (02)	000526-73-8	NS	NS	-	-	270 J	-	-	-
Benzene, 1,2,4-trimethyl-	95-63-6	NS	NS	-	-	140 J	-	-	-
Benzene, 1,3-dimethyl-	108-38-3	NS	NS	-	-	180 J	-	-	-
Benzene, 1-ethyl-2-methyl-	611-14-3	NS	NS	-	-	110 J	-	-	-
Benzene, 1-methyl-4-propyl-	001074-55-1	NS	NS	-	-	14 J	-	-	-
Benzene, 4-ethyl-1,2-dimethyl- (02)	000934-80-5	NS	NS	-	-	72 J	-	-	-
Benzolic acid, 2,4-dichloro-	000050-84-0	NS	NS	-	-	11 J	8.2 J	-	-
Cyclic octaatomic sulfur	010544-50-0	NS	NS	-	-	39 J	-	-	-
Cyclobutane, (1-methylethyl...	001528-22-9	NS	NS	-	-	13 J	-	-	-
Ethylbenzene	100-41-4	NS	NS	-	-	18 J	-	-	-
Indane	496-11-7	NS	NS	-	-	90 J	-	-	-
o-Xylene	95-47-6	NS	NS	-	-	34 J	-	-	-
1-Heptadecanol	001454-85-9	NS	NS	-	-	-	6.3 J	-	-
Benzene, 1,3-diethyl-	141-93-5	NS	NS	-	-	-	5.5 J	4.6 J	-
E-14-Hexadecenal	330207-53-9	NS	NS	-	-	-	-	5.1 J	-
TOTAL SVOCs	-	-	-	19.95	0	1202.97	24.21	12.37	

Notes:

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)  
\*- Value of 5 ug/L applies to each trichlorobenzene or tetrachlorobenzene individually. Value of 10 ug/L, applies to the sum of these respective substances  
\*\* - Value of 1 ug/L applies to the sum of all phenolic compounds  
Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 9**

Groundwater Analyses Summary - Metals  
Method SW846 6010C

**2018 Q3 Groundwater Monitoring**

700 Out Parcel

Syracuse, NY

AECC Project No. 18-051

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE							
Metal	CAS No.	Standard	Guidance Value	MW-5		MW-7		MW-8		MW-9	MW-D (MW-9)
				09/06/18	09/06/18	09/06/18	09/07/18	09/07/18	09/07/18	09/07/18	09/07/18
Aluminum	7429-90-5	2,000	-	866	506	15	UJ	870		742	
Antimony	7440-36-0	3	-	BRL	BRL	BRL		BRL	BRL		
Arsenic	7440-38-2	25	-	2.5	UJ	14.6		3.75	UJ	3	UJ
Barium	7440-39-3	1,000	-	616	234	800		604		544	
Beryllium	7440-41-7	3	-	BRL	BRL	BRL		BRL	BRL		
Cadmium	7440-43-9	5	-	BRL	BRL	BRL		0.4	UJ	BRL	
Calcium	7440-70-2	NS	NS	188,000	337,000	256,000		182,000		187,000	
Chromium	7440-47-3	50	-	2.1	UJ	1.4	UJ	BRL	2.2	UJ	2 UJ
Cobalt	7440-48-4	NS	NS	1.5	UJ	1	UJ	BRL	0.8	UJ	0.8 UJ
Copper	7440-50-8	200	-	6.8	BRL	BRL		2.9	UJ	2.8	UJ
Iron	7439-89-6	300	-	2,110	3,570	5,040		5,500		5,520	
Lead	7439-92-1	25	-	BRL	BRL	12.2		BRL	BRL		
Magnesium	7439-95-4	-	35,000	21,500	71,900	33,400		25,400		26,400	
Manganese	7439-96-5	300	-	180	77.3	591		337		302	
Mercury*	7439-97-5	0.7	-	BRL	BRL	BRL		BRL	BRL		
Nickel	7440-02-0	100	-	2.7	UJ	2	UJ	BRL	1.8	UJ	1.4 UJ
Potassium	7440-09-7	NS	NS	12,100	5,550	9,140		10,900		9,780	
Selenium	7782-49-2	10	-	BRL	BRL	BRL		BRL	BRL		
Silver	7440-22-4	50	-	BRL	BRL	BRL		BRL	BRL		
Sodium	7440-23-5	20,000	-	2,180,000	1,350,000	371,000		557,000		581,000	
Thallium	7440-28-0	-	0.5	BRL	BRL	BRL		BRL	BRL		
Vanadium	7440-62-2	NS	NS	3.7	UJ	BRL		2.8	UJ	2.2	UJ
Zinc	7440-66-6	-	2,000	13.6	UJ	10.6	UJ	3.2	UJ	7.1	UJ

**Notes:**

All concentrations in micrograms per liter (ug/L), or approximate parts per billion (ppb)

\*Mercury analyzed by Method EPA 245.1/7470A

Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 10**  
**Groundwater Analyses Summary - VOCs**  
**Method SW-846 8260**

**2018 Q4 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-7	MW-8	MW-9	MWD (MW-9)
				12/05/18	12/05/18	12/05/18	12/05/18	12/05/18
1,1,2-Trichlorotrifluoroethane (Freon 113)	76-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Acetone	67-64-1	NS	50	BRL	BRL	2 UJ	2 UJ	
Acrylonitrile	107-13-1	5	-	BRL	BRL	BRL	BRL	BRL
Benzene	71-43-2	1	-	BRL	BRL	0.3 UJ	0.3 UJ	
Bromobenzene	108-86-1	5	-	BRL	BRL	BRL	BRL	BRL
Bromochloromethane	74-97-5	5	-	BRL	BRL	BRL	BRL	BRL
Bromodichloromethane	75-27-4	NS	50	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Bromoform	75-25-2	NS	50	BRL	BRL	BRL	BRL	BRL
Bromomethane	74-83-9	5	-	BRL	BRL	BRL	BRL	BRL
2-Butanone (MEK)	78-93-3	NS	50	BRL	BRL	11 UJ	BRL	BRL
1-Butylbenzene	104-51-8	5	-	BRL	BRL	8 UJ	0.3 UJ	0.4 UJ
sec-Butylbenzene	135-98-8	5	-	BRL	BRL	4 UJ	1 UJ	1 UJ
tert-Butylbenzene	98-06-6	5	-	BRL	BRL	0.7 UJ	0.4 UJ	0.4 UJ
Carbon disulfide	75-15-0	NS	NS	BRL	BRL	BRL	BRL	BRL
Carbon tetrachloride	56-23-5	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Chlorobenzene	108-90-7	5	-	BRL	BRL	BRL	BRL	BRL
Chloroethane	75-00-3	5	-	BRL	BRL	BRL	BRL	BRL
Chloroform	67-66-3	7	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Chloromethane (methyl chloride)	74-87-3	5	-	BRL	BRL	BRL	BRL	BRL
2-Chirotoluene	95-49-8	5	-	BRL	BRL	0.4 UJ	BRL	BRL
4-Chirotoluene	106-43-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dibromo-3-chloropropane	96-12-8	0.04	-	BRL	BRL	BRL	BRL	BRL
Dibromochloromethane	124-48-1	NS	50	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
1,2-Dibromethane (EDB)	106-93-4	0.0006	-	BRL	BRL	BRL	BRL	BRL
Dibromomethane	74-95-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
Dichlorodifluoromethane (Freon12)	75-71-8	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethane	75-34-3	5	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichloroethane	107-06-2	0.6	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloroethene	75-35-4	5	-	BRL	BRL	BRL	BRL	BRL
Gis-1,2-Dichloroethene	156-59-2	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
trans-1,2-Dichloroethene	156-60-5	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
1,2-Dichloropropane	78-87-5	1	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichloropropane	142-28-9	5	-	BRL	BRL	BRL	BRL	BRL
2,2-Dichloropropane	594-20-7	5	-	BRL	BRL	BRL	BRL	BRL
1,1-Dichloropropene	563-58-6	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Gis-1,3-Dichloropropene	10061-01-5	0.4**	-	BRL	BRL	BRL	BRL	BRL
trans-1,3-Dichloropropene	10061-02-6	-	-	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	100-41-4	5	-	BRL	BRL	160	BRL	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
2-Hexanone (MBK)	591-78-6	NS	50	BRL	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	-	BRL UJ+	BRL UJ+	18 J+	1 J+	2 J+
4-Isopropyltoluene	99-87-6	5	-	BRL	BRL	3 UJ	0.4 UJ	0.5 UJ
Methyl tert-butyl ether	1634-04-4	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	BRL	BRL	BRL	BRL	BRL
Methylene chloride	75-09-2	5	-	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	BRL	48	2 UJ	2 UJ
p-Propylbenzene	103-65-1	5	-	BRL	BRL	48	2 UJ	2 UJ
Styrene	100-42-5	5	-	BRL	BRL	BRL	BRL	BRL
1,1,1,2-Tetrachloroethane	630-20-6	5	-	BRL	BRL	BRL	BRL	BRL
1,1,2,2-Tetrachloroethane	79-34-5	5	-	BRL	BRL	BRL	BRL	BRL
Tetrachloroethene	127-18-4	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Toluene	108-88-3	5	-	BRL	BRL	15	BRL	BRL
1,2,3-Trichlorobenzene	87-61-6	5	10*	BRL	BRL	BRL	BRL	BRL
1,2,4-Trichlorobenzene	120-82-1	5	10*	BRL	BRL	BRL	BRL	BRL
1,3,5-Trichlorobenzene	108-70-3	5	10*	BRL	BRL	BRL	BRL	BRL
1,1,1-Trichloroethane	71-55-6	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
1,1,2-Trichloroethane	79-00-5	1	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Trichloroethene	79-01-6	5	-	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+	BRL UJ+
Trichlorofluoromethane (Freon 11)	75-69-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2,3-Trichloropropane	96-18-4	0.04	-	BRL	BRL	BRL	BRL	BRL
1,2,4-Trimethylbenzene	95-63-6	5	-	BRL	BRL	340	BRL	BRL
1,3,5-Trimethylbenzene	108-67-8	5	-	BRL	BRL	110	BRL	BRL
Vinyl chloride	75-01-4	2	-	BRL	BRL	BRL	BRL	BRL
m,p-xylene	17960123-1	5	-	BRL	BRL	620	BRL	BRL
xylene	95-47-6	5	-	BRL	BRL	110	BRL	BRL
Tetrahydrofuran	109-99-9	NS	50	BRL	BRL	BRL	BRL	BRL
Ethyl ether	60-29-7	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-amyI methyl ether	994-05-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Ethyl tert-butyl ether	637-92-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Di-isopropyl ether	108-20-3	NS	NS	BRL	BRL	BRL	BRL	BRL
tert-Butanol / butyl alcohol	75-65-0	NS	NS	BRL	BRL	BRL	BRL	BRL
1,4-Dioxane	123-91-1	NS	NS	BRL	BRL	BRL	BRL	BRL
trans-1,4-Dichloro-2-butene	110-57-6	5	-	BRL	BRL	BRL	BRL	BRL
Ethanol	64-17-5	NS	NS	BRL	BRL	BRL	BRL	BRL
Tentatively Identified Compounds (TICs)								
Benzene, 1,2,3-trimethyl-	526-73-8	NS	NS	-	-	93 J	-	-
Benzene, 1-ethyl-2-methyl-	611-14-3	NS	NS	-	-	200 J	-	-
Benzene, 1-ethyl-3-methyl-	620-14-4	NS	NS	-	-	98 J	-	-
Benzene, 2-ethenyl-1,4-dimet	2039-89-6	NS	NS	-	-	71 J	-	-
Benzene, 2-ethyl-1,4-dimethv	1758-88-9	NS	NS	-	-	72 J	-	-
Butane, 2-methyl-	78-78-4	NS	NS	-	-	110 J	-	-
Cyclohexane, methyl-	110-82-7	NS	NS	-	-	130 J	-	-
Cyclohexane, methylethyl-	108-87-2	NS	NS	-	-	170 J	-	-
Cyclopentane, methyl-	96-37-7	NS	NS	-	-	170 J	-	-
Pentane	109-66-0	NS	NS	-	-	87 J	-	-
Pentane, 2-methyl-	107-83-5	NS	NS	-	-	220 J	-	-
Pentane, 3-methyl-	96-14-0	NS	NS	-	-	94 J	-	-
Benzene, (2-methyl-1-butetyl	56253-64-6	NS	NS	-	-	-	5 J	-
Benzene, 1,2,4,5-tetramethyl	95-93-2	NS	NS	-	-	-	6 J	7 J
Benzene, 1,3-diethyl-	141-93-5	NS	NS	-	-	-	8 J	8 J
Bicyclo[3.2.1]octane	6221-55-2	NS	NS	-	-	-	6 J	6 J
Cyclohexane, 1,2-dimethyl-	6876-23-9	NS	NS	-	-	-	9 J	10 J
Indan, 1-methyl-	767-58-8	NS	NS	-	-	-	9 J	9 J
Isopropylcyclobutane	872-56-0	NS	NS	-	-	-	7 J	-
Pentalene, octahydro-	694-72-4	NS	NS	-	-	-	6 J	-
Pentane, 2,3,3-trimethyl-	560-21-4	NS	NS	-	-	-	7 J	9 J
Pentane, 2,3-dimethyl-	565-59-3	NS	NS	-	-	-	7 J	6 J
1H-Indene, 2,3-dihydro-1,2-d	17057-82-8	NS	NS	-	-	-	-	6 J
Cyclopentane, 1,2-dimethyl-, cis-	822-50-4	NS	NS	-	-	-	-	7 J
Pentalene, octahydro-, cis-	1755-05-1	NS	NS	-	-	-	-	6 J
Unknown	-	NS	NS	-	-	80 J	-	-
Unknown aromatic	-	NS	NS	-	-	110 J	-	-
Unknown1	-	NS	NS	-	-	-	11 J	11 J
Unknown2	-	NS	NS	-	-	-	8 J	8 J
Unknown3	-	NS	NS	-	-	-	9 J	10 J
Unknown4	-	NS	NS	-	-	-	14 J	15 J
Unknown5	-	NS	NS	-	-	-	-	5 J
TOTAL VOCs	-	-	-	0	0	3201.1	119.4	131.60

Notes:

All concentrations in micrograms per liter (µg/L) parts per billion (ppb)

\* - Value of 5 µg/L applies to each trichlorobenzene individually. Value of 10 µg/L, applies to the sum of these substances

\*\* - Sum of cis and trans Dichloropropenes

Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 11**  
**Groundwater Analyses Summary - SVOCs**  
**Method SW-846 8270**

**2018 Q4 Groundwater Monitoring**

**700 Out Parcel**

**Syracuse, NY**

**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE				
Semi-Volatile Organic Compounds	CAS No.	Standard	Guidance Value	MW-5	MW-7	MW-8	MW-9	MW-D (MW-9)
				12/5/2018	12/5/2028	12/5/2018	12/5/2018	12/5/2018
1,1'-Biphenyl	92-52-4	5	-	BRL	BRL	BRL	BRL	BRL
1,2,4,5-Tetrachlorobenzene	95-94-3	5, 10*	-	BRL	BRL	BRL	BRL	BRL
1,2,4-Trichlorobenzene	120-82-1	5, 10*	-	BRL	BRL	BRL	BRL	BRL
1,2-Dichlorobenzene	95-50-1	3	-	BRL	BRL	BRL	BRL	BRL
1,2-Diphenylhydrazine	122-66-7	ND	-	BRL	BRL	BRL	BRL	BRL
1,3-Dichlorobenzene	541-73-1	3	-	BRL	BRL	BRL	BRL	BRL
1,4-Dichlorobenzene	106-46-7	3	-	BRL	BRL	BRL	BRL	BRL
1-Methylphthalene	90-12-0	NS	NS	BRL	BRL	8	BRL	BRL
2,3,4,6-Tetrachlorophenol	58-90-2	1**	-	BRL	BRL	BRL	BRL	BRL
2,4,5-Trichlorophenol	95-95-4	1**	-	BRL	BRL	BRL	BRL	BRL
2,4,6-Trichlorophenol	88-06-2	1**	-	BRL	BRL	BRL	BRL	BRL
2,4-Dichlorophenol	120-83-2	1**	-	BRL	BRL	BRL	BRL	BRL
2,4-Dimethylphenol	105-67-9	1**	-	BRL	BRL	BRL	BRL	BRL
2,4-Dinitrophenol	51-28-5	1**	-	BRL	BRL	BRL	BRL	BRL
2,4-Dinitrotoluene	121-14-2	5	-	BRL	BRL	BRL	BRL	BRL
2,6-Dinitrotoluene	606-20-2	5	-	BRL	BRL	BRL	BRL	BRL
2-Chloronaphthalene	91-58-7	NS	10	BRL	BRL	BRL	BRL	BRL
2-Chlorophenol	95-57-8	NS	NS	BRL	BRL	BRL	BRL	BRL
2-Methylphthalene	91-57-6	NS	NS	BRL	BRL	16	BRL	BRL
2-Methylphenol	95-48-7	NS	NS	BRL	BRL	BRL	BRL	BRL
2-Nitroaniline	88-74-4	5	-	BRL	BRL	BRL	BRL	BRL
2-Nitrophenoil	88-75-5	NS	NS	BRL	BRL	BRL	BRL	BRL
3,3'-Dichlorobenzidine	91-94-1	5	-	BRL	BRL	BRL	BRL	BRL
3-Nitroaniline	99-09-2	5	-	BRL	BRL	BRL	BRL	BRL
4,6-Dinitro-2-methylphenol	534-52-1	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Bromophenyl phenyl ether	101-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Chloro-3-methylphenol	59-50-7	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Chloroaniline	106-47-8	5	-	BRL	BRL	BRL	BRL	BRL
4-Chlorophenyl phenyl ether	7005-72-3	NS	NS	BRL	BRL	BRL	BRL	BRL
4-Methylphenol	106-44-5	1**	-	BRL	BRL	BRL	BRL	BRL
4-Nitroaniline	100-01-6	5	-	BRL	BRL	BRL	BRL	BRL
4-Nitrophenoil	100-02-7	NS	NS	BRL	BRL	BRL	BRL	BRL
Acenaphthene	83-32-9	20	20	BRL	BRL	0.2	UJ	BRL
Acenaphthylene	208-96-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Acetophenone	98-86-2	NS	NS	BRL	BRL	BRL	BRL	BRL
Aniline	62-53-3	5	-	BRL	BRL	BRL	BRL	BRL
Anthracene	120-12-7	NS	50	BRL	BRL	BRL	BRL	BRL
Atrazine	1912-24-9	7.5	-	BRL	BRL	BRL	BRL	BRL
Benzaldehyde	100-52-7	NS	NS	BRL	BRL	BRL	BRL	BRL
Benzidine	92-87-5	5	-	BRL	BRL	BRL	BRL	BRL
Benzo (a) anthracene	56-55-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Benzo (a) pyrene	50-32-8	ND		BRL	BRL	BRL	BRL	BRL
Benzo (b) fluoranthene	205-99-2	NS	0.002	BRL	BRL	BRL	BRL	BRL
Benzo (g,h,i) perylene	191-24-2	NS	NS	BRL	BRL	BRL	BRL	BRL
Benzo (k) fluoranthene	207-08-9	NS	0.002	BRL	BRL	BRL	BRL	BRL
Benzoic acid	65-85-0	NS	NS	BRL	BRL	UJ+	BRL	BRL
Benzyl alcohol	100-51-6	NS	NS	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroethyl)ether	111-91-1	5	-	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroethyl)ether	111-44-4	1	-	BRL	BRL	BRL	BRL	BRL
Bis(2-chloroisopropyl)ether	108-60-0	5	-	BRL	UJ	BRL	UJ	BRL
Bis(2-ethylhexyl)phthalate	117-81-7	5	-	BRL	BRL	BRL	BRL	BRL
Butyl benzyl phthalate	85-68-7	NS	50	BRL	BRL	BRL	BRL	BRL
Caprolactam	105-60-2			BRL	BRL	BRL	BRL	BRL
Carbazole	86-74-8	NS	NS	BRL	BRL	BRL	BRL	BRL
Chrysene	218-01-9	NS	0.002	BRL	BRL	BRL	BRL	BRL
Di-n-butyl phthalate	84-74-2	50	-	BRL	BRL	BRL	BRL	BRL
Di-n-octyl phthalate	117-84-0	NS	50	BRL	BRL	BRL	BRL	BRL
Dibenzo (a,h) anthracene	53-70-3	NS	NS	BRL	BRL	BRL	BRL	BRL
Dibenzofuran	132-64-9	NS	NS	BRL	BRL	BRL	BRL	BRL
Diethyl phthalate	84-66-2	NS	50	BRL	BRL	BRL	BRL	BRL
Dimethyl phthalate	131-11-3	NS	50	BRL	BRL	BRL	BRL	BRL
Fluoranthene	206-44-0	NS	50	BRL	BRL	BRL	BRL	BRL
Fluorene	86-73-7	NS	50	BRL	BRL	0.3	UJ	BRL
Hexachlorobenzene	118-74-1	0.04	-	BRL	BRL	BRL	BRL	BRL
Hexachlorobutadiene	87-68-3	0.5	-	BRL	BRL	BRL	BRL	BRL
Hexachlorocyclopentadiene	77-47-4	5	-	BRL	BRL	BRL	BRL	BRL
Hexachloroethane	67-72-1	5	-	BRL	BRL	BRL	BRL	BRL
Indeno (1,2,3-cd) pyrene	193-39-5	NS	0.002	BRL	BRL	BRL	BRL	BRL
Iso phorone	78-59-1	NS	50	BRL	BRL	BRL	BRL	BRL
N-Nitrosodi-n-propylamine	621-64-7	NS	NS	BRL	BRL	BRL	BRL	BRL
N-Nitrosodimethylamine	62-75-9	NS	NS	BRL	BRL	BRL	BRL	BRL
N-Nitrosodiphenylamine	86-30-6	NS	50	BRL	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	NS	10	BRL	BRL	33	BRL	BRL
Nitrobenzene	98-95-3	0.4	-	BRL	BRL	BRL	BRL	BRL
Pentachloronitrobenzene	82-68-8	ND	-	BRL	BRL	BRL	BRL	BRL
Pentachlorophenol	87-86-5	1**	-	BRL	BRL	BRL	BRL	BRL
Phenanthrene	85-01-8	NS	50	BRL	BRL	BRL	BRL	BRL
Phenol	108-95-2	1**	-	BRL	BRL	BRL	BRL	BRL
Pyrene	129-00-0	NS	50	BRL	BRL	BRL	BRL	BRL
Pyridine	110-86-1	NS	50	BRL	BRL	BRL	BRL	BRL
Tentatively Identified Compounds (TICs)								
Benzene, 1,3-dimethyl-	108-38-3	NS	NS	-	-	460	J	-
Unknown	---	NS	NS	8	J	9	J	10 J
TOTAL SVOCs	-	-	-	8		9	517.5	10

**Notes:**

All concentrations in micrograms per liter (ug/L)/parts per billion (ppb)

\* - Value of 5 ug/L applies to each trichlorobenzene or tetrachlorobenzene individually. Value of 10 ug/L, applies to the sum of these respective substances

\*\* - Value of 1 ug/L applies to the sum of all phenolic compounds

Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 12**  
**Groundwater Analyses Summary - Metals**  
**Method SW846 6010C**

**2018 Q4 Groundwater Monitoring**  
**700 Out Parcel**  
**Syracuse, NY**  
**AECC Project No. 18-051**

ANALYTES		APPLICABLE STANDARD		SAMPLE LOCATION / DATE								
Metal	CAS No.	Standard	Guidance Value	MW-5		MW-7		MW-8		MW-9		MW-D (MW-9)
				12/05/18	12/05/18	12/05/18	12/05/18	12/05/18	12/05/18	12/05/18	12/05/18	
Aluminum	7429-90-5	2,000	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Antimony	7440-36-0	3	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Arsenic	7440-38-2	25	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Barium	7440-39-3	1,000	-	103	536	479	370	372				
Beryllium	7440-41-7	3	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Cadmium	7440-43-9	5	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Calcium	7440-70-2	NS	NS	91,900	J	249,000	J	259,000	J	225,000	J	222,000 J
Chromium	7440-47-3	50	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Cobalt	7440-48-4	NS	NS	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Copper	7440-50-8	200	-	6.4	BRL							
Iron	7439-89-6	300	-	103	249	11,000		1,120		1,070		
Lead	7439-92-1	25	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Magnesium	7439-95-4	-	35,000	11,800	J	36,800	J	33,800	J	29,100	J	28,600 J
Manganese	7439-96-5	300	-	1.7	25.7	1430		282		276		
Mercury*	7439-97-5	0.7	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Nickel	7440-02-0	100	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Potassium	7440-09-7	NS	NS	4,600	12,000	10,900	15,300			15,000		
Selenium	7782-49-2	10	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Silver	7440-22-4	50	-	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Sodium	7440-23-5	20,000	-	428,000	J	401,000	J	64,100	J	350,000	J	345,000 J
Thallium	7440-28-0	-	0.5	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	
Vanadium	7440-62-2	NS	NS	3.2	BRL							
Zinc	7440-66-6	-	2,000	8.7	BRL	BRL	BRL	4.6		3.1		

**Notes:**

All concentrations in micrograms per liter (ug/L), or approximate parts per billion (ppb)

\*Mercury analyzed by Method EPA 245.1/7470A

Values of "BRL" have a "U" qualifier unless otherwise noted.

**TABLE 13**  
Summary of Historical Exceedances

**2018 Periodic Review Report**  
700 Out Parcel  
Syracuse, NY  
AECC Project No. 18-051

ANALYTES		GWS	SAMPLE LOCATION / DATE									
Compound	CAS No.		MW-5					MW-7				
VOCs			1/19/2012*	3/19/2018^	06/13/18	09/06/18	12/05/18	1/19/2012*	03/19/18	06/13/18	09/06/18	12/05/18
Benzene	71-43-2	1	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-Butylbenzene	104-51-8	5	0.75	BRL	BRL	2.27	BRL	BRL	BRL	BRL	BRL	BRL
sec-Butylbenzene	135-98-8	5	0.33 J	BRL	BRL	1.87	BRL	BRL	BRL	BRL	BRL	BRL
tert-Butylbenzene	98-06-6	5	BRL	BRL	0.33	UJ	BRL	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	100-41-4	5	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	BRL	BRL	0.72 J	4.64	BRL	UJ+	BRL	BRL	BRL	BRL
Naphthalene	91-20-3	10	0.34 J	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
n-Propylbenzene	103-65-1	5	0.36 J	BRL	0.67 J	8.93	BRL	BRL	BRL	BRL	BRL	BRL
Toluene	108-88-3	5	BRL	BRL	BRL	0.66	UJ	BRL	BRL	BRL	BRL	BRL
p-Isopropyltoluene	99-87-6	5	0.34 J	BRL	BRL	0.72	UJ	BRL	BRL	BRL	BRL	BRL
1,2,4-Trimethylbenzene	95-63-6	5	0.95	BRL	BRL	0.95	UJ	BRL	BRL	BRL	BRL	BRL
1,3,5-Trimethylbenzene	108-67-8	5	0.39 J	BRL	BRL	0.62	UJ	BRL	BRL	BRL	BRL	BRL
Total Xylenes	95-47-6	15	BRL	BRL	BRL	1.08	UJ	BRL	BRL	BRL	BRL	BRL
TOTAL VOCs + TICs*	-	NS	80.2	0	1.4	261.07	0	4.6	0	0	0	0
SVOCs			1/19/2012*	03/19/18	06/13/18	09/06/18	09/06/18	1/19/2012*	4/2/2018^	06/13/18	09/06/18	09/06/18
2,4-Dinitrophenol	51-28-5	1	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Bis(2-ethylhexyl)phthalate	117-81-7	5	BRL	BRL	BRL	BRL	BRL	1.03 J	BRL	BRL	BRL	BRL
Di-n-octyl phthalate	117-84-0	50	BRL	35.3	BRL	5.45	BRL	54	BRL	BRL	BRL	BRL
Hexachloroethane	67-72-1	5	BRL	BRL	BRL	J-	BRL	BRL	BRL	J-	BRL	BRL
Naphthalene	91-20-3	10	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Nitrobenzene	98-95-3	0.4	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
TOTAL SVOCs + TICs*	-	NS	52.9	41.2	27	19.95	8	4.2	44.4	0	0	9
Metals			1/19/2012*	3/19/2018^	06/13/18	09/06/18	09/06/18	1/19/2012*	03/19/18	06/13/18	09/06/18	09/06/18
Aluminum	7429-90-5	2000	1,500 J	68	3,310	866	BRL	BRL	33	287	506	BRL
Antimony	7440-36-0	3	BRL	7	2	UJ	BRL	BRL	2 J	BRL	BRL	BRL
Barium	7440-39-3	1000	190	230	342	616	103	410	680	303	234	536
Iron	7439-89-6	300	1,900	71	3,130	2,110	103	72	102	3,710	3,570	249
Magnesium	7439-95-4	35000	18,000	17,700	25,200 J	21,500	11,800 J	82,000	30,000	55,200 J	71,900	36,800 J
Manganese	7439-96-5	300	110	BRL	108 J	180	1.7	110	15	41.8 J	77.3	1430
Sodium	7440-23-5	20,000	620,000	1,400,000 J	1,660,000	2,180,000	428,000 J	1,000,000	409,000 J	1,310,000 J	1,350,000	401,000 J
ANALYTES		GWS	SAMPLE LOCATION / DATE									
Compound	CAS No.		MW-8					MW-9				
VOCs			1/19/2012*	03/19/18	6/13/2018^	09/07/18	09/07/18	1/19/2012*	03/19/18	06/13/18	9/7/2018^	12/5/2018^
Benzene	71-43-2	1	49.4	5.7 J	44.1	34.2	BRL	3.62	0.33 J	0.79 J	BRL	0.3 UJ
n-Butylbenzene	104-51-8	5	11.6	13.1	39.7	24.6	8 UJ	10.6	0.47 J	0.62 J	1.82	0.4 UJ
sec-Butylbenzene	135-98-8	5	8	7.4 J	17	8.1	UJ	4 UJ	7.38	1.53	1.11	1 UJ
tert-Butylbenzene	98-06-6	5	BRL	BRL	6.5	UJ	BRL	0.7 UJ	1.56	0.51 J	0.61	0.4 UJ
Ethylbenzene	100-41-4	5	404	157	342	352	160	21.7	BRL	BRL	BRL	BRL
Isopropylbenzene	98-82-8	5	54	21.9	40.1	41.2	18	J+	25.6	3.16	1.56	2 J+
Naphthalene	91-20-3	10	111	73.2	204	164 J	48	29.5	0.67 J	BRL	BRL	BRL
n-Propylbenzene	103-65-1	5	99.4	67.8	116	74.9	48	49.7	4.8	1.92	2.04	2 UJ
Toluene	108-88-3	5	109	15.6	42.9	49.4	15	BRL	BRL	BRL	BRL	BRL
p-Isopropyltoluene	99-87-6	5	5.6	4.5 J	16.5	10.3	3 UJ	7.54	0.59	BRL	0.82 J	0.5 UJ
1,2,4-Trimethylbenzene	95-63-6	5	628	486	1,120	922 J	340	3.18	0.79 J	0.85 J	0.69	BRL
1,3,5-Trimethylbenzene	108-67-8	5	176	150	313	195	110	3.12	BRL	0.55 J	BRL	BRL
Total Xylenes	95-47-6	15	689	763	865	714	730	25.1	0.62 J	0.6 J	BRL	BRL
TOTAL VOCs + TICs*	-	NS	4,861.60	3,559.20	4,975.80	4,118.30	3,201.10	987.5	101.1	51.11	104.93	131.6
SVOCs			1/19/2012*	03/19/18	6/13/2018^	09/07/18	09/07/18	1/19/2012*	04/02/18	06/13/18	9/7/2018^	12/5/2018^
2,4-Dinitrophenol	51-28-5	1	BRL	1.15 J	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Bis(2-ethylhexyl)phthalate	117-81-7	5	BRL	1.32 J	5.05	UJ	2.67 UJ	BRL	BRL	1.23 J	1.74 J	4.21 UJ
Di-n-octyl phthalate	117-84-0	50	BRL	3.62 J	0.916	BRL	BRL	BRL	BRL	2.36 J	BRL	BRL
Hexachloroethane	67-72-1	5	BRL	14.8	BRL	BRL	BRL	BRL	BRL	BRL	J-	BRL
Naphthalene	91-20-3	10	77	22.4	82.7	38.1	33	23	BRL	BRL	BRL	BRL
Nitrobenzene	98-95-3	0.4	BRL	8.9	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
TOTAL SVOCs + TICs*	-	NS	1087.5	499.9	3214.1	1202.97	517.5	513	16.8	29.24	24.21	10
Metals			1/19/2012*	03/19/18	6/13/2018^	09/07/18	09/07/18	1/19/2012*	03/19/18	06/13/18	9/7/2018^	12/5/2018^
Aluminum	7429-90-5	2000	170 J	BRL	BRL	15 UJ	BRL	1,800 J	2,930	2,190	870	BRL
Antimony	7440-36-0	3	BRL	4.4 J	BRL	BRL	BRL	3.4 J	BRL	BRL	BRL	BRL
Barium	7440-39-3	1000	1,500	518	1,870	800	479	860	537	468	604	372
Iron	7439-89-6	300	450	6,360	1,660	5,040	11,000	3,600	5,520	8,720	5,520	1,120
Magnesium	7439-95-4	35000	30,000	36,400	43,400 J	33,400	33,800 J	24,000	36,100	38,600 J	26,400	28,600 J
Manganese	7439-96-5	300	380	1,340	456 J	591	1,430	250	730	570 J	337	276
Sodium	7440-23-5	20,000	420,000 J	60,400 J	141,000 J	371,000	64,100 J	690,000 J	449,000 J	465,000 J	581,000	345,000

**Notes:**

All concentrations in micrograms per liter (ug/L) or approximate parts per billion (ppb)

\* - Provided for relative comparison purposes only

^ - This sample had an associated field duplicate. The value shown is the highest of the two results.

Values of "BRL" have a "U" qualifier unless otherwise noted.

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**ATTACHMENT E**  
**LABORATORY ANALYSIS REPORTS**

Report Date:  
06-Apr-18 14:10**Laboratory Report****SC44935**

AECC Environmental Consulting  
6308 Fly Road  
East Syracuse, NY 13057  
Attn: Rich McKenna

Project: 700 Out Parcel - Syracuse, NY

Project #: 18-051

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

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Please note that this report contains 58 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.

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*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:** SC44935  
**Project:** 700 Out Parcel - Syracuse, NY  
**Project Number:** 18-051

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SC44935-01	MW-5 (2018-03-19)	Ground Water	19-Mar-18 11:00	20-Mar-18 11:35
SC44935-02	MW-7 (2018-03-19)	Ground Water	19-Mar-18 12:00	20-Mar-18 11:35
SC44935-03	MW-8 (2018-03-19)	Ground Water	19-Mar-18 13:54	20-Mar-18 11:35
SC44935-04	MW-9 (2018-03-19)	Ground Water	19-Mar-18 13:10	20-Mar-18 11:35
SC44935-05	MW-D (2018-03-19)	Ground Water	19-Mar-18 00:00	20-Mar-18 11:35
SC44935-06	Trip Blank	Aqueous	19-Mar-18 00:00	20-Mar-18 11:35

## 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 5.6 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.**

## **SW846 6010C**

### **Spikes:**

1803912-MS1      *Source: SC44935-02*

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.

Calcium

1803912-MS2      *Source: SC44935-02*

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

1803912-MSD1      *Source: SC44935-02*

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.

Calcium

1803912-MSD2      *Source: SC44935-02*

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

1803912-PS1      *Source: SC44935-02*

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.

Calcium

1803912-PS2      *Source: SC44935-02*

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.

Magnesium

Sodium

### **Duplicates:**

1803912-DUP1      *Source: SC44935-01*

## **SW846 6010C**

### **Duplicates:**

1803912-DUP1      *Source: SC44935-01*

---

MRL raised to correlate to batch QC reporting limits.

Calcium

1803912-DUP2      *Source: SC44935-01*

---

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.

Aluminum

Beryllium

MRL raised to correlate to batch QC reporting limits.

Magnesium

Sodium

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

Sodium

1803912-DUP3      *Source: SC44935-01*

---

MRL raised to correlate to batch QC reporting limits.

Manganese

### **Samples:**

SC44935-01      *MW-5 (2018-03-19)*

---

MRL raised to correlate to batch QC reporting limits.

Calcium

Magnesium

Manganese

Sodium

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

Sodium

SC44935-02      *MW-7 (2018-03-19)*

---

MRL raised to correlate to batch QC reporting limits.

Calcium

Magnesium

Manganese

Sodium

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

Sodium

SC44935-03      *MW-8 (2018-03-19)*

---

MRL raised to correlate to batch QC reporting limits.

Calcium

Magnesium

Manganese

Sodium

SC44935-04      *MW-9 (2018-03-19)*

---

## **SW846 6010C**

### **Samples:**

SC44935-04                  MW-9 (2018-03-19)

---

MRL raised to correlate to batch QC reporting limits.

Calcium  
Magnesium  
Manganese  
Sodium

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

Sodium

SC44935-05                  MW-D (2018-03-19)

---

MRL raised to correlate to batch QC reporting limits.

Calcium  
Magnesium  
Manganese  
Sodium

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

Sodium

## **SW846 8260C**

### **Calibration:**

1802088

---

Analyte quantified by quadratic equation type calibration.

Bromoform  
Carbon tetrachloride

This affected the following samples:

1803890-BLK1  
1803890-BS1  
1803890-BSD1  
MW-7 (2018-03-19)  
MW-8 (2018-03-19)  
MW-9 (2018-03-19)  
MW-D (2018-03-19)  
S817144-ICV1  
S817892-CCV1  
Trip Blank

1803020

---

## **SW846 8260C**

### **Calibration:**

1803020

---

Analyte quantified by quadratic equation type calibration.

1,1,2,2-Tetrachloroethane  
1,2,4-Trimethylbenzene  
1,3,5-Trimethylbenzene  
2-Hexanone (MBK)  
4-Isopropyltoluene  
Bromodichloromethane  
Bromoform  
Carbon tetrachloride  
cis-1,3-Dichloropropene  
Dibromochloromethane  
n-Propylbenzene  
sec-Butylbenzene  
Styrene  
tert-Butylbenzene  
trans-1,3-Dichloropropene  
trans-1,4-Dichloro-2-butene

This affected the following samples:

1804359-BLK1  
1804359-BS1  
1804359-BSD1  
MW-5 (2018-03-19)  
S817373-ICV1  
S818132-CCV1

### **Laboratory Control Samples:**

1803890 BS/BSD

---

Tetrahydrofuran percent recoveries (69/79) 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:

MW-7 (2018-03-19)  
MW-8 (2018-03-19)  
MW-9 (2018-03-19)  
MW-D (2018-03-19)  
Trip Blank

Trichlorofluoromethane (Freon 11) percent recoveries (127/138) 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:

MW-7 (2018-03-19)  
MW-8 (2018-03-19)  
MW-9 (2018-03-19)  
MW-D (2018-03-19)  
Trip Blank

1804359 BS/BSD

---

1,1,1-Trichloroethane percent recoveries (138/124) 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:

MW-5 (2018-03-19)

Carbon tetrachloride percent recoveries (137/126) 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:

MW-5 (2018-03-19)

## **SW846 8260C**

### **Laboratory Control Samples:**

1804359 BS/BSD

---

Trichlorofluoromethane (Freon 11) percent recoveries (134/121) 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:

MW-5 (2018-03-19)

### **Samples:**

S817892-CCV1

---

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

Di-isopropyl ether (-20.7%)  
Tetrahydrofuran (-24.0%)  
trans-1,4-Dichloro-2-butene (21.6%)  
Trichlorofluoromethane (Freon 11) (45.2%)

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

1,4-Dioxane (-22.7%)  
Carbon tetrachloride (24.6%)  
Chloroethane (37.1%)  
Chloromethane (-21.7%)

This affected the following samples:

1803890-BLK1  
1803890-BS1  
1803890-BSD1  
MW-7 (2018-03-19)  
MW-8 (2018-03-19)  
MW-9 (2018-03-19)  
MW-D (2018-03-19)  
Trip Blank

S818132-CCV1

---

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

1,1,1,2-Tetrachloroethane (31.5%)  
1,1,1-Trichloroethane (46.3%)  
1,1,2-Trichlorotrifluoroethane (Freon 113) (37.4%)  
1,1-Dichloroethene (31.7%)  
Carbon disulfide (24.2%)  
Trichlorofluoromethane (Freon 11) (42.2%)

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

Bromoform (20.8%)  
Carbon tetrachloride (45.4%)

This affected the following samples:

1804359-BLK1  
1804359-BS1  
1804359-BSD1  
MW-5 (2018-03-19)

SC44935-03                  MW-8 (2018-03-19)

---

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

## **SW846 8260C TICs**

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## **SW846 8260C TICs**

### **Samples:**

SC44935-03                  *MW-8 (2018-03-19)*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

SC44935-04                  *MW-9 (2018-03-19)*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

## **SW846 8270D**

### **Calibration:**

1801047

---

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol  
2,4-Dinitrotoluene  
2,6-Dinitrotoluene  
3-Nitroaniline  
4,6-Dinitro-2-methylphenol  
4-Nitrophenol  
Benzidine  
Benzoic acid  
Carbazole  
Pentachlorophenol

This affected the following samples:

1804025-BLK1  
MW-5 (2018-03-19)  
MW-8 (2018-03-19)  
S815859-ICV1  
S818116-CCV1

### **Laboratory Control Samples:**

1804025 BS/BSD

---

4-Chloroaniline percent recoveries (22/25) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-03-19)  
MW-8 (2018-03-19)

Aniline percent recoveries (21/24) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-03-19)  
MW-8 (2018-03-19)

Benzidine percent recoveries (30/37) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-03-19)  
MW-8 (2018-03-19)

## **SW846 8270D**

### **Laboratory Control Samples:**

#### **1804025 BS/BSD**

---

Benzo (k) fluoranthene percent recoveries (36/35) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-03-19)  
MW-8 (2018-03-19)

Benzyl alcohol percent recoveries (32/36) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-03-19)  
MW-8 (2018-03-19)

#### **1804025 BSD**

---

4-Nitrophenol RPD 22% (20%) is outside individual acceptance criteria.

Benzidine RPD 21% (20%) is outside individual acceptance criteria.

#### **1804025-BS1**

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

4-Chloroaniline  
Aniline  
Benzidine  
Benzo (k) fluoranthene  
Benzyl alcohol

#### **1804025-BSD1**

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

4-Chloroaniline  
Aniline  
Benzidine  
Benzo (k) fluoranthene  
Benzyl alcohol

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

4-Nitrophenol

### **Samples:**

#### **S818116-CCV1**

---

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

2-Nitrophenol (-33.5%)  
3,3'-Dichlorobenzidine (-41.3%)  
4-Chloroaniline (-59.2%)  
Benzo (a) pyrene (22.3%)  
Benzo (b) fluoranthene (26.2%)  
Di-n-octyl phthalate (23.0%)

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

2,4-Dinitrophenol (-43.2%)  
3-Nitroaniline (-69.3%)  
Benzidine (-84.5%)  
Benzoic acid (-47.3%)  
Carbazole (-38.2%)

## **SW846 8270D**

### **Samples:**

S818116-CCV1

---

This affected the following samples:

1804025-BLK1  
MW-5 (2018-03-19)  
MW-8 (2018-03-19)

SC44935-01                  *MW-5 (2018-03-19)*

---

Surrogates were out of acceptance criteria, but no extra volume was provided by the client for re-extraction.

2,4,6-Tribromophenol  
2-Fluorobiphenyl  
2-Fluorophenol  
Nitrobenzene-d5  
Phenol-d5  
Terphenyl-dl4

## Sample Acceptance Check Form

Client: AECC Environmental Consulting  
Project: 700 Out Parcel - Syracuse, NY / 18-051  
Work Order: SC44935  
Sample(s) received on: 3/20/2018

***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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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:** SC44935-01

**Client ID:** MW-5 (2018-03-19)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.0682		0.0250	mg/l	SW846 6010C
Antimony	0.0065		0.0060	mg/l	SW846 6010C
Barium	0.230		0.0050	mg/l	SW846 6010C
Beryllium	0.0004	J	0.0020	mg/l	SW846 6010C
Cadmium	0.0004	J	0.0025	mg/l	SW846 6010C
Calcium	133	R06	5.00	mg/l	SW846 6010C
Chromium	0.0032	J	0.0050	mg/l	SW846 6010C
Copper	0.0064		0.0050	mg/l	SW846 6010C
Iron	0.0706		0.0150	mg/l	SW846 6010C
Magnesium	17.7	R06	5.00	mg/l	SW846 6010C
Nickel	0.0010	J	0.0050	mg/l	SW846 6010C
Potassium	5.90		0.500	mg/l	SW846 6010C
Selenium	0.0066	J	0.0150	mg/l	SW846 6010C
Sodium	1330	GS1, R100		mg/l	SW846 6010C
Vanadium	0.0027	J	0.0050	mg/l	SW846 6010C
Zinc	0.0138		0.0050	mg/l	SW846 6010C
2,4-Dinitrotoluene	0.857	J	4.76	µg/l	SW846 8270D
2,6-Dinitrotoluene	1.28	J	4.76	µg/l	SW846 8270D
4-Nitrophenol	1.21	J	19.0	µg/l	SW846 8270D
Benzoic acid	1.49	J	4.76	µg/l	SW846 8270D
Di-n-octyl phthalate	35.3		4.76	µg/l	SW846 8270D
N-Nitrosodi-n-propylamine	1.10	J	4.76	µg/l	SW846 8270D

**Lab ID:** SC44935-02

**Client ID:** MW-7 (2018-03-19)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.0330		0.0250	mg/l	SW846 6010C
Antimony	0.0022	J	0.0060	mg/l	SW846 6010C
Barium	0.680		0.0050	mg/l	SW846 6010C
Calcium	176	R06	5.00	mg/l	SW846 6010C
Chromium	0.0017	J	0.0050	mg/l	SW846 6010C
Copper	0.0067		0.0050	mg/l	SW846 6010C
Iron	0.102		0.0150	mg/l	SW846 6010C
Magnesium	30.0	R06	5.00	mg/l	SW846 6010C
Manganese	0.0154	R06	0.0100	mg/l	SW846 6010C
Nickel	0.0016	J	0.0050	mg/l	SW846 6010C
Potassium	9.14		0.500	mg/l	SW846 6010C
Sodium	409	GS1, R50.0		mg/l	SW846 6010C
Zinc	0.0042	J	0.0050	mg/l	SW846 6010C

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Antimony	0.0044	J	0.0060	mg/l	SW846 6010C
Barium	0.518		0.0050	mg/l	SW846 6010C
Cadmium	0.0004	J	0.0025	mg/l	SW846 6010C
Calcium	241	R06	5.00	mg/l	SW846 6010C
Chromium	0.0017	J	0.0050	mg/l	SW846 6010C
Iron	6.36		0.0150	mg/l	SW846 6010C
Magnesium	36.4	R06	5.00	mg/l	SW846 6010C
Manganese	1.34	R06	0.0100	mg/l	SW846 6010C
Potassium	10.3		0.500	mg/l	SW846 6010C
Sodium	60.4	R06	5.00	mg/l	SW846 6010C
Zinc	0.0034	J	0.0050	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	486	D	10.0	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	150	D	10.0	µg/l	SW846 8260C
4-Isopropyltoluene	4.50	J, D	10.0	µg/l	SW846 8260C
Benzene	5.70	J, D	10.0	µg/l	SW846 8260C
Ethylbenzene	157	D	10.0	µg/l	SW846 8260C
Isopropylbenzene	21.9	D	10.0	µg/l	SW846 8260C
m,p-Xylene	607	D	20.0	µg/l	SW846 8260C
Naphthalene	73.2	D	10.0	µg/l	SW846 8260C
n-Butylbenzene	13.1	D	10.0	µg/l	SW846 8260C
n-Propylbenzene	67.8	D	10.0	µg/l	SW846 8260C
o-Xylene	156	D	10.0	µg/l	SW846 8260C
sec-Butylbenzene	7.40	J, D	10.0	µg/l	SW846 8260C
Toluene	15.6	D	10.0	µg/l	SW846 8260C
1-Methylnaphthalene	7.50		4.85	µg/l	SW846 8270D
2,4-Dinitrophenol	1.15	J	4.85	µg/l	SW846 8270D
2,4-Dinitrotoluene	0.913	J	4.85	µg/l	SW846 8270D
2,6-Dinitrotoluene	1.93	J	4.85	µg/l	SW846 8270D
2-Methylnaphthalene	17.3		4.85	µg/l	SW846 8270D
4,6-Dinitro-2-methylphenol	1.71	J	4.85	µg/l	SW846 8270D
4-Nitrophenol	1.26	J	19.4	µg/l	SW846 8270D
Benzoic acid	3.07	J	4.85	µg/l	SW846 8270D
Bis(2-ethylhexyl)phthalate	1.32	J	4.85	µg/l	SW846 8270D
Di-n-octyl phthalate	3.62	J	4.85	µg/l	SW846 8270D
Hexachloroethane	14.8		4.85	µg/l	SW846 8270D
Naphthalene	22.4		4.85	µg/l	SW846 8270D
Nitrobenzene	8.90		4.85	µg/l	SW846 8270D
N-Nitrosodi-n-propylamine	2.96	J	4.85	µg/l	SW846 8270D

Lab ID: SC44935-04

Client ID: MW-9 (2018-03-19)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	2.93		0.0250	mg/l	SW846 6010C
Antimony	0.0034	J	0.0060	mg/l	SW846 6010C
Barium	0.537		0.0050	mg/l	SW846 6010C
Cadmium	0.0004	J	0.0025	mg/l	SW846 6010C
Calcium	230	R06	5.00	mg/l	SW846 6010C
Chromium	0.0054		0.0050	mg/l	SW846 6010C
Cobalt	0.0010	J	0.0050	mg/l	SW846 6010C
Copper	0.0058		0.0050	mg/l	SW846 6010C
Iron	5.52		0.0150	mg/l	SW846 6010C
Magnesium	36.1	R06	5.00	mg/l	SW846 6010C
Manganese	0.730	R06	0.0100	mg/l	SW846 6010C
Nickel	0.0034	J	0.0050	mg/l	SW846 6010C
Potassium	15.6		0.500	mg/l	SW846 6010C
Sodium	449	GS1, R050.0		mg/l	SW846 6010C
Vanadium	0.0047	J	0.0050	mg/l	SW846 6010C
Zinc	0.0106		0.0050	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	0.79	J	1.00	µg/l	SW846 8260C
4-Isopropyltoluene	0.59	J	1.00	µg/l	SW846 8260C
Benzene	0.33	J	1.00	µg/l	SW846 8260C
Isopropylbenzene	3.16		1.00	µg/l	SW846 8260C
m,p-Xylene	0.62	J	2.00	µg/l	SW846 8260C
Naphthalene	0.67	J	1.00	µg/l	SW846 8260C
n-Butylbenzene	0.47	J	1.00	µg/l	SW846 8260C
n-Propylbenzene	4.80		1.00	µg/l	SW846 8260C
sec-Butylbenzene	1.53		1.00	µg/l	SW846 8260C
tert-Butylbenzene	0.51	J	1.00	µg/l	SW846 8260C

Lab ID: SC44935-05

Client ID: MW-D (2018-03-19)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.0666		0.0250	mg/l	SW846 6010C
Antimony	0.0062		0.0060	mg/l	SW846 6010C
Barium	0.230		0.0050	mg/l	SW846 6010C
Calcium	140	R06	5.00	mg/l	SW846 6010C
Chromium	0.0030	J	0.0050	mg/l	SW846 6010C
Copper	0.0082		0.0050	mg/l	SW846 6010C
Iron	0.0858		0.0150	mg/l	SW846 6010C
Magnesium	18.1	R06	5.00	mg/l	SW846 6010C
Manganese	0.0020	R06, J	0.0100	mg/l	SW846 6010C
Nickel	0.0012	J	0.0050	mg/l	SW846 6010C
Potassium	6.26		0.500	mg/l	SW846 6010C
Selenium	0.0064	J	0.0150	mg/l	SW846 6010C
Sodium	1400	GS1, R050		mg/l	SW846 6010C
Vanadium	0.0028	J	0.0050	mg/l	SW846 6010C
Zinc	0.0154		0.0050	mg/l	SW846 6010C

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*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

MW-5 (2018-03-19)

SC44935-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 11:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	02-Apr-18	02-Apr-18	GMA	1804359	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

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Sample Identification

MW-5 (2018-03-19)

SC44935-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 11:00

Received

20-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>															
<b>Volatile Organic Compounds by SW846 8260</b>															
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	SW846 8260C	02-Apr-18	02-Apr-18	GMA	1804359	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 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		
<i>Surrogate recoveries:</i>															
460-00-4	4-Bromofluorobenzene	93			70-130 %			"	"	"	"	"			
2037-26-5	Toluene-d8	100			70-130 %			"	"	"	"	"			
17060-07-0	1,2-Dichloroethane-d4	108			70-130 %			"	"	"	"	"			
1868-53-7	Dibromofluoromethane	111			70-130 %			"	"	"	"	"			
<b>Tentatively Identified Compounds by GC/MS</b>															
Tentatively Identified Compounds		None found		µg/l			1	SW846 8260C TICs	"	"	GMA	"			
<b>Semivolatile Organic Compounds by GCMS</b>															
<b>Semivolatile Organic Compounds</b>															

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Sample Identification

MW-5 (2018-03-19)

SC44935-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 11:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.76	U	µg/l	4.76	0.658	1	SW846 8270D	26-Mar-18	28-Mar-18	MSL	1804025	X
208-96-8	Acenaphthylene	< 4.76	U	µg/l	4.76	0.650	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.76	U	µg/l	4.76	1.69	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.76	U	µg/l	4.76	0.579	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.76	U	µg/l	4.76	0.712	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.52	U	µg/l	9.52	1.09	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.76	U	µg/l	4.76	0.510	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.76	U	µg/l	4.76	0.535	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.76	U	µg/l	4.76	0.416	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.76	U	µg/l	4.76	0.505	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.76	U	µg/l	4.76	0.457	1	"	"	"	"	"	X
65-85-0	Benzoic acid	1.49	J	µg/l	4.76	0.502	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.76	U	µg/l	4.76	0.743	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.76	U	µg/l	4.76	0.634	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.76	U	µg/l	4.76	0.699	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.76	U	µg/l	4.76	0.741	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.76	U	µg/l	4.76	0.608	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.76	U	µg/l	4.76	0.573	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.76	U	µg/l	4.76	0.417	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.76	U	µg/l	4.76	1.49	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.76	U	µg/l	4.76	0.477	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.76	U	µg/l	4.76	1.07	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.76	U	µg/l	4.76	0.562	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.76	U	µg/l	4.76	0.712	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.76	U	µg/l	4.76	0.574	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.76	U	µg/l	4.76	0.507	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.76	U	µg/l	4.76	0.429	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.76	U	µg/l	4.76	0.705	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.76	U	µg/l	4.76	0.535	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.76	U	µg/l	4.76	0.616	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.76	U	µg/l	4.76	0.585	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.76	U	µg/l	4.76	1.89	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.76	U	µg/l	4.76	0.505	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.76	U	µg/l	4.76	0.593	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.76	U	µg/l	4.76	0.722	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.76	U	µg/l	4.76	0.622	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.76	U	µg/l	4.76	0.435	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.76	U	µg/l	4.76	0.304	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.76	U	µg/l	4.76	0.534	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	0.857	J	µg/l	4.76	0.641	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	1.28	J	µg/l	4.76	0.565	1	"	"	"	"	"	X

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Sample Identification

MW-5 (2018-03-19)

SC44935-01

Client Project #

18-051

Matrix

Ground Water

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19-Mar-18 11:00

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20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	35.3		µg/l	4.76	0.387	1	SW846 8270D	26-Mar-18	28-Mar-18	MSL	1804025	X
206-44-0	Fluoranthene	< 4.76	U	µg/l	4.76	0.608	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.76	U	µg/l	4.76	0.583	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.76	U	µg/l	4.76	0.544	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.76	U	µg/l	4.76	0.370	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.76	U	µg/l	4.76	0.987	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.76	U	µg/l	4.76	0.609	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.76	U	µg/l	4.76	0.552	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.76	U	µg/l	4.76	0.558	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.76	U	µg/l	4.76	0.547	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.76	U	µg/l	4.76	0.633	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.52	U	µg/l	9.52	0.586	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.76	U	µg/l	4.76	0.652	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.76	U	µg/l	4.76	0.577	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.76	U	µg/l	4.76	0.517	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.76	U	µg/l	4.76	0.356	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.76	U	µg/l	4.76	0.657	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.76	U	µg/l	4.76	0.443	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	1.21	J	µg/l	19.0	0.798	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.76	U	µg/l	4.76	0.641	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	1.10	J	µg/l	4.76	0.550	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.76	U	µg/l	4.76	0.620	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.0	U	µg/l	19.0	0.355	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.76	U	µg/l	4.76	0.558	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.76	U	µg/l	4.76	0.614	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.76	U	µg/l	4.76	0.581	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.76	U	µg/l	4.76	0.780	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.76	U	µg/l	4.76	0.654	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.76	U	µg/l	4.76	0.698	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.76	U	µg/l	4.76	0.495	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.76	U	µg/l	4.76	0.493	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.76	U	µg/l	4.76	0.663	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.76	U	µg/l	4.76	0.690	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	12	Z-2		30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	14	Z-2		15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	13	Z-2		30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	8	Z-2		15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	29	Z-2		30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	14	Z-2		15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
Tentatively Identified Compounds		None found		µg/l			1	SW846 8270D TICS	"	"	MSL	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													

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Sample Identification

MW-5 (2018-03-19)

SC44935-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 11:00

Received

20-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>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	21-Mar-18			KT	1803871
<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	23-Mar-18	30-Mar-18	SJR/T	1803912	X
7429-90-5	Aluminum	<b>0.0682</b>		mg/l	0.0250	0.0103	1	"	"	03-Apr-18	"	"	X
7440-38-2	Arsenic	< 0.00400	U	mg/l	0.00400	0.00138	1	"	"	30-Mar-18	"	"	X
7440-39-3	Barium	<b>0.230</b>		mg/l	0.0050	0.0007	1	"	"	03-Apr-18	"	"	X
7440-41-7	Beryllium	<b>0.0004</b>	J	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	<b>133</b>	R06	mg/l	5.00	0.0071	1	"	"	30-Mar-18	"	"	X
7440-43-9	Cadmium	<b>0.0004</b>	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	<b>0.0032</b>	J	mg/l	0.0050	0.0009	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	<b>0.0064</b>		mg/l	0.0050	0.0023	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	<b>0.0706</b>		mg/l	0.0150	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	<b>5.90</b>		mg/l	0.500	0.0600	1	"	"	"	"	"	X
7439-95-4	Magnesium	<b>17.7</b>	R06	mg/l	5.00	0.0044	1	"	"	03-Apr-18	"	"	X
7439-96-5	Manganese	< 0.0100	R06, U	mg/l	0.0100	0.0019	1	"	"	04-Apr-18	"	"	X
7440-23-5	Sodium	<b>1,330</b>	GS1, R06, D	mg/l	100	0.785	20	"	"	03-Apr-18	"	"	X
7440-02-0	Nickel	<b>0.0010</b>	J	mg/l	0.0050	0.0009	1	"	"	30-Mar-18	"	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	"	"	X
7440-36-0	Antimony	<b>0.0065</b>		mg/l	0.0060	0.0016	1	"	"	"	"	"	X
7782-49-2	Selenium	<b>0.0066</b>	J	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	<b>0.0027</b>	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	<b>0.0138</b>		mg/l	0.0050	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00013	1	EPA 245.1/7470A	26-Mar-18	27-Mar-18	ABW	1803913	X

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Sample Identification

MW-7 (2018-03-19)

SC44935-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 12:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	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

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Sample Identification

MW-7 (2018-03-19)

SC44935-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 12:00

Received

20-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>													
<b>Volatile Organic Compounds by SW846 8260</b>													
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	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 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
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	96			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	108			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	100			70-130 %			"	"	"	"	"	
<b>Tentatively Identified Compounds by GC/MS</b>													
	Tentatively Identified Compounds	<b>None found</b>		µg/l				1	SW846 8260C TICs	"	"	GMA	"
<b>Total Metals by EPA 200/6000 Series Methods</b>													
Prepared by method General Prep-Metal													

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Sample Identification

MW-7 (2018-03-19)

SC44935-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 12:00

Received

20-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>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	21-Mar-18			KT	1803871
<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	23-Mar-18	30-Mar-18	SJR/T	1803912	X
7429-90-5	Aluminum	<b>0.0330</b>		mg/l	0.0250	0.0103	1	"	"	03-Apr-18	"	"	X
7440-38-2	Arsenic	< 0.00400	U	mg/l	0.00400	0.00138	1	"	"	30-Mar-18	"	"	X
7440-39-3	Barium	<b>0.680</b>		mg/l	0.0050	0.0007	1	"	"	03-Apr-18	"	"	X
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	<b>176</b>	R06	mg/l	5.00	0.0071	1	"	"	30-Mar-18	"	"	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	<b>0.0017</b>	J	mg/l	0.0050	0.0009	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	<b>0.0067</b>		mg/l	0.0050	0.0023	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	<b>0.102</b>		mg/l	0.0150	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	<b>9.14</b>		mg/l	0.500	0.0600	1	"	"	"	"	"	X
7439-95-4	Magnesium	<b>30.0</b>	R06	mg/l	5.00	0.0044	1	"	"	03-Apr-18	"	"	X
7439-96-5	Manganese	<b>0.0154</b>	R06	mg/l	0.0100	0.0019	1	"	"	04-Apr-18	"	"	X
7440-23-5	Sodium	<b>409</b>	GS1, R06, D	mg/l	50.0	0.392	10	"	"	03-Apr-18	"	"	X
7440-02-0	Nickel	<b>0.0016</b>	J	mg/l	0.0050	0.0009	1	"	"	30-Mar-18	"	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	"	"	X
7440-36-0	Antimony	<b>0.0022</b>	J	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	<b>0.0042</b>	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	mg/l	0.00020	0.00013	1	EPA 245.1/7470A	26-Mar-18	27-Mar-18	ABW	1803913	X

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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:54

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
GS1													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 10.0	U, D	µg/l	10.0	5.32	10	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	X
67-64-1	Acetone	< 100	U, D	µg/l	100	8.04	10	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 5.00	U, D	µg/l	5.00	4.66	10	"	"	"	"	"	X
71-43-2	Benzene	<b>5.70</b>	J, D	µg/l	10.0	2.84	10	"	"	"	"	"	X
108-86-1	Bromobenzene	< 10.0	U, D	µg/l	10.0	3.32	10	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 10.0	U, D	µg/l	10.0	3.38	10	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 5.00	U, D	µg/l	5.00	4.17	10	"	"	"	"	"	X
75-25-2	Bromoform	< 10.0	U, D	µg/l	10.0	4.25	10	"	"	"	"	"	X
74-83-9	Bromomethane	< 20.0	U, D	µg/l	20.0	8.96	10	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 20.0	U, D	µg/l	20.0	10.7	10	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>13.1</b>	D	µg/l	10.0	4.12	10	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>7.40</b>	J, D	µg/l	10.0	3.26	10	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 10.0	U, D	µg/l	10.0	3.15	10	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 20.0	U, D	µg/l	20.0	4.12	10	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 10.0	U, D	µg/l	10.0	4.37	10	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 10.0	U, D	µg/l	10.0	2.49	10	"	"	"	"	"	X
75-00-3	Chloroethane	< 20.0	U, D	µg/l	20.0	5.88	10	"	"	"	"	"	X
67-66-3	Chloroform	< 10.0	U, D	µg/l	10.0	3.26	10	"	"	"	"	"	X
74-87-3	Chloromethane	< 20.0	U, D	µg/l	20.0	3.68	10	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 10.0	U, D	µg/l	10.0	3.16	10	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 10.0	U, D	µg/l	10.0	3.16	10	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 20.0	U, D	µg/l	20.0	8.63	10	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 5.00	U, D	µg/l	5.00	3.17	10	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 5.00	U, D	µg/l	5.00	2.02	10	"	"	"	"	"	X
74-95-3	Dibromomethane	< 10.0	U, D	µg/l	10.0	3.09	10	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.77	10	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	3.14	10	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 20.0	U, D	µg/l	20.0	5.84	10	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 10.0	U, D	µg/l	10.0	3.23	10	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 10.0	U, D	µg/l	10.0	2.77	10	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 10.0	U, D	µg/l	10.0	6.93	10	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.27	10	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.77	10	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.14	10	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	4.18	10	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 10.0	U, D	µg/l	10.0	5.78	10	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.59	10	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.47	10	"	"	"	"	"	X
100-41-4	Ethylbenzene	<b>157</b>	D	µg/l	10.0	3.29	10	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 5.00	U, D	µg/l	5.00	4.70	10	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 20.0	U, D	µg/l	20.0	5.28	10	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:54

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
				GS1									
98-82-8	Isopropylbenzene	21.9	D	µg/l	10.0	3.60	10	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	X
99-87-6	4-Isopropyltoluene	4.50	J, D	µg/l	10.0	2.79	10	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.37	10	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 20.0	U, D	µg/l	20.0	5.15	10	"	"	"	"	"	X
75-09-2	Methylene chloride	< 20.0	U, D	µg/l	20.0	6.61	10	"	"	"	"	"	X
91-20-3	Naphthalene	73.2	D	µg/l	10.0	3.51	10	"	"	"	"	"	X
103-65-1	n-Propylbenzene	67.8	D	µg/l	10.0	3.44	10	"	"	"	"	"	X
100-42-5	Styrene	< 10.0	U, D	µg/l	10.0	4.05	10	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 10.0	U, D	µg/l	10.0	3.78	10	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 5.00	U, D	µg/l	5.00	3.30	10	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.0	U, D	µg/l	10.0	5.70	10	"	"	"	"	"	X
108-88-3	Toluene	15.6	D	µg/l	10.0	2.99	10	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.77	10	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.78	10	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	2.96	10	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 10.0	U, D	µg/l	10.0	5.09	10	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 10.0	U, D	µg/l	10.0	3.30	10	"	"	"	"	"	X
79-01-6	Trichloroethene	< 10.0	U, D	µg/l	10.0	4.97	10	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 10.0	U, D	µg/l	10.0	4.87	10	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	486	D	µg/l	10.0	3.55	10	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	150	D	µg/l	10.0	4.31	10	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 10.0	U, D	µg/l	10.0	4.72	10	"	"	"	"	"	X
179601-23-1	m,p-Xylene	607	D	µg/l	20.0	3.80	10	"	"	"	"	"	X
95-47-6	o-Xylene	156	D	µg/l	10.0	2.83	10	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 20.0	U, D	µg/l	20.0	10.6	10	"	"	"	"	"	
60-29-7	Ethyl ether	< 10.0	U, D	µg/l	10.0	3.74	10	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 10.0	U, D	µg/l	10.0	4.93	10	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	3.32	10	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 10.0	U, D	µg/l	10.0	2.86	10	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 100	U, D	µg/l	100	59.0	10	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 200	U, D	µg/l	200	114	10	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 50.0	U, D	µg/l	50.0	8.21	10	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	U, D	µg/l	2000	309	10	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	98			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	102			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	109			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	100			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
000563-79-1	2-Butene, 2,3-dimethyl-	87	D	µg/l			10	SW846 8260C TICs	"	"	GMA	"	
611-14-3	Benzene, 1-ethyl-2-methyl-	280	D	µg/l			10	"	"	"	"	"	

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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

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19-Mar-18 13:54

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20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Tentatively Identified Compounds by GC/MS</b>													
002039-89-6	Benzene, 2-ethenyl-1,4-dime...	87	D	µg/l			10	SW846 8260C TICs	22-Mar-18	22-Mar-18	GMA	1803890	
78-78-4	Butane, 2-methyl-	340	D	µg/l			10	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	310	D	µg/l			10	"	"	"	"	"	
109-66-0	Pentane	130	D	µg/l			10	"	"	"	"	"	
107-83-5	Pentane, 2-methyl-	380	D	µg/l			10	"	"	"	"	"	
96-14-0	Pentane, 3-methyl-	180	D	µg/l			10	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 4.85	U	µg/l	4.85	0.671	1	SW846 8270D	26-Mar-18	28-Mar-18	MSL	1804025	X
208-96-8	Acenaphthylene	< 4.85	U	µg/l	4.85	0.663	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.85	U	µg/l	4.85	1.72	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.85	U	µg/l	4.85	0.590	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.71	U	µg/l	9.71	1.11	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.85	U	µg/l	4.85	0.520	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.85	U	µg/l	4.85	0.424	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.85	U	µg/l	4.85	0.466	1	"	"	"	"	"	X
65-85-0	Benzoic acid	3.07	J	µg/l	4.85	0.512	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.85	U	µg/l	4.85	0.757	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.85	U	µg/l	4.85	0.647	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.85	U	µg/l	4.85	0.713	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.85	U	µg/l	4.85	0.755	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	1.32	J	µg/l	4.85	0.619	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.584	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.85	U	µg/l	4.85	0.425	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.85	U	µg/l	4.85	1.51	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.85	U	µg/l	4.85	0.486	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.85	U	µg/l	4.85	1.09	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.85	U	µg/l	4.85	0.573	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.585	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.85	U	µg/l	4.85	0.517	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.85	U	µg/l	4.85	0.437	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.85	U	µg/l	4.85	0.718	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.628	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.596	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.85	U	µg/l	4.85	1.93	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

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19-Mar-18 13:54

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20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
84-66-2	Diethyl phthalate	< 4.85	U	µg/l	4.85	0.605	1	SW846 8270D	26-Mar-18	28-Mar-18	MSL	1804025	X
131-11-3	Dimethyl phthalate	< 4.85	U	µg/l	4.85	0.736	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.85	U	µg/l	4.85	0.634	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.85	U	µg/l	4.85	0.444	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	1.71	J	µg/l	4.85	0.310	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	1.15	J	µg/l	4.85	0.545	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	0.913	J	µg/l	4.85	0.653	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	1.93	J	µg/l	4.85	0.576	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	3.62	J	µg/l	4.85	0.394	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.85	U	µg/l	4.85	0.619	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.85	U	µg/l	4.85	0.594	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.85	U	µg/l	4.85	0.554	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.85	U	µg/l	4.85	0.377	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.85	U	µg/l	4.85	1.01	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	14.8		µg/l	4.85	0.620	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.85	U	µg/l	4.85	0.563	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	17.3		µg/l	4.85	0.557	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.85	U	µg/l	4.85	0.646	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.71	U	µg/l	9.71	0.597	1	"	"	"	"	"	X
91-20-3	Naphthalene	22.4		µg/l	4.85	0.665	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.85	U	µg/l	4.85	0.588	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.85	U	µg/l	4.85	0.527	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.85	U	µg/l	4.85	0.363	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	8.90		µg/l	4.85	0.670	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.85	U	µg/l	4.85	0.451	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	1.26	J	µg/l	19.4	0.814	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.85	U	µg/l	4.85	0.653	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	2.96	J	µg/l	4.85	0.561	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.85	U	µg/l	4.85	0.632	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.4	U	µg/l	19.4	0.362	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.85	U	µg/l	4.85	0.626	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.85	U	µg/l	4.85	0.592	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.85	U	µg/l	4.85	0.795	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.85	U	µg/l	4.85	0.667	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	7.50		µg/l	4.85	0.712	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 4.85	U	µg/l	4.85	0.505	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.85	U	µg/l	4.85	0.503	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.85	U	µg/l	4.85	0.676	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.85	U	µg/l	4.85	0.704	1	"	"	"	"	"	X

Surrogate recoveries:

321-60-8	2-Fluorobiphenyl	30	30-130 %	"	"	"	"
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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:54

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
367-12-4	2-Fluorophenol	27			15-110 %			SW846 8270D	26-Mar-18	28-Mar-18	MSL		1804025
4165-60-0	Nitrobenzene-d5	35			30-130 %			"	"	"	"		"
4165-62-2	Phenol-d5	16			15-110 %			"	"	"	"		"
1718-51-0	Terphenyl-d4	48			30-130 %			"	"	"	"		"
118-79-6	2,4,6-Tribromophenol	43			15-110 %			"	"	"	"		"
<b>Tentatively Identified Compounds</b>													
	1H-Indene, 2,3-dihydro-5-me...	12		µg/l			1	SW846 8270D TICS	"	"	MSL		"
020836-11-7	1H-Indene,2,3-dihydro-2,2 -d...	9.7		µg/l			1	"	"	"	"		"
	Benzene, (1-methylethyl)-	5.7		µg/l			1	"	"	"	"		"
	Benzene, (3-methyl-2-butanyl)-	4.9		µg/l			1	"	"	"	"		"
488-23-3	Benzene, 1,2,3,4-tetramethyl-	23		µg/l			1	"	"	"	"		"
000526-73-8	Benzene, 1,2,3-trimethyl- (01)	48		µg/l			1	"	"	"	"		"
000095-93-2	Benzene, 1,2,4,5-tetramethyl- (01)	16		µg/l			1	"	"	"	"		"
108-38-3	Benzene, 1,3-dimethyl-	47		µg/l			1	"	"	"	"		"
000620-14-4	Benzene, 1-ethyl-3-methyl-	110		µg/l			1	"	"	"	"		"
001074-43-7	Benzene, 1-methyl-3-propyl-	29		µg/l			1	"	"	"	"		"
000099-87-6	Benzene, 1-methyl-4- (1-meth...	4.1		µg/l			1	"	"	"	"		"
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	7.6		µg/l			1	"	"	"	"		"
103-65-1	Benzene, propyl-	18		µg/l			1	"	"	"	"		"
010544-50-0	Cyclic octaatomic sulfur	47		µg/l			1	"	"	"	"		"
496-11-7	Indane	24		µg/l			1	"	"	"	"		"
112-39-0	n-Hexadecanoic Acid	5.1		µg/l			1	"	"	"	"		"
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<b>Prepared by method General Prep-Metal</b>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	21-Mar-18		KT		1803871
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
<b>Prepared by method SW846 3005A</b>													
7440-22-4	Silver	< 0.0050	U	mg/l	0.0050	0.0006	1	SW846 6010C	23-Mar-18	30-Mar-18	SJR/T		1803912
7429-90-5	Aluminum	< 0.0250	U	mg/l	0.0250	0.0103	1	"	"	03-Apr-18	"	"	X
7440-38-2	Arsenic	< 0.00400	U	mg/l	0.00400	0.00138	1	"	"	30-Mar-18	"	"	X
7440-39-3	Barium	0.518		mg/l	0.0050	0.0007	1	"	"	03-Apr-18	"	"	X
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	241	R06	mg/l	5.00	0.0071	1	"	"	30-Mar-18	"	"	X
7440-43-9	Cadmium	0.0004	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	0.0017	J	mg/l	0.0050	0.0009	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	< 0.0050	U	mg/l	0.0050	0.0023	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	6.36		mg/l	0.0150	0.0045	1	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-03-19)

SC44935-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:54

Received

20-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>Total Metals by EPA 6000/7000 Series Methods</b>													
7440-09-7	Potassium	<b>10.3</b>		mg/l	0.500	0.0600	1	SW846 6010C	23-Mar-18	30-Mar-18	SJR/T	1803912	X
7439-95-4	Magnesium	<b>36.4</b>	R06	mg/l	5.00	0.0044	1	"	"	03-Apr-18	"	"	X
7439-96-5	Manganese	<b>1.34</b>	R06	mg/l	0.0100	0.0019	1	"	"	04-Apr-18	"	"	X
7440-23-5	Sodium	<b>60.4</b>	R06	mg/l	5.00	0.0392	1	"	"	03-Apr-18	"	"	X
7440-02-0	Nickel	< 0.0050	U	mg/l	0.0050	0.0009	1	"	"	30-Mar-18	"	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	"	"	X
7440-36-0	Antimony	<b>0.0044</b>	J	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	<b>0.0034</b>	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	mg/l	0.00020	0.00013	1	EPA 245.1/7470A	26-Mar-18	27-Mar-18	ABW	1803913	X

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Sample Identification

MW-9 (2018-03-19)

SC44935-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:10

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	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	0.33	J	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	0.47	J	µg/l	1.00	0.41	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	1.53		µg/l	1.00	0.33	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	0.51	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

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Sample Identification

MW-9 (2018-03-19)

SC44935-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:10

Received

20-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>													
<b>Volatile Organic Compounds by SW846 8260</b>													
98-82-8	Isopropylbenzene	3.16		µg/l	1.00	0.36	1	SW846 8260C	22-Mar-18	22-Mar-18	GMA	1803890	X
99-87-6	4-Isopropyltoluene	0.59	J	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	0.67	J	µg/l	1.00	0.35	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	4.80		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	0.79	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	0.62	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	< 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
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	98			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	103			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	104			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"	
<i>Tentatively Identified Compounds by GC/MS</i>													
105-05-5	Benzene, 1,4-diethyl-	9.6		µg/l			1	SW846 8260C TICs	"	"	GMA	"	
	Cyclohexane, 1,1-dimethyl-	12		µg/l			1	"	"	"	"	"	

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

Sample Identification

MW-9 (2018-03-19)

SC44935-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 13:10

Received

20-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>Tentatively Identified Compounds by GC/MS</u>													
000822-50-4	Cyclopentane, 1,2-dimethyl-...	20	J N	µg/l			1	SW846 8260C TICs	22-Mar-18	22-Mar-18	GMA	1803890	
473-91-6	Cyclopentene, 1,2,3-trimethyl-	23		µg/l			1	"	"	"	"	"	
000767-58-8	Indan, 1-methyl-	13		µg/l			1	"	"	"	"	"	
565-59-3	Pentane, 2,3-dimethyl-	10		µg/l			1	"	"	"	"	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	21-Mar-18		KT	1803871	
<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	23-Mar-18	30-Mar-18	SJR/T	1803912	X
7429-90-5	Aluminum	2.93		mg/l	0.0250	0.0103	1	"	"	03-Apr-18	"	"	X
7440-38-2	Arsenic	< 0.00400	U	mg/l	0.00400	0.00138	1	"	"	30-Mar-18	"	"	X
7440-39-3	Barium	0.537		mg/l	0.0050	0.0007	1	"	"	03-Apr-18	"	"	X
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	230	R06	mg/l	5.00	0.0071	1	"	"	30-Mar-18	"	"	X
7440-43-9	Cadmium	0.0004	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	0.0054		mg/l	0.0050	0.0009	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	0.0058		mg/l	0.0050	0.0023	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	5.52		mg/l	0.0150	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	15.6		mg/l	0.500	0.0600	1	"	"	"	"	"	X
7439-95-4	Magnesium	36.1	R06	mg/l	5.00	0.0044	1	"	"	03-Apr-18	"	"	X
7439-96-5	Manganese	0.730	R06	mg/l	0.0100	0.0019	1	"	"	04-Apr-18	"	"	X
7440-23-5	Sodium	449	GS1, R06, D	mg/l	50.0	0.392	10	"	"	03-Apr-18	"	"	X
7440-02-0	Nickel	0.0034	J	mg/l	0.0050	0.0009	1	"	"	30-Mar-18	"	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	"	"	X
7440-36-0	Antimony	0.0034	J	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	0.0047	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0106		mg/l	0.0050	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00013	1	EPA 245.1/7470A	26-Mar-18	27-Mar-18	ABW	1803913	X

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Sample Identification

MW-D (2018-03-19)

SC44935-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 00:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	22-Mar-18	23-Mar-18	GMA	1803890	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

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Sample Identification

MW-D (2018-03-19)

SC44935-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 00:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	SW846 8260C	22-Mar-18	23-Mar-18	GMA	1803890	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 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
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	102			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
	Tentatively Identified Compounds	<b>None found</b>		µg/l				1	SW846 8260C TICs	"	"	GMA	"
<u>Total Metals by EPA 200/6000 Series Methods</u>													
Prepared by method General Prep-Metal													

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Sample Identification

MW-D (2018-03-19)

SC44935-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

19-Mar-18 00:00

Received

20-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>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	21-Mar-18			KT	1803871
<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	23-Mar-18	30-Mar-18	SJR/T	1803912	X
7429-90-5	Aluminum	<b>0.0666</b>		mg/l	0.0250	0.0103	1	"	"	03-Apr-18	"	"	X
7440-38-2	Arsenic	< 0.00400	U	mg/l	0.00400	0.00138	1	"	"	30-Mar-18	"	"	X
7440-39-3	Barium	<b>0.230</b>		mg/l	0.0050	0.0007	1	"	"	03-Apr-18	"	"	X
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	<b>140</b>	R06	mg/l	5.00	0.0071	1	"	"	30-Mar-18	"	"	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	<b>0.0030</b>	J	mg/l	0.0050	0.0009	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	<b>0.0082</b>		mg/l	0.0050	0.0023	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	<b>0.0858</b>		mg/l	0.0150	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	<b>6.26</b>		mg/l	0.500	0.0600	1	"	"	"	"	"	X
7439-95-4	Magnesium	<b>18.1</b>	R06	mg/l	5.00	0.0044	1	"	"	03-Apr-18	"	"	X
7439-96-5	Manganese	<b>0.0020</b>	R06, J	mg/l	0.0100	0.0019	1	"	"	04-Apr-18	"	"	X
7440-23-5	Sodium	<b>1,400</b>	GS1, R06, D	mg/l	250	1.96	50	"	"	04-Apr-18	"	"	X
7440-02-0	Nickel	<b>0.0012</b>	J	mg/l	0.0050	0.0009	1	"	"	30-Mar-18	"	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	"	"	X
7440-36-0	Antimony	<b>0.0062</b>		mg/l	0.0060	0.0016	1	"	"	"	"	"	X
7782-49-2	Selenium	<b>0.0064</b>	J	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	<b>0.0028</b>	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	<b>0.0154</b>		mg/l	0.0050	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00013	1	EPA 245.1/7470A	26-Mar-18	27-Mar-18	ABW	1803913	X

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Sample Identification

Trip Blank

SC44935-06

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

19-Mar-18 00:00

Received

20-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.53	1	SW846 8260C	22-Mar-18	23-Mar-18	GMA	1803890	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	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 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

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Sample Identification

Trip Blank

SC44935-06

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

19-Mar-18 00:00

Received

20-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>													
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.36	1	SW846 8260C	22-Mar-18	23-Mar-18	GMA	1803890	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 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
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	100			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	105			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
	Tentatively Identified Compounds	<b>None found</b>		µg/l				1	SW846 8260C TICs	"	"	GMA	"

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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>										
Batch 1803890 - SW846 5030 Water MS										
<u>Blank (1803890-BLK1)</u>										
<u>Prepared &amp; Analyzed: 22-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>										
Batch 1803890 - SW846 5030 Water MS										
<u>Blank (1803890-BLK1)</u>										
<u>Prepared &amp; Analyzed: 22-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						
Trichloroethylene	< 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						
Surrogate: 4-Bromofluorobenzene	47.7		µg/l	50.0		95		70-130		
Surrogate: Toluene-d8	49.9		µg/l	50.0		100		70-130		
Surrogate: 1,2-Dichloroethane-d4	55.5		µg/l	50.0		111		70-130		
Surrogate: Dibromofluoromethane	49.9		µg/l	50.0		100		70-130		
<u>LCS (1803890-BS1)</u>										
<u>Prepared &amp; Analyzed: 22-Mar-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	<b>20.2</b>		µg/l	20.0		101		70-130		
Acetone	<b>16.1</b>		µg/l	20.0		81		70-130		
Acrylonitrile	<b>14.6</b>		µg/l	20.0		73		70-130		
Benzene	<b>16.2</b>		µg/l	20.0		81		70-130		
Bromobenzene	<b>17.6</b>		µg/l	20.0		88		70-130		
Bromoform	<b>18.4</b>		µg/l	20.0		92		70-130		
Bromochloromethane	<b>19.3</b>		µg/l	20.0		96		70-130		
Bromodichloromethane	<b>18.6</b>		µg/l	20.0		93		70-130		
Bromoform	<b>22.4</b>		µg/l	20.0		112		70-130		
Bromomethane	<b>15.1</b>		µg/l	20.0		76		70-130		
2-Butanone (MEK)	<b>15.7</b>		µg/l	20.0		79		70-130		
n-Butylbenzene	<b>17.4</b>		µg/l	20.0		87		70-130		
sec-Butylbenzene	<b>17.3</b>		µg/l	20.0		87		70-130		
Carbon disulfide	<b>17.9</b>		µg/l	20.0		89		70-130		
Carbon tetrachloride	<b>22.0</b>		µg/l	20.0		110		70-130		
Chlorobenzene	<b>16.7</b>		µg/l	20.0		84		70-130		
Chloroethane	<b>23.6</b>		µg/l	20.0		118		70-130		
Chloroform	<b>18.3</b>		µg/l	20.0		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>										
Batch 1803890 - SW846 5030 Water MS										
<u>LCS (1803890-BS1)</u>										
<u>Prepared &amp; Analyzed: 22-Mar-18</u>										
Chloromethane	14.4		µg/l		20.0	72	70-130			
2-Chlorotoluene	17.9		µg/l		20.0	89	70-130			
4-Chlorotoluene	18.0		µg/l		20.0	90	70-130			
1,2-Dibromo-3-chloropropane	18.5		µg/l		20.0	93	70-130			
Dibromochloromethane	20.0		µg/l		20.0	100	70-130			
1,2-Dibromoethane (EDB)	18.0		µg/l		20.0	90	70-130			
Dibromomethane	18.2		µg/l		20.0	91	70-130			
1,2-Dichlorobenzene	16.6		µg/l		20.0	83	70-130			
1,3-Dichlorobenzene	18.6		µg/l		20.0	93	70-130			
1,4-Dichlorobenzene	17.1		µg/l		20.0	86	70-130			
Dichlorodifluoromethane (Freon12)	19.8		µg/l		20.0	99	70-130			
1,1-Dichloroethane	16.4		µg/l		20.0	82	70-130			
1,2-Dichloroethane	19.0		µg/l		20.0	95	70-130			
1,1-Dichloroethene	17.6		µg/l		20.0	88	70-130			
cis-1,2-Dichloroethene	16.0		µg/l		20.0	80	70-130			
trans-1,2-Dichloroethene	16.3		µg/l		20.0	81	70-130			
1,2-Dichloropropane	15.9		µg/l		20.0	79	70-130			
1,3-Dichloropropane	16.5		µg/l		20.0	83	70-130			
2,2-Dichloropropane	17.7		µg/l		20.0	88	70-130			
1,1-Dichloropropene	16.6		µg/l		20.0	83	70-130			
cis-1,3-Dichloropropene	15.9		µg/l		20.0	79	70-130			
trans-1,3-Dichloropropene	18.2		µg/l		20.0	91	70-130			
Ethylbenzene	16.9		µg/l		20.0	84	70-130			
Hexachlorobutadiene	16.6		µg/l		20.0	83	70-130			
2-Hexanone (MBK)	14.6		µg/l		20.0	73	70-130			
Isopropylbenzene	17.1		µg/l		20.0	86	70-130			
4-Isopropyltoluene	16.8		µg/l		20.0	84	70-130			
Methyl tert-butyl ether	16.3		µg/l		20.0	82	70-130			
4-Methyl-2-pentanone (MIBK)	15.3		µg/l		20.0	77	70-130			
Methylene chloride	16.2		µg/l		20.0	81	70-130			
Naphthalene	20.0		µg/l		20.0	100	70-130			
n-Propylbenzene	17.3		µg/l		20.0	86	70-130			
Styrene	17.1		µg/l		20.0	85	70-130			
1,1,1,2-Tetrachloroethane	19.9		µg/l		20.0	99	70-130			
1,1,2,2-Tetrachloroethane	17.3		µg/l		20.0	87	70-130			
Tetrachloroethene	18.2		µg/l		20.0	91	70-130			
Toluene	17.2		µg/l		20.0	86	70-130			
1,2,3-Trichlorobenzene	18.0		µg/l		20.0	90	70-130			
1,2,4-Trichlorobenzene	18.2		µg/l		20.0	91	70-130			
1,3,5-Trichlorobenzene	18.3		µg/l		20.0	91	70-130			
1,1,1-Trichloroethane	20.2		µg/l		20.0	101	70-130			
1,1,2-Trichloroethane	17.3		µg/l		20.0	86	70-130			
Trichloroethene	18.2		µg/l		20.0	91	70-130			
Trichlorofluoromethane (Freon 11)	25.4		µg/l		20.0	127	70-130			
1,2,3-Trichloropropane	17.8		µg/l		20.0	89	70-130			
1,2,4-Trimethylbenzene	17.8		µg/l		20.0	89	70-130			
1,3,5-Trimethylbenzene	18.0		µg/l		20.0	90	70-130			
Vinyl chloride	20.6		µg/l		20.0	103	70-130			
m,p-Xylene	16.8		µg/l		20.0	84	70-130			
o-Xylene	16.2		µg/l		20.0	81	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>										
Batch 1803890 - SW846 5030 Water MS										
<u>LCS (1803890-BS1)</u>										
Tetrahydrofuran	13.9	QM9	µg/l		20.0	69	70-130			
Ethyl ether	19.5		µg/l		20.0	98	70-130			
Tert-amyl methyl ether	16.0		µg/l		20.0	80	70-130			
Ethyl tert-butyl ether	15.5		µg/l		20.0	77	70-130			
Di-isopropyl ether	14.1		µg/l		20.0	70	70-130			
Tert-Butanol / butyl alcohol	150		µg/l		200	75	70-130			
1,4-Dioxane	141		µg/l		200	71	70-130			
trans-1,4-Dichloro-2-butene	20.7		µg/l		20.0	103	70-130			
Ethanol	321		µg/l		400	80	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	49.6		µg/l		50.0	99	70-130			
<u>Surrogate: Toluene-d8</u>										
	50.1		µg/l		50.0	100	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	55.2		µg/l		50.0	110	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	50.9		µg/l		50.0	102	70-130			
<u>LCS Dup (1803890-BSD1)</u>										
<u>Prepared &amp; Analyzed: 22-Mar-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.1		µg/l		20.0	110	70-130	9	20	
Acetone	18.0		µg/l		20.0	90	70-130	11	20	
Acrylonitrile	17.0		µg/l		20.0	85	70-130	15	20	
Benzene	17.6		µg/l		20.0	88	70-130	8	20	
Bromobenzene	19.2		µg/l		20.0	96	70-130	8	20	
Bromochloromethane	20.3		µg/l		20.0	101	70-130	9	20	
Bromodichloromethane	21.1		µg/l		20.0	105	70-130	9	20	
Bromoform	20.6		µg/l		20.0	103	70-130	11	20	
Bromomethane	25.0		µg/l		20.0	125	70-130	11	20	
2-Butanone (MEK)	17.1		µg/l		20.0	86	70-130	13	20	
n-Butylbenzene	16.5		µg/l		20.0	83	70-130	5	20	
sec-Butylbenzene	18.4		µg/l		20.0	92	70-130	5	20	
tert-Butylbenzene	18.8		µg/l		20.0	94	70-130	8	20	
Carbon disulfide	19.2		µg/l		20.0	96	70-130	7	20	
Carbon tetrachloride	23.5		µg/l		20.0	117	70-130	6	20	
Chlorobenzene	18.2		µg/l		20.0	91	70-130	8	20	
Chloroethane	25.3		µg/l		20.0	126	70-130	7	20	
Chloroform	19.7		µg/l		20.0	98	70-130	8	20	
Chloromethane	15.8		µg/l		20.0	79	70-130	9	20	
2-Chlorotoluene	19.3		µg/l		20.0	97	70-130	8	20	
4-Chlorotoluene	19.4		µg/l		20.0	97	70-130	7	20	
1,2-Dibromo-3-chloropropane	20.1		µg/l		20.0	100	70-130	8	20	
Dibromochloromethane	22.6		µg/l		20.0	113	70-130	12	20	
1,2-Dibromoethane (EDB)	19.7		µg/l		20.0	98	70-130	9	20	
Dibromomethane	20.0		µg/l		20.0	100	70-130	10	20	
1,2-Dichlorobenzene	18.6		µg/l		20.0	93	70-130	12	20	
1,3-Dichlorobenzene	19.8		µg/l		20.0	99	70-130	6	20	
1,4-Dichlorobenzene	18.1		µg/l		20.0	91	70-130	6	20	
Dichlorodifluoromethane (Freon12)	21.8		µg/l		20.0	109	70-130	10	20	
1,1-Dichloroethane	18.3		µg/l		20.0	91	70-130	11	20	
1,2-Dichloroethane	20.6		µg/l		20.0	103	70-130	8	20	
1,1-Dichloroethene	19.6		µg/l		20.0	98	70-130	10	20	
cis-1,2-Dichloroethene	17.6		µg/l		20.0	88	70-130	9	20	
trans-1,2-Dichloroethene	17.7		µg/l		20.0	89	70-130	8	20	
1,2-Dichloropropane	17.1		µg/l		20.0	86	70-130	8	20	
1,3-Dichloropropane	17.8		µg/l		20.0	89	70-130	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>										
Batch 1803890 - SW846 5030 Water MS										
<u>LCS Dup (1803890-BSD1)</u>										
<u>Prepared &amp; Analyzed: 22-Mar-18</u>										
2,2-Dichloropropane	19.2		µg/l		20.0	96	70-130	9	20	
1,1-Dichloropropene	18.3		µg/l		20.0	92	70-130	10	20	
cis-1,3-Dichloropropene	17.5		µg/l		20.0	88	70-130	10	20	
trans-1,3-Dichloropropene	19.4		µg/l		20.0	97	70-130	6	20	
Ethylbenzene	18.1		µg/l		20.0	90	70-130	7	20	
Hexachlorobutadiene	17.3		µg/l		20.0	87	70-130	4	20	
2-Hexanone (MBK)	16.6		µg/l		20.0	83	70-130	13	20	
Isopropylbenzene	18.6		µg/l		20.0	93	70-130	8	20	
4-Isopropyltoluene	17.7		µg/l		20.0	88	70-130	5	20	
Methyl tert-butyl ether	18.1		µg/l		20.0	90	70-130	10	20	
4-Methyl-2-pentanone (MIBK)	17.0		µg/l		20.0	85	70-130	10	20	
Methylene chloride	17.9		µg/l		20.0	89	70-130	10	20	
Naphthalene	22.2		µg/l		20.0	111	70-130	11	20	
n-Propylbenzene	18.4		µg/l		20.0	92	70-130	6	20	
Styrene	18.4		µg/l		20.0	92	70-130	8	20	
1,1,1,2-Tetrachloroethane	21.5		µg/l		20.0	108	70-130	8	20	
1,1,2,2-Tetrachloroethane	19.3		µg/l		20.0	97	70-130	11	20	
Tetrachloroethene	20.0		µg/l		20.0	100	70-130	9	20	
Toluene	18.3		µg/l		20.0	91	70-130	6	20	
1,2,3-Trichlorobenzene	19.3		µg/l		20.0	96	70-130	7	20	
1,2,4-Trichlorobenzene	19.2		µg/l		20.0	96	70-130	5	20	
1,3,5-Trichlorobenzene	19.6		µg/l		20.0	98	70-130	7	20	
1,1,1-Trichloroethane	22.3		µg/l		20.0	111	70-130	10	20	
1,1,2-Trichloroethane	18.8		µg/l		20.0	94	70-130	9	20	
Trichloroethene	19.6		µg/l		20.0	98	70-130	8	20	
Trichlorofluoromethane (Freon 11)	27.7	QM9	µg/l		20.0	138	70-130	9	20	
1,2,3-Trichloropropane	20.3		µg/l		20.0	101	70-130	13	20	
1,2,4-Trimethylbenzene	19.2		µg/l		20.0	96	70-130	8	20	
1,3,5-Trimethylbenzene	19.3		µg/l		20.0	96	70-130	7	20	
Vinyl chloride	22.4		µg/l		20.0	112	70-130	9	20	
m,p-Xylene	18.3		µg/l		20.0	91	70-130	8	20	
o-Xylene	17.9		µg/l		20.0	90	70-130	10	20	
Tetrahydrofuran	15.8		µg/l		20.0	79	70-130	13	20	
Ethyl ether	21.6		µg/l		20.0	108	70-130	10	20	
Tert-amyl methyl ether	17.6		µg/l		20.0	88	70-130	9	20	
Ethyl tert-butyl ether	17.2		µg/l		20.0	86	70-130	10	20	
Di-isopropyl ether	15.5		µg/l		20.0	77	70-130	10	20	
Tert-Butanol / butyl alcohol	171		µg/l		200	85	70-130	13	20	
1,4-Dioxane	158		µg/l		200	79	70-130	11	20	
trans-1,4-Dichloro-2-butene	23.0		µg/l		20.0	115	70-130	11	20	
Ethanol	328		µg/l		400	82	70-130	2	20	
Surrogate: 4-Bromofluorobenzene	49.9		µg/l		50.0	100	70-130			
Surrogate: Toluene-d8	50.3		µg/l		50.0	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	54.7		µg/l		50.0	109	70-130			
Surrogate: Dibromofluoromethane	50.8		µg/l		50.0	102	70-130			
<b>Batch 1804359 - SW846 5030 Water MS</b>										
<u>Blank (1804359-BLK1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-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						

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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>										
Batch 1804359 - SW846 5030 Water MS										
<u>Blank (1804359-BLK1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
Benzene	< 1.00	U	µg/l	1.00						
Bromobenzene	< 1.00	U	µg/l	1.00						
Bromoform	< 1.00	U	µg/l	1.00						
Bromochloromethane	< 1.00	U	µg/l	1.00						
Bromodichloromethane	< 0.50	U	µg/l	0.50						
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>SW846 8260C</b>										
Batch 1804359 - SW846 5030 Water MS										
<u>Blank (1804359-BLK1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
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						
Surrogate: 4-Bromofluorobenzene	45.9		µg/l		50.0		92	70-130		
Surrogate: Toluene-d8	50.2		µg/l		50.0		100	70-130		
Surrogate: 1,2-Dichloroethane-d4	53.6		µg/l		50.0		107	70-130		
Surrogate: Dibromofluoromethane	54.7		µg/l		50.0		109	70-130		
<u>LCS (1804359-BS1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	<b>25.9</b>		µg/l		20.0		130	70-130		
Acetone	<b>22.9</b>		µg/l		20.0		115	70-130		
Acrylonitrile	<b>22.0</b>		µg/l		20.0		110	70-130		
Benzene	<b>23.1</b>		µg/l		20.0		115	70-130		
Bromobenzene	<b>20.8</b>		µg/l		20.0		104	70-130		
Bromochloromethane	<b>21.5</b>		µg/l		20.0		108	70-130		
Bromodichloromethane	<b>23.6</b>		µg/l		20.0		118	70-130		
Bromoform	<b>23.7</b>		µg/l		20.0		118	70-130		
Bromomethane	<b>16.2</b>		µg/l		20.0		81	70-130		
2-Butanone (MEK)	<b>23.4</b>		µg/l		20.0		117	70-130		
n-Butylbenzene	<b>19.9</b>		µg/l		20.0		100	70-130		
sec-Butylbenzene	<b>18.7</b>		µg/l		20.0		93	70-130		
tert-Butylbenzene	<b>18.4</b>		µg/l		20.0		92	70-130		
Carbon disulfide	<b>23.8</b>		µg/l		20.0		119	70-130		
Carbon tetrachloride	<b>27.3</b>	QM9	µg/l		20.0		137	70-130		
Chlorobenzene	<b>20.5</b>		µg/l		20.0		103	70-130		
Chloroethane	<b>21.7</b>		µg/l		20.0		108	70-130		
Chloroform	<b>22.9</b>		µg/l		20.0		114	70-130		
Chloromethane	<b>22.7</b>		µg/l		20.0		114	70-130		
2-Chlorotoluene	<b>19.6</b>		µg/l		20.0		98	70-130		
4-Chlorotoluene	<b>20.8</b>		µg/l		20.0		104	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>										
Batch 1804359 - SW846 5030 Water MS										
<u>LCS (1804359-BS1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
1,2-Dibromo-3-chloropropane	23.7		µg/l		20.0	119	70-130			
Dibromochloromethane	23.4		µg/l		20.0	117	70-130			
1,2-Dibromoethane (EDB)	21.5		µg/l		20.0	107	70-130			
Dibromomethane	22.5		µg/l		20.0	112	70-130			
1,2-Dichlorobenzene	18.9		µg/l		20.0	95	70-130			
1,3-Dichlorobenzene	20.8		µg/l		20.0	104	70-130			
1,4-Dichlorobenzene	19.1		µg/l		20.0	96	70-130			
Dichlorodifluoromethane (Freon12)	22.2		µg/l		20.0	111	70-130			
1,1-Dichloroethane	23.3		µg/l		20.0	116	70-130			
1,2-Dichloroethane	22.0		µg/l		20.0	110	70-130			
1,1-Dichloroethene	23.5		µg/l		20.0	118	70-130			
cis-1,2-Dichloroethene	21.5		µg/l		20.0	108	70-130			
trans-1,2-Dichloroethene	22.7		µg/l		20.0	113	70-130			
1,2-Dichloropropane	21.6		µg/l		20.0	108	70-130			
1,3-Dichloropropane	21.2		µg/l		20.0	106	70-130			
2,2-Dichloropropane	22.5		µg/l		20.0	112	70-130			
1,1-Dichloropropene	23.1		µg/l		20.0	115	70-130			
cis-1,3-Dichloropropene	20.5		µg/l		20.0	102	70-130			
trans-1,3-Dichloropropene	21.3		µg/l		20.0	107	70-130			
Ethylbenzene	20.8		µg/l		20.0	104	70-130			
Hexachlorobutadiene	17.5		µg/l		20.0	88	70-130			
2-Hexanone (MBK)	19.7		µg/l		20.0	98	70-130			
Isopropylbenzene	20.5		µg/l		20.0	102	70-130			
4-Isopropyltoluene	17.9		µg/l		20.0	89	70-130			
Methyl tert-butyl ether	22.9		µg/l		20.0	115	70-130			
4-Methyl-2-pentanone (MIBK)	22.2		µg/l		20.0	111	70-130			
Methylene chloride	23.0		µg/l		20.0	115	70-130			
Naphthalene	18.1		µg/l		20.0	90	70-130			
n-Propylbenzene	18.6		µg/l		20.0	93	70-130			
Styrene	17.9		µg/l		20.0	89	70-130			
1,1,1,2-Tetrachloroethane	24.3		µg/l		20.0	121	70-130			
1,1,2,2-Tetrachloroethane	20.8		µg/l		20.0	104	70-130			
Tetrachloroethene	20.9		µg/l		20.0	105	70-130			
Toluene	22.0		µg/l		20.0	110	70-130			
1,2,3-Trichlorobenzene	18.0		µg/l		20.0	90	70-130			
1,2,4-Trichlorobenzene	17.2		µg/l		20.0	86	70-130			
1,3,5-Trichlorobenzene	17.0		µg/l		20.0	85	70-130			
1,1,1-Trichloroethane	27.5	QM9	µg/l		20.0	138	70-130			
1,1,2-Trichloroethane	22.1		µg/l		20.0	110	70-130			
Trichloroethene	21.8		µg/l		20.0	109	70-130			
Trichlorofluoromethane (Freon 11)	26.8	QM9	µg/l		20.0	134	70-130			
1,2,3-Trichloropropane	21.6		µg/l		20.0	108	70-130			
1,2,4-Trimethylbenzene	17.8		µg/l		20.0	89	70-130			
1,3,5-Trimethylbenzene	18.2		µg/l		20.0	91	70-130			
Vinyl chloride	23.3		µg/l		20.0	117	70-130			
m,p-Xylene	20.9		µg/l		20.0	104	70-130			
o-Xylene	21.5		µg/l		20.0	107	70-130			
Tetrahydrofuran	20.7		µg/l		20.0	103	70-130			
Ethyl ether	22.4		µg/l		20.0	112	70-130			
Tert-amyl methyl ether	20.4		µg/l		20.0	102	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>										
Batch 1804359 - SW846 5030 Water MS										
<u>LCS (1804359-BS1)</u>										
Ethyl tert-butyl ether	21.9		µg/l		20.0	109	70-130			
Di-isopropyl ether	22.2		µg/l		20.0	111	70-130			
Tert-Butanol / butyl alcohol	214		µg/l		200	107	70-130			
1,4-Dioxane	179		µg/l		200	89	70-130			
trans-1,4-Dichloro-2-butene	16.9		µg/l		20.0	84	70-130			
Ethanol	484		µg/l		400	121	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
Surrogate: Toluene-d8	50.7		µg/l		50.0	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	50.4		µg/l		50.0	101	70-130			
Surrogate: Dibromofluoromethane	52.4		µg/l		50.0	105	70-130			
<u>LCS Dup (1804359-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.7		µg/l		20.0	118	70-130	9	20	
Acetone	23.4		µg/l		20.0	117	70-130	2	20	
Acrylonitrile	21.0		µg/l		20.0	105	70-130	4	20	
Benzene	22.0		µg/l		20.0	110	70-130	5	20	
Bromobenzene	20.4		µg/l		20.0	102	70-130	2	20	
Bromochloromethane	21.0		µg/l		20.0	105	70-130	2	20	
Bromodichloromethane	22.7		µg/l		20.0	114	70-130	4	20	
Bromoform	23.6		µg/l		20.0	118	70-130	0.3	20	
Bromomethane	15.0		µg/l		20.0	75	70-130	7	20	
2-Butanone (MEK)	23.5		µg/l		20.0	117	70-130	0.2	20	
n-Butylbenzene	18.1		µg/l		20.0	91	70-130	9	20	
sec-Butylbenzene	17.4		µg/l		20.0	87	70-130	7	20	
tert-Butylbenzene	17.1		µg/l		20.0	86	70-130	7	20	
Carbon disulfide	22.0		µg/l		20.0	110	70-130	8	20	
Carbon tetrachloride	25.2		µg/l		20.0	126	70-130	8	20	
Chlorobenzene	19.9		µg/l		20.0	99	70-130	3	20	
Chloroethane	19.6		µg/l		20.0	98	70-130	10	20	
Chloroform	22.0		µg/l		20.0	110	70-130	4	20	
Chloromethane	20.9		µg/l		20.0	105	70-130	8	20	
2-Chlorotoluene	21.9		µg/l		20.0	110	70-130	11	20	
4-Chlorotoluene	20.5		µg/l		20.0	102	70-130	2	20	
1,2-Dibromo-3-chloropropane	21.5		µg/l		20.0	108	70-130	10	20	
Dibromochloromethane	23.1		µg/l		20.0	115	70-130	2	20	
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0	105	70-130	3	20	
Dibromomethane	21.4		µg/l		20.0	107	70-130	5	20	
1,2-Dichlorobenzene	18.8		µg/l		20.0	94	70-130	0.4	20	
1,3-Dichlorobenzene	20.8		µg/l		20.0	104	70-130	0.1	20	
1,4-Dichlorobenzene	17.5		µg/l		20.0	87	70-130	9	20	
Dichlorodifluoromethane (Freon12)	24.0		µg/l		20.0	120	70-130	8	20	
1,1-Dichloroethane	22.0		µg/l		20.0	110	70-130	6	20	
1,2-Dichloroethane	21.2		µg/l		20.0	106	70-130	4	20	
1,1-Dichloroethene	23.6		µg/l		20.0	118	70-130	0.5	20	
cis-1,2-Dichloroethene	20.7		µg/l		20.0	103	70-130	4	20	
trans-1,2-Dichloroethene	21.1		µg/l		20.0	105	70-130	7	20	
1,2-Dichloropropane	20.8		µg/l		20.0	104	70-130	4	20	
1,3-Dichloropropane	20.8		µg/l		20.0	104	70-130	2	20	
2,2-Dichloropropane	20.1		µg/l		20.0	101	70-130	11	20	
1,1-Dichloropropene	21.3		µg/l		20.0	107	70-130	8	20	
cis-1,3-Dichloropropene	19.9		µg/l		20.0	99	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><u>SW846 8260C</u></b>										
Batch 1804359 - SW846 5030 Water MS										
<u>LCS Dup (1804359-BSD1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
trans-1,3-Dichloropropene	20.7		µg/l		20.0	103	70-130	3	20	
Ethylbenzene	20.1		µg/l		20.0	100	70-130	4	20	
Hexachlorobutadiene	16.4		µg/l		20.0	82	70-130	7	20	
2-Hexanone (MBK)	20.7		µg/l		20.0	104	70-130	5	20	
Isopropylbenzene	19.7		µg/l		20.0	99	70-130	4	20	
4-Isopropyltoluene	16.6		µg/l		20.0	83	70-130	8	20	
Methyl tert-butyl ether	22.4		µg/l		20.0	112	70-130	2	20	
4-Methyl-2-pentanone (MIBK)	21.9		µg/l		20.0	110	70-130	1	20	
Methylene chloride	21.6		µg/l		20.0	108	70-130	6	20	
Naphthalene	18.1		µg/l		20.0	91	70-130	0.4	20	
n-Propylbenzene	16.2		µg/l		20.0	81	70-130	14	20	
Styrene	17.8		µg/l		20.0	89	70-130	0.6	20	
1,1,1,2-Tetrachloroethane	24.6		µg/l		20.0	123	70-130	1	20	
1,1,2,2-Tetrachloroethane	21.1		µg/l		20.0	106	70-130	2	20	
Tetrachloroethene	20.0		µg/l		20.0	100	70-130	5	20	
Toluene	20.6		µg/l		20.0	103	70-130	7	20	
1,2,3-Trichlorobenzene	17.4		µg/l		20.0	87	70-130	4	20	
1,2,4-Trichlorobenzene	16.1		µg/l		20.0	81	70-130	6	20	
1,3,5-Trichlorobenzene	16.2		µg/l		20.0	81	70-130	4	20	
1,1,1-Trichloroethane	24.7		µg/l		20.0	124	70-130	11	20	
1,1,2-Trichloroethane	21.6		µg/l		20.0	108	70-130	2	20	
Trichloroethene	19.6		µg/l		20.0	98	70-130	11	20	
Trichlorofluoromethane (Freon 11)	24.2		µg/l		20.0	121	70-130	10	20	
1,2,3-Trichloropropane	22.3		µg/l		20.0	112	70-130	3	20	
1,2,4-Trimethylbenzene	17.5		µg/l		20.0	87	70-130	2	20	
1,3,5-Trimethylbenzene	17.2		µg/l		20.0	86	70-130	6	20	
Vinyl chloride	23.0		µg/l		20.0	115	70-130	1	20	
m,p-Xylene	20.1		µg/l		20.0	100	70-130	4	20	
o-Xylene	21.4		µg/l		20.0	107	70-130	0.4	20	
Tetrahydrofuran	21.6		µg/l		20.0	108	70-130	4	20	
Ethyl ether	22.4		µg/l		20.0	112	70-130	0.1	20	
Tert-amyl methyl ether	19.8		µg/l		20.0	99	70-130	3	20	
Ethyl tert-butyl ether	21.3		µg/l		20.0	106	70-130	3	20	
Di-isopropyl ether	21.8		µg/l		20.0	109	70-130	2	20	
Tert-Butanol / butyl alcohol	219		µg/l		200	109	70-130	2	20	
1,4-Dioxane	177		µg/l		200	88	70-130	1	20	
trans-1,4-Dichloro-2-butene	18.7		µg/l		20.0	93	70-130	10	20	
Ethanol	487		µg/l		400	122	70-130	0.6	20	
Surrogate: 4-Bromofluorobenzene	51.0		µg/l		50.0	102	70-130			
Surrogate: Toluene-d8	50.8		µg/l		50.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	51.7		µg/l		50.0	103	70-130			
Surrogate: Dibromofluoromethane	53.7		µg/l		50.0	107	70-130			
<b><u>SW846 8260C TICs</u></b>										
Batch 1803890 - SW846 5030 Water MS										
<u>Blank (1803890-BLK1)</u>										
<u>Prepared &amp; Analyzed: 22-Mar-18</u>										
Tentatively Identified Compounds	None found		µg/l							
Batch 1804359 - SW846 5030 Water MS										
<u>Blank (1804359-BLK1)</u>										
<u>Prepared &amp; Analyzed: 02-Apr-18</u>										
Tentatively Identified Compounds	None found		µg/l							

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804025 - SW846 3510C										
<u>Blank (1804025-BLK1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 28-Mar-18</u>										
Acenaphthene	< 5.00	U	µg/l	5.00						
Acenaphthylene	< 5.00	U	µg/l	5.00						
Aniline	< 5.00	U	µg/l	5.00						
Anthracene	< 5.00	U	µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00	U	µg/l	5.00						
Benzidine	< 10.0	U	µg/l	10.0						
Benzo (a) anthracene	< 5.00	U	µg/l	5.00						
Benzo (a) pyrene	< 5.00	U	µg/l	5.00						
Benzo (b) fluoranthene	< 5.00	U	µg/l	5.00						
Benzo (g,h,i) perlylene	< 5.00	U	µg/l	5.00						
Benzo (k) fluoranthene	< 5.00	U	µg/l	5.00						
Benzoic acid	< 5.00	U	µg/l	5.00						
Benzyl alcohol	< 5.00	U	µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00	U	µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00	U	µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Butyl benzyl phthalate	< 5.00	U	µg/l	5.00						
Carbazole	< 5.00	U	µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00	U	µg/l	5.00						
4-Chloroaniline	< 5.00	U	µg/l	5.00						
2-Chloronaphthalene	< 5.00	U	µg/l	5.00						
2-Chlorophenol	< 5.00	U	µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Chrysene	< 5.00	U	µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00	U	µg/l	5.00						
Dibenzofuran	< 5.00	U	µg/l	5.00						
1,2-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,3-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,4-Dichlorobenzene	< 5.00	U	µg/l	5.00						
3,3'-Dichlorobenzidine	< 5.00	U	µg/l	5.00						
2,4-Dichlorophenol	< 5.00	U	µg/l	5.00						
Diethyl phthalate	< 5.00	U	µg/l	5.00						
Dimethyl phthalate	< 5.00	U	µg/l	5.00						
2,4-Dimethylphenol	< 5.00	U	µg/l	5.00						
Di-n-butyl phthalate	< 5.00	U	µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrophenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrotoluene	< 5.00	U	µg/l	5.00						
2,6-Dinitrotoluene	< 5.00	U	µg/l	5.00						
Di-n-octyl phthalate	< 5.00	U	µg/l	5.00						
Fluoranthene	< 5.00	U	µg/l	5.00						
Fluorene	< 5.00	U	µg/l	5.00						
Hexachlorobenzene	< 5.00	U	µg/l	5.00						
Hexachlorobutadiene	< 5.00	U	µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00	U	µg/l	5.00						
Hexachloroethane	< 5.00	U	µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00	U	µg/l	5.00						
Isophorone	< 5.00	U	µg/l	5.00						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804025 - SW846 3510C										
<u>Blank (1804025-BLK1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 28-Mar-18</u>										
2-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2-Methylphenol	< 5.00	U	µg/l	5.00						
3 & 4-Methylphenol	< 10.0	U	µg/l	10.0						
Naphthalene	< 5.00	U	µg/l	5.00						
2-Nitroaniline	< 5.00	U	µg/l	5.00						
3-Nitroaniline	< 5.00	U	µg/l	5.00						
4-Nitroaniline	< 5.00	U	µg/l	5.00						
Nitrobenzene	< 5.00	U	µg/l	5.00						
2-Nitrophenol	< 5.00	U	µg/l	5.00						
4-Nitrophenol	< 20.0	U	µg/l	20.0						
N-Nitrosodimethylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00	U	µg/l	5.00						
Pentachlorophenol	< 20.0	U	µg/l	20.0						
Phenanthrene	< 5.00	U	µg/l	5.00						
Phenol	< 5.00	U	µg/l	5.00						
Pyrene	< 5.00	U	µg/l	5.00						
Pyridine	< 5.00	U	µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00	U	µg/l	5.00						
1-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00	U	µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00	U	µg/l	5.00						
Pentachloronitrobenzene	< 5.00	U	µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00	U	µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	30.1		µg/l		50.0		60	30-130		
Surrogate: 2-Fluorophenol	34.9		µg/l		50.0		70	15-110		
Surrogate: Nitrobenzene-d5	30.6		µg/l		50.0		61	30-130		
Surrogate: Phenol-d5	32.6		µg/l		50.0		65	15-110		
Surrogate: Terphenyl-d14	37.7		µg/l		50.0		75	30-130		
Surrogate: 2,4,6-Tribromophenol	33.4		µg/l		50.0		67	15-110		
<u>LCS (1804025-BS1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 29-Mar-18</u>										
Acenaphthene	34.9		µg/l	5.10	51.0		68	40-140		
Acenaphthylene	35.2		µg/l	5.10	51.0		69	40-140		
Aniline	10.7	QC6	µg/l	5.10	51.0		21	40-140		
Anthracene	35.1		µg/l	5.10	51.0		69	40-140		
Azobenzene/Diphenyldiazene	28.7		µg/l	5.10	51.0		56	40-140		
Benzidine	15.3	QC6	µg/l	10.2	51.0		30	40-140		
Benzo (a) anthracene	34.6		µg/l	5.10	51.0		68	40-140		
Benzo (a) pyrene	26.1		µg/l	5.10	51.0		51	40-140		
Benzo (b) fluoranthene	30.5		µg/l	5.10	51.0		60	40-140		
Benzo (g,h,i) perylene	25.2		µg/l	5.10	51.0		49	40-140		
Benzo (k) fluoranthene	18.3	QC6	µg/l	5.10	51.0		36	40-140		
Benzoic acid	32.4		µg/l	5.10	51.0		64	30-130		
Benzyl alcohol	16.1	QC6	µg/l	5.10	51.0		32	40-140		
Bis(2-chloroethoxy)methane	27.7		µg/l	5.10	51.0		54	40-140		
Bis(2-chloroethyl)ether	23.8		µg/l	5.10	51.0		47	40-140		
Bis(2-chloroisopropyl)ether	24.8		µg/l	5.10	51.0		49	40-140		
Bis(2-ethylhexyl)phthalate	29.3		µg/l	5.10	51.0		57	40-140		
4-Bromophenyl phenyl ether	37.1		µg/l	5.10	51.0		73	40-140		
Butyl benzyl phthalate	29.8		µg/l	5.10	51.0		58	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804025 - SW846 3510C										
<u>LCS (1804025-BS1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 29-Mar-18</u>										
Carbazole	30.0		µg/l	5.10	51.0		59	40-140		
4-Chloro-3-methylphenol	34.5		µg/l	5.10	51.0		68	30-130		
4-Chloroaniline	11.1	QC6	µg/l	5.10	51.0		22	40-140		
2-Chloronaphthalene	40.3		µg/l	5.10	51.0		79	40-140		
2-Chlorophenol	33.8		µg/l	5.10	51.0		66	30-130		
4-Chlorophenyl phenyl ether	37.3		µg/l	5.10	51.0		73	40-140		
Chrysene	32.3		µg/l	5.10	51.0		63	40-140		
Dibenzo (a,h) anthracene	27.0		µg/l	5.10	51.0		53	40-140		
Dibenzofuran	39.4		µg/l	5.10	51.0		77	40-140		
1,2-Dichlorobenzene	38.4		µg/l	5.10	51.0		75	40-140		
1,3-Dichlorobenzene	37.5		µg/l	5.10	51.0		73	40-140		
1,4-Dichlorobenzene	38.1		µg/l	5.10	51.0		75	40-140		
3,3'-Dichlorobenzidine	38.1		µg/l	5.10	51.0		75	40-140		
2,4-Dichlorophenol	38.6		µg/l	5.10	51.0		76	30-130		
Diethyl phthalate	33.1		µg/l	5.10	51.0		65	40-140		
Dimethyl phthalate	32.8		µg/l	5.10	51.0		64	40-140		
2,4-Dimethylphenol	32.7		µg/l	5.10	51.0		64	30-130		
Di-n-butyl phthalate	31.2		µg/l	5.10	51.0		61	40-140		
4,6-Dinitro-2-methylphenol	32.6		µg/l	5.10	51.0		64	30-130		
2,4-Dinitrophenol	25.8		µg/l	5.10	51.0		51	30-130		
2,4-Dinitrotoluene	43.5		µg/l	5.10	51.0		85	40-140		
2,6-Dinitrotoluene	43.2		µg/l	5.10	51.0		85	40-140		
Di-n-octyl phthalate	22.8		µg/l	5.10	51.0		45	40-140		
Fluoranthene	35.6		µg/l	5.10	51.0		70	40-140		
Fluorene	34.7		µg/l	5.10	51.0		68	40-140		
Hexachlorobenzene	43.4		µg/l	5.10	51.0		85	40-140		
Hexachlorobutadiene	41.6		µg/l	5.10	51.0		81	40-140		
Hexachlorocyclopentadiene	36.4		µg/l	5.10	51.0		71	40-140		
Hexachloroethane	37.5		µg/l	5.10	51.0		74	40-140		
Indeno (1,2,3-cd) pyrene	33.2		µg/l	5.10	51.0		65	40-140		
Isophorone	29.9		µg/l	5.10	51.0		59	40-140		
2-Methylnaphthalene	57.6		µg/l	5.10	51.0		113	40-140		
2-Methylphenol	32.0		µg/l	5.10	51.0		63	30-130		
3 & 4-Methylphenol	32.0		µg/l	10.2	51.0		63	30-130		
Naphthalene	33.0		µg/l	5.10	51.0		65	40-140		
2-Nitroaniline	34.7		µg/l	5.10	51.0		68	40-140		
3-Nitroaniline	25.8		µg/l	5.10	51.0		50	40-140		
4-Nitroaniline	26.5		µg/l	5.10	51.0		52	40-140		
Nitrobenzene	37.0		µg/l	5.10	51.0		72	40-140		
2-Nitrophenol	36.2		µg/l	5.10	51.0		71	30-130		
4-Nitrophenol	44.0		µg/l	20.4	51.0		86	30-130		
N-Nitrosodimethylamine	25.2		µg/l	5.10	51.0		49	40-140		
N-Nitrosodi-n-propylamine	28.2		µg/l	5.10	51.0		55	40-140		
N-Nitrosodiphenylamine	34.3		µg/l	5.10	51.0		67	40-140		
Pentachlorophenol	24.8		µg/l	20.4	51.0		49	30-130		
Phenanthrene	32.4		µg/l	5.10	51.0		63	40-140		
Phenol	30.5		µg/l	5.10	51.0		60	30-130		
Pyrene	34.3		µg/l	5.10	51.0		67	40-140		
Pyridine	24.9		µg/l	5.10	51.0		49	40-140		
1,2,4-Trichlorobenzene	42.4		µg/l	5.10	51.0		83	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804025 - SW846 3510C										
<u>LCS (1804025-BS1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 29-Mar-18</u>										
1-Methylnaphthalene	33.5		µg/l	5.10	51.0		66	40-140		
2,4,5-Trichlorophenol	41.2		µg/l	5.10	51.0		81	30-130		
2,4,6-Trichlorophenol	34.4		µg/l	5.10	51.0		67	30-130		
Pentachloronitrobenzene	37.2		µg/l	5.10	51.0		73	40-140		
1,2,4,5-Tetrachlorobenzene	38.6		µg/l	5.10	51.0		76	40-140		
<i>Surrogate: 2-Fluorobiphenyl</i>	32.9		µg/l		51.0		65	30-130		
<i>Surrogate: 2-Fluorophenol</i>	28.9		µg/l		51.0		57	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	29.2		µg/l		51.0		57	30-130		
<i>Surrogate: Phenol-d5</i>	29.3		µg/l		51.0		57	15-110		
<i>Surrogate: Terphenyl-d14</i>	34.7		µg/l		51.0		68	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	37.9		µg/l		51.0		74	15-110		
<u>LCS Dup (1804025-BSD1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 29-Mar-18</u>										
Acenaphthene	35.4		µg/l	5.10	51.0		69	40-140	1	20
Acenaphthylene	35.1		µg/l	5.10	51.0		69	40-140	0.06	20
Aniline	12.1	QC6	µg/l	5.10	51.0		24	40-140	12	20
Anthracene	36.1		µg/l	5.10	51.0		71	40-140	3	20
Azobenzene/Diphenyldiazene	29.0		µg/l	5.10	51.0		57	40-140	1	20
Benzidine	18.9	QC6, QR5	µg/l	10.2	51.0		37	40-140	21	20
Benzo (a) anthracene	34.9		µg/l	5.10	51.0		68	40-140	0.8	20
Benzo (a) pyrene	26.7		µg/l	5.10	51.0		52	40-140	2	20
Benzo (b) fluoranthene	34.0		µg/l	5.10	51.0		67	40-140	11	20
Benzo (g,h,i) perylene	25.0		µg/l	5.10	51.0		49	40-140	0.7	20
Benzo (k) fluoranthene	18.1	QC6	µg/l	5.10	51.0		35	40-140	1	20
Benzoic acid	33.2		µg/l	5.10	51.0		65	30-130	2	20
Benzyl alcohol	18.2	QC6	µg/l	5.10	51.0		36	40-140	12	20
Bis(2-chloroethoxy)methane	28.3		µg/l	5.10	51.0		56	40-140	2	20
Bis(2-chloroethyl)ether	24.4		µg/l	5.10	51.0		48	40-140	3	20
Bis(2-chloroisopropyl)ether	25.5		µg/l	5.10	51.0		50	40-140	3	20
Bis(2-ethylhexyl)phthalate	30.0		µg/l	5.10	51.0		59	40-140	2	20
4-Bromophenyl phenyl ether	37.8		µg/l	5.10	51.0		74	40-140	2	20
Butyl benzyl phthalate	30.4		µg/l	5.10	51.0		60	40-140	2	20
Carbazole	32.9		µg/l	5.10	51.0		65	40-140	9	20
4-Chloro-3-methylphenol	35.3		µg/l	5.10	51.0		69	30-130	2	20
4-Chloroaniline	12.8	QC6	µg/l	5.10	51.0		25	40-140	14	20
2-Chloronaphthalene	40.2		µg/l	5.10	51.0		79	40-140	0.2	20
2-Chlorophenol	34.2		µg/l	5.10	51.0		67	30-130	1	20
4-Chlorophenyl phenyl ether	37.2		µg/l	5.10	51.0		73	40-140	0.2	20
Chrysene	33.2		µg/l	5.10	51.0		65	40-140	3	20
Dibenzo (a,h) anthracene	26.4		µg/l	5.10	51.0		52	40-140	2	20
Dibenzofuran	39.4		µg/l	5.10	51.0		77	40-140	0.1	20
1,2-Dichlorobenzene	38.5		µg/l	5.10	51.0		76	40-140	0.2	20
1,3-Dichlorobenzene	35.9		µg/l	5.10	51.0		70	40-140	4	20
1,4-Dichlorobenzene	38.1		µg/l	5.10	51.0		75	40-140	0.1	20
3,3'-Dichlorobenzidine	38.7		µg/l	5.10	51.0		76	40-140	2	20
2,4-Dichlorophenol	38.7		µg/l	5.10	51.0		76	30-130	0.3	20
Diethyl phthalate	32.9		µg/l	5.10	51.0		65	40-140	0.5	20
Dimethyl phthalate	32.8		µg/l	5.10	51.0		64	40-140	0	20
2,4-Dimethylphenol	39.6		µg/l	5.10	51.0		78	30-130	19	20
Di-n-butyl phthalate	31.9		µg/l	5.10	51.0		62	40-140	2	20

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW846 8270D</u></b>										
Batch 1804025 - SW846 3510C										
<u>LCS Dup (1804025-BSD1)</u>										
<u>Prepared: 26-Mar-18 Analyzed: 29-Mar-18</u>										
4,6-Dinitro-2-methylphenol	33.1		µg/l	5.10	51.0	65	30-130	1	20	
2,4-Dinitrophenol	26.3		µg/l	5.10	51.0	52	30-130	2	20	
2,4-Dinitrotoluene	43.8		µg/l	5.10	51.0	86	40-140	0.7	20	
2,6-Dinitrotoluene	42.2		µg/l	5.10	51.0	83	40-140	2	20	
Di-n-octyl phthalate	23.2		µg/l	5.10	51.0	46	40-140	2	20	
Fluoranthene	36.7		µg/l	5.10	51.0	72	40-140	3	20	
Fluorene	34.4		µg/l	5.10	51.0	67	40-140	0.9	20	
Hexachlorobenzene	44.8		µg/l	5.10	51.0	88	40-140	3	20	
Hexachlorobutadiene	42.3		µg/l	5.10	51.0	83	40-140	2	20	
Hexachlorocyclopentadiene	36.9		µg/l	5.10	51.0	72	40-140	1	20	
Hexachloroethane	37.7		µg/l	5.10	51.0	74	40-140	0.5	20	
Indeno (1,2,3-cd) pyrene	32.9		µg/l	5.10	51.0	65	40-140	0.6	20	
Isophorone	30.5		µg/l	5.10	51.0	60	40-140	2	20	
2-Methylnaphthalene	58.0		µg/l	5.10	51.0	114	40-140	0.7	20	
2-Methylphenol	32.0		µg/l	5.10	51.0	63	30-130	0.1	20	
3 & 4-Methylphenol	32.9		µg/l	10.2	51.0	64	30-130	3	20	
Naphthalene	33.5		µg/l	5.10	51.0	66	40-140	1	20	
2-Nitroaniline	35.0		µg/l	5.10	51.0	69	40-140	1	20	
3-Nitroaniline	26.8		µg/l	5.10	51.0	53	40-140	4	20	
4-Nitroaniline	28.1		µg/l	5.10	51.0	55	40-140	6	20	
Nitrobenzene	37.1		µg/l	5.10	51.0	73	40-140	0.3	20	
2-Nitrophenol	36.5		µg/l	5.10	51.0	72	30-130	0.8	20	
4-Nitrophenol	35.4	QR9	µg/l	20.4	51.0	69	30-130	22	20	
N-Nitrosodimethylamine	25.4		µg/l	5.10	51.0	50	40-140	0.7	20	
N-Nitrosodi-n-propylamine	28.5		µg/l	5.10	51.0	56	40-140	0.9	20	
N-Nitrosodiphenylamine	34.6		µg/l	5.10	51.0	68	40-140	0.9	20	
Pentachlorophenol	26.8		µg/l	20.4	51.0	52	30-130	8	20	
Phenanthrene	33.1		µg/l	5.10	51.0	65	40-140	2	20	
Phenol	30.8		µg/l	5.10	51.0	60	30-130	1	20	
Pyrene	35.0		µg/l	5.10	51.0	69	40-140	2	20	
Pyridine	25.1		µg/l	5.10	51.0	49	40-140	0.7	20	
1,2,4-Trichlorobenzene	42.7		µg/l	5.10	51.0	84	40-140	0.6	20	
1-Methylnaphthalene	34.1		µg/l	5.10	51.0	67	40-140	2	20	
2,4,5-Trichlorophenol	38.1		µg/l	5.10	51.0	75	30-130	8	20	
2,4,6-Trichlorophenol	34.4		µg/l	5.10	51.0	67	30-130	0.09	20	
Pentachloronitrobenzene	37.5		µg/l	5.10	51.0	74	40-140	1	20	
1,2,4,5-Tetrachlorobenzene	38.9		µg/l	5.10	51.0	76	40-140	0.7	20	
Surrogate: 2-Fluorobiphenyl	32.9		µg/l		51.0	64	30-130			
Surrogate: 2-Fluorophenol	28.8		µg/l		51.0	56	15-110			
Surrogate: Nitrobenzene-d5	29.9		µg/l		51.0	59	30-130			
Surrogate: Phenol-d5	29.7		µg/l		51.0	58	15-110			
Surrogate: Terphenyl-d14	34.6		µg/l		51.0	68	30-130			
Surrogate: 2,4,6-Tribromophenol	38.0		µg/l		51.0	75	15-110			

## **SW846 8270D TICS**

Batch 1804025 - SW846 3510C

Blank (1804025-BLK1)

Tentatively Identified Compounds

**None found**

Prepared: 26-Mar-18 Analyzed: 28-Mar-18

**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>										
Batch 1803912 - SW846 3005A										
<u>Blank (1803912-BLK1)</u>										
Prepared: 26-Mar-18 Analyzed: 30-Mar-18										
Iron	<b>0.0147</b>	J	mg/l	0.0150						
Potassium	<b>0.0801</b>	J	mg/l	0.500						
Calcium	<b>0.0172</b>	J	mg/l	5.00						
Cadmium	< 0.0025	U	mg/l	0.0025						
Cobalt	< 0.0050	U	mg/l	0.0050						
Nickel	< 0.0050	U	mg/l	0.0050						
Arsenic	< 0.00400	U	mg/l	0.00400						
Antimony	<b>0.0019</b>	J	mg/l	0.0060						
Selenium	< 0.0150	U	mg/l	0.0150						
Thallium	< 0.0050	U	mg/l	0.0050						
Lead	< 0.0075	U	mg/l	0.0075						
Zinc	< 0.0050	U	mg/l	0.0050						
Copper	< 0.0050	U	mg/l	0.0050						
Silver	<b>0.0007</b>	J	mg/l	0.0050						
Vanadium	< 0.0050	U	mg/l	0.0050						
<u>Blank (1803912-BLK2)</u>										
Prepared: 26-Mar-18 Analyzed: 03-Apr-18										
Sodium	<b>0.0952</b>	J	mg/l	5.00						
Aluminum	< 0.0250	U	mg/l	0.0250						
Barium	< 0.0050	U	mg/l	0.0050						
Beryllium	< 0.0020	U	mg/l	0.0020						
Chromium	< 0.0050	U	mg/l	0.0050						
Magnesium	< 5.00	U	mg/l	5.00						
<u>Blank (1803912-BLK3)</u>										
Prepared: 26-Mar-18 Analyzed: 04-Apr-18										
Manganese	< 0.0100	U	mg/l	0.0100						
<u>LCS (1803912-BS1)</u>										
Prepared: 26-Mar-18 Analyzed: 30-Mar-18										
Iron	<b>1.28</b>		mg/l	0.0150	1.25		103	85-115		
Potassium	<b>12.3</b>		mg/l	0.500	12.5		99	85-115		
Calcium	<b>6.04</b>		mg/l	5.00	6.25		97	85-115		
Zinc	<b>1.24</b>		mg/l	0.0050	1.25		99	85-115		
Antimony	<b>1.21</b>		mg/l	0.0060	1.25		96	85-115		
Thallium	<b>1.18</b>		mg/l	0.0050	1.25		94	85-115		
Selenium	<b>1.27</b>		mg/l	0.0150	1.25		101	85-115		
Vanadium	<b>1.25</b>		mg/l	0.0050	1.25		100	85-115		
Lead	<b>1.23</b>		mg/l	0.0075	1.25		99	85-115		
Nickel	<b>1.26</b>		mg/l	0.0050	1.25		100	85-115		
Copper	<b>1.25</b>		mg/l	0.0050	1.25		100	85-115		
Cadmium	<b>1.19</b>		mg/l	0.0025	1.25		95	85-115		
Silver	<b>1.19</b>		mg/l	0.0050	1.25		95	85-115		
Arsenic	<b>1.220</b>		mg/l	0.00400	1.25		98	85-115		
Cobalt	<b>1.23</b>		mg/l	0.0050	1.25		99	85-115		
<u>LCS (1803912-BS2)</u>										
Prepared: 26-Mar-18 Analyzed: 03-Apr-18										
Sodium	<b>5.90</b>		mg/l	5.00	6.25		94	85-115		
Aluminum	<b>1.27</b>		mg/l	0.0250	1.25		101	85-115		
Barium	<b>1.32</b>		mg/l	0.0050	1.25		106	85-115		
Beryllium	<b>1.41</b>		mg/l	0.0020	1.25		112	85-115		
Chromium	<b>1.32</b>		mg/l	0.0050	1.25		106	85-115		
Magnesium	<b>1.32</b>	J	mg/l	5.00	1.25		106	85-115		
<u>LCS (1803912-BS3)</u>										
Prepared: 26-Mar-18 Analyzed: 04-Apr-18										
Manganese	<b>1.21</b>		mg/l	0.0100	1.25		97	85-115		
<u>LCS Dup (1803912-BS1)</u>										
Prepared: 26-Mar-18 Analyzed: 30-Mar-18										

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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 1803912 - SW846 3005A</b>										
<b><u>LCS Dup (1803912-BSD1)</u></b>										
Iron	1.28		mg/l	0.0150	1.25	102	85-115	0.4	20	
Potassium	12.3		mg/l	0.500	12.5	99	85-115	0.08	20	
Zinc	1.24		mg/l	0.0050	1.25	99	85-115	0.3	20	
Vanadium	1.24		mg/l	0.0050	1.25	99	85-115	0.7	20	
Thallium	1.17		mg/l	0.0050	1.25	94	85-115	0.2	20	
Selenium	1.27		mg/l	0.0150	1.25	102	85-115	0.2	20	
Silver	1.19		mg/l	0.0050	1.25	95	85-115	0.6	20	
Antimony	1.20		mg/l	0.0060	1.25	96	85-115	0.2	20	
Lead	1.23		mg/l	0.0075	1.25	98	85-115	0.4	20	
Nickel	1.25		mg/l	0.0050	1.25	100	85-115	0.3	20	
Copper	1.25		mg/l	0.0050	1.25	100	85-115	0.2	20	
Cobalt	1.23		mg/l	0.0050	1.25	98	85-115	0.3	20	
Cadmium	1.19		mg/l	0.0025	1.25	95	85-115	0.4	20	
Calcium	6.02		mg/l	5.00	6.25	96	85-115	0.3	20	
Arsenic	1.222		mg/l	0.00400	1.25	98	85-115	0.2	20	
<b><u>LCS Dup (1803912-BSD2)</u></b>										
Sodium	5.88		mg/l	5.00	6.25	94	85-115	0.3	20	
Beryllium	1.40		mg/l	0.0020	1.25	112	85-115	0.6	20	
Magnesium	1.32	J	mg/l	5.00	1.25	105	85-115	0.3	20	
Chromium	1.31		mg/l	0.0050	1.25	105	85-115	0.8	20	
Aluminum	1.26		mg/l	0.0250	1.25	101	85-115	0.6	20	
Barium	1.32		mg/l	0.0050	1.25	106	85-115	0.2	20	
<b><u>LCS Dup (1803912-BSD3)</u></b>										
Manganese	1.28		mg/l	0.0100	1.25	102	85-115	5	20	
<b><u>Duplicate (1803912-DUP1)</u></b>										
Iron	0.0725		mg/l	0.0150		0.0706		3	20	
Potassium	5.92		mg/l	0.500		5.90		0.4	20	
Lead	< 0.0075	U	mg/l	0.0075		BRL		20		
Zinc	0.0156		mg/l	0.0050		0.0138		12	20	
Vanadium	0.0026	J	mg/l	0.0050		0.0027		4	20	
Thallium	< 0.0050	U	mg/l	0.0050		BRL		20		
Nickel	0.0012	J	mg/l	0.0050		0.0010		13	20	
Antimony	0.0066		mg/l	0.0060		0.0065		0.8	20	
Copper	0.0064		mg/l	0.0050		0.0064		0.8	20	
Cobalt	< 0.0050	U	mg/l	0.0050		BRL		20		
Cadmium	< 0.0025	U	mg/l	0.0025		0.0004		20		
Arsenic	< 0.00400	U	mg/l	0.00400		BRL		20		
Silver	< 0.0050	U	mg/l	0.0050		BRL		20		
Selenium	0.0064	J	mg/l	0.0150		0.0066		3	20	
Calcium	131	R06	mg/l	5.00		133		1	20	
<b><u>Duplicate (1803912-DUP2)</u></b>										
Sodium	1320	GS1, R06, D	mg/l	100		1330		0.5	20	
Magnesium	17.8	R06	mg/l	5.00		17.7		0.5	20	
Beryllium	0.0006	QR8, J	mg/l	0.0020		0.0004		46	20	
Chromium	0.0037	J	mg/l	0.0050		0.0032		16	20	
Barium	0.226		mg/l	0.0050		0.230		2	20	
Aluminum	0.0517	QR8	mg/l	0.0250		0.0682		28	20	
<b><u>Duplicate (1803912-DUP3)</u></b>										
Manganese	< 0.0100	R06, U	mg/l	0.0100		BRL			20	

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

**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>										
Batch 1803912 - SW846 3005A										
<u>Matrix Spike (1803912-MS1)</u>										
Potassium	21.5		mg/l	0.500	12.5	9.14	99	75-125		
Iron	1.31		mg/l	0.0150	1.25	0.102	97	75-125		
Cadmium	1.10		mg/l	0.0025	1.25	BRL	88	75-125		
Cobalt	1.15		mg/l	0.0050	1.25	BRL	92	75-125		
Calcium	178	QM2	mg/l	5.00	6.25	176	46	75-125		
Copper	1.31		mg/l	0.0050	1.25	0.0067	104	75-125		
Nickel	1.16		mg/l	0.0050	1.25	0.0016	92	75-125		
Zinc	1.15		mg/l	0.0050	1.25	0.0042	92	75-125		
Vanadium	1.21		mg/l	0.0050	1.25	BRL	97	70-130		
Antimony	1.28		mg/l	0.0060	1.25	0.0022	102	75-125		
Arsenic	1.304		mg/l	0.00400	1.25	BRL	104	75-125		
Lead	1.13		mg/l	0.0075	1.25	BRL	90	75-125		
Thallium	1.09		mg/l	0.0050	1.25	BRL	87	75-125		
Selenium	1.35		mg/l	0.0150	1.25	BRL	108	75-125		
Silver	1.28		mg/l	0.0050	1.25	BRL	102	75-125		
<u>Matrix Spike (1803912-MS2)</u>										
Sodium	417	QM2, D	mg/l	50.0	6.25	409	129	75-125		
Magnesium	31.4		mg/l	5.00	1.25	30.0	113	75-125		
Chromium	1.31		mg/l	0.0050	1.25	0.0017	104	75-125		
Beryllium	1.43		mg/l	0.0020	1.25	BRL	114	75-125		
Barium	2.01		mg/l	0.0050	1.25	0.680	107	75-125		
Aluminum	1.46		mg/l	0.0250	1.25	0.0330	114	75-125		
<u>Matrix Spike (1803912-MS3)</u>										
Manganese	1.22		mg/l	0.0100	1.25	0.0154	97	75-125		
<u>Matrix Spike Dup (1803912-MSD1)</u>										
Iron	1.29		mg/l	0.0150	1.25	0.102	95	75-125	2	20
Potassium	21.7		mg/l	0.500	12.5	9.14	101	75-125	0.8	20
Copper	1.33		mg/l	0.0050	1.25	0.0067	106	75-125	2	20
Cobalt	1.17		mg/l	0.0050	1.25	BRL	93	75-125	2	20
Calcium	177	QM2	mg/l	5.00	6.25	176	18	75-125	1	20
Thallium	1.10		mg/l	0.0050	1.25	BRL	88	75-125	1	20
Cadmium	1.11		mg/l	0.0025	1.25	BRL	89	75-125	1	20
Nickel	1.17		mg/l	0.0050	1.25	0.0016	94	75-125	2	20
Arsenic	1.328		mg/l	0.00400	1.25	BRL	106	75-125	2	20
Selenium	1.38		mg/l	0.0150	1.25	BRL	110	75-125	2	20
Vanadium	1.22		mg/l	0.0050	1.25	BRL	98	70-130	1	20
Zinc	1.16		mg/l	0.0050	1.25	0.0042	93	75-125	1	20
Antimony	1.31		mg/l	0.0060	1.25	0.0022	104	75-125	2	20
Silver	1.29		mg/l	0.0050	1.25	BRL	103	75-125	1	20
Lead	1.14		mg/l	0.0075	1.25	BRL	92	75-125	1	20
<u>Matrix Spike Dup (1803912-MSD2)</u>										
Sodium	423	QM2, D	mg/l	50.0	6.25	409	211	75-125	1	20
Magnesium	31.0		mg/l	5.00	1.25	30.0	83	75-125	1	20
Chromium	1.31		mg/l	0.0050	1.25	0.0017	104	75-125	0.08	20
Beryllium	1.43		mg/l	0.0020	1.25	BRL	114	75-125	0.1	20
Barium	1.95		mg/l	0.0050	1.25	0.680	102	75-125	3	20
Aluminum	1.43		mg/l	0.0250	1.25	0.0330	112	75-125	2	20
<u>Matrix Spike Dup (1803912-MSD3)</u>										
Manganese	1.22		mg/l	0.0100	1.25	0.0154	96	75-125	0.6	20
<u>Post Spike (1803912-PS1)</u>										
<u>Source: SC44935-02</u> Prepared: 26-Mar-18 Analyzed: 30-Mar-18										

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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 1803912 - SW846 3005A</b>										
<b><u>Post Spike (1803912-PS1)</u></b>										
Potassium	22.3		mg/l	0.500	12.5	9.14	105	80-120		
Iron	1.37		mg/l	0.0150	1.25	0.102	101	80-120		
Copper	1.35		mg/l	0.0050	1.25	0.0067	108	80-120		
Cobalt	1.20		mg/l	0.0050	1.25	BRL	96	80-120		
Silver	1.33		mg/l	0.0050	1.25	BRL	107	80-120		
Calcium	184	QM2	mg/l	5.00	6.25	176	139	80-120		
Selenium	1.40		mg/l	0.0150	1.25	BRL	112	80-120		
Arsenic	1.358		mg/l	0.00400	1.25	BRL	109	80-120		
Nickel	1.20		mg/l	0.0050	1.25	0.0016	96	80-120		
Cadmium	1.14		mg/l	0.0025	1.25	BRL	92	80-120		
Antimony	1.33		mg/l	0.0060	1.25	0.0022	106	80-120		
Thallium	1.14		mg/l	0.0050	1.25	BRL	91	80-120		
Vanadium	1.26		mg/l	0.0050	1.25	BRL	101	80-120		
Zinc	1.20		mg/l	0.0050	1.25	0.0042	96	80-120		
Lead	1.17		mg/l	0.0075	1.25	BRL	94	80-120		
<b><u>Post Spike (1803912-PS2)</u></b>										
Sodium	435	QM2, D	mg/l	50.0	6.25	409	414	80-120		
Chromium	1.36		mg/l	0.0050	1.25	0.0017	109	80-120		
Beryllium	1.49		mg/l	0.0020	1.25	BRL	119	80-120		
Barium	2.05		mg/l	0.0050	1.25	0.680	110	80-120		
Aluminum	1.54		mg/l	0.0250	1.25	0.0330	120	80-120		
Magnesium	31.8	QM2	mg/l	5.00	1.25	30.0	147	80-120		
<b><u>Post Spike (1803912-PS3)</u></b>										
Manganese	1.22		mg/l	0.0100	1.25	0.0154	96	80-120		

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

### 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>EPA 245.1/7470A</b>										
Batch 1803913 - EPA200/SW7000 Series										
<u>Blank (1803913-BLK1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020						
<u>LCS (1803913-BS1)</u>										
Mercury	<b>0.00472</b>		mg/l	0.00020	0.00500	94	85-115			
<u>Duplicate (1803913-DUP1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020		BRL				20
<u>Matrix Spike (1803913-MS1)</u>										
Mercury	<b>0.00503</b>		mg/l	0.00020	0.00500	BRL	101	80-120		
<u>Matrix Spike Dup (1803913-MSD1)</u>										
Mercury	<b>0.00505</b>		mg/l	0.00020	0.00500	BRL	101	80-120	0.5	20
<u>Post Spike (1803913-PS1)</u>										
Mercury	<b>0.00498</b>		mg/l	0.00020	0.00500	BRL	100	85-115		

## 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).
J N	(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall 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.
QR5	RPD out of acceptance range.
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.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R06	MRL raised to correlate to batch QC reporting limits.
U	Analyte included in the analysis, but not detected at or above the MDL.
Z-2	Surrogates were out of acceptance criteria, but no extra volume was provided by the client for re-extraction.
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.



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## Batch Summary

### 1803871

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

SC44935-01 (MW-5 (2018-03-19))  
SC44935-02 (MW-7 (2018-03-19))  
SC44935-03 (MW-8 (2018-03-19))  
SC44935-04 (MW-9 (2018-03-19))  
SC44935-05 (MW-D (2018-03-19))

1803913-DUP1

1803913-MS1

1803913-MSD1

1803913-PS1

SC44935-01 (MW-5 (2018-03-19))

SC44935-02 (MW-7 (2018-03-19))

SC44935-03 (MW-8 (2018-03-19))

SC44935-04 (MW-9 (2018-03-19))

SC44935-05 (MW-D (2018-03-19))

### 1803890

#### Volatile Organic Compounds

1803890-BLK1  
1803890-BS1  
1803890-BSD1  
SC44935-02 (MW-7 (2018-03-19))  
SC44935-03 (MW-8 (2018-03-19))  
SC44935-04 (MW-9 (2018-03-19))  
SC44935-05 (MW-D (2018-03-19))  
SC44935-06 (Trip Blank)

### 1804025

#### Semivolatile Organic Compounds by GCMS

1804025-BLK1  
1804025-BS1  
1804025-BSD1  
SC44935-01 (MW-5 (2018-03-19))  
SC44935-03 (MW-8 (2018-03-19))

### 1803912

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

1803912-BLK1  
1803912-BLK2  
1803912-BLK3  
1803912-BS1  
1803912-BS2  
1803912-BS3  
1803912-BSD1  
1803912-BSD2  
1803912-BSD3  
1803912-DUP1  
1803912-DUP2  
1803912-DUP3  
1803912-MS1  
1803912-MS2  
1803912-MS3  
1803912-MSD1  
1803912-MSD2  
1803912-MSD3  
1803912-PS1  
1803912-PS2  
1803912-PS3  
SC44935-01 (MW-5 (2018-03-19))  
SC44935-02 (MW-7 (2018-03-19))  
SC44935-03 (MW-8 (2018-03-19))  
SC44935-04 (MW-9 (2018-03-19))  
SC44935-05 (MW-D (2018-03-19))

### 1804359

#### Volatile Organic Compounds

1804359-BLK1  
1804359-BS1  
1804359-BSD1  
SC44935-01 (MW-5 (2018-03-19))

### S815859

#### Semivolatile Organic Compounds by GCMS

S815859-CAL1  
S815859-CAL2  
S815859-CAL3  
S815859-CAL4  
S815859-CAL5  
S815859-CAL6  
S815859-CAL7  
S815859-CAL8  
S815859-CAL9  
S815859-CALA  
S815859-ICV1  
S815859-LCV1  
S815859-LCV2  
S815859-TUN1

### 1803913

#### Total Metals by EPA 200 Series Methods

1803913-BLK1  
1803913-BS1

**S816932***Semivolatile Organic Compounds by GCMS*

S816932-CAL1  
 S816932-CAL2  
 S816932-CAL3  
 S816932-CAL4  
 S816932-CAL5  
 S816932-CAL6  
 S816932-CAL7  
 S816932-CAL8  
 S816932-CAL9  
 S816932-ICV1  
 S816932-LCV1  
 S816932-LCV2  
 S816932-TUN1

S818075-CCV1

S818075-TUN1

**S818116***Semivolatile Organic Compounds by GCMS*

S818116-CCV1  
 S818116-TUN1

**S818132***Volatile Organic Compounds*

S818132-CCV1  
 S818132-TUN1

**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

**S817373***Volatile Organic Compounds*

S817373-CAL1  
 S817373-CAL2  
 S817373-CAL3  
 S817373-CAL4  
 S817373-CAL5  
 S817373-CAL6  
 S817373-CAL7  
 S817373-CAL8  
 S817373-CAL9  
 S817373-ICV1  
 S817373-LCV1  
 S817373-LCV2  
 S817373-TUN1

**S817892***Volatile Organic Compounds*

S817892-CCV1  
 S817892-TUN1

**S818075***Semivolatile Organic Compounds by GCMS*

Report Date:  
04-Apr-18 16:46**Laboratory Report****SC45319**

AECC Environmental Consulting  
6308 Fly Road  
East Syracuse, NY 13057  
Attn: Rich McKenna

Project: 700 Out Parcel - Syracuse, NY

Project #: 18-051

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 19 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.

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*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:** SC45319  
**Project:** 700 Out Parcel - Syracuse, NY  
**Project Number:** 18-051

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SC45319-01	MW-7 (2018-04-02)	Ground Water	02-Apr-18 10:01	03-Apr-18 10:30
SC45319-02	MW-9 (2018-04-02)	Ground Water	02-Apr-18 10:54	03-Apr-18 10:30
SC45319-03	MW-D (2018-04-02)	Ground Water	02-Apr-18 00:00	03-Apr-18 10:30

## 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 3.7 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.**

## **SW846 8270D**

### **Calibration:**

1801047

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Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol  
2,4-Dinitrotoluene  
2,6-Dinitrotoluene  
3-Nitroaniline  
4,6-Dinitro-2-methylphenol  
4-Nitrophenol  
Benzidine  
Benzoic acid  
Carbazole  
Pentachlorophenol

This affected the following samples:

1804437-BLK1  
1804437-BS1  
1804437-BSD1  
MW-7 (2018-04-02)  
MW-9 (2018-04-02)  
MW-D (2018-04-02)  
S815859-ICV1  
S818202-CCV1

### **Laboratory Control Samples:**

1804437 BS/BSD

---

Aniline percent recoveries (36/40) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-7 (2018-04-02)  
MW-9 (2018-04-02)  
MW-D (2018-04-02)

Phenol percent recoveries (27/28) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-7 (2018-04-02)  
MW-9 (2018-04-02)  
MW-D (2018-04-02)

## **SW846 8270D**

### **Laboratory Control Samples:**

#### **1804437 BS/BSD**

---

Pyridine percent recoveries (24/36) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

- MW-7 (2018-04-02)
- MW-9 (2018-04-02)
- MW-D (2018-04-02)

#### **1804437 BSD**

---

Benzidine RPD 38% (20%) is outside individual acceptance criteria.

Pyridine RPD 39% (20%) is outside individual acceptance criteria.

#### **1804437-BS1**

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

- Aniline
- Phenol
- Pyridine

#### **1804437-BSD1**

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

- Phenol
- Pyridine

### **Samples:**

#### **S818202-CCV1**

---

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

- 4-Chloroaniline (-31.1%)
- Aniline (-43.9%)
- Benzo (a) pyrene (29.9%)
- Benzo (b) fluoranthene (44.6%)
- Benzo (g,h,i) perylene (27.4%)
- Dibeno (a,h) anthracene (32.3%)
- Di-n-octyl phthalate (39.0%)
- Indeno (1,2,3-cd) pyrene (28.0%)

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

- 2,4-Dinitrophenol (39.2%)
- 4,6-Dinitro-2-methylphenol (40.8%)

This affected the following samples:

- 1804437-BLK1
- 1804437-BS1
- 1804437-BSD1
- MW-7 (2018-04-02)
- MW-9 (2018-04-02)
- MW-D (2018-04-02)

#### **SC45319-02 MW-9 (2018-04-02)**

---

Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.

- 2-Fluorobiphenyl

## **SW846 8270D**

### **Samples:**

SC45319-03                  MW-D (2018-04-02)

---

Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.

2-Fluorobiphenyl

## **SW846 8270D TICS**

### **Blanks:**

1804437-BLK1

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

Cyclododecane  
n-Hexadecanoic Acid  
Propanoic acid, 3,3'-thiobi...

### **Samples:**

SC45319-01                  MW-7 (2018-04-02)

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

9-Octadecenamide, (Z)- (01)

SC45319-02                  MW-9 (2018-04-02)

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

13-Docosenamide, (Z)-

SC45319-03                  MW-D (2018-04-02)

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

13-Docosenamide, (Z)-

## Sample Acceptance Check Form

Client: AECC Environmental Consulting  
Project: 700 Out Parcel - Syracuse, NY / 18-051  
Work Order: SC45319  
Sample(s) received on: 4/3/2018

***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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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:** SC45319-01

**Client ID:** MW-7 (2018-04-02)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Bis(2-ethylhexyl)phthalate	1.03	J	4.85	µg/l	SW846 8270D
Di-n-butyl phthalate	9.37		4.85	µg/l	SW846 8270D
Di-n-octyl phthalate	54.0		4.85	µg/l	SW846 8270D

**Lab ID:** SC45319-02

**Client ID:** MW-9 (2018-04-02)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Bis(2-ethylhexyl)phthalate	1.23	J	4.85	µg/l	SW846 8270D
Di-n-butyl phthalate	8.37		4.85	µg/l	SW846 8270D
Di-n-octyl phthalate	2.36	J	4.85	µg/l	SW846 8270D

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Bis(2-ethylhexyl)phthalate	0.841	J	4.84	µg/l	SW846 8270D
Di-n-butyl phthalate	8.38		4.84	µg/l	SW846 8270D
Di-n-octyl phthalate	1.59	J	4.84	µg/l	SW846 8270D

*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

MW-7 (2018-04-02)

SC45319-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 10:01

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.85	U	µg/l	4.85	0.671	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
208-96-8	Acenaphthylene	< 4.85	U	µg/l	4.85	0.663	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.85	U	µg/l	4.85	1.72	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.85	U	µg/l	4.85	0.590	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.71	U	µg/l	9.71	1.11	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.85	U	µg/l	4.85	0.520	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.85	U	µg/l	4.85	0.424	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.85	U	µg/l	4.85	0.466	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.85	U	µg/l	4.85	0.512	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.85	U	µg/l	4.85	0.757	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.85	U	µg/l	4.85	0.647	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.85	U	µg/l	4.85	0.713	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.85	U	µg/l	4.85	0.755	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	1.03	J	µg/l	4.85	0.619	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.584	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.85	U	µg/l	4.85	0.425	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.85	U	µg/l	4.85	1.51	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.85	U	µg/l	4.85	0.486	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.85	U	µg/l	4.85	1.09	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.85	U	µg/l	4.85	0.573	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.585	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.85	U	µg/l	4.85	0.517	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.85	U	µg/l	4.85	0.437	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.85	U	µg/l	4.85	0.718	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.628	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.596	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.85	U	µg/l	4.85	1.93	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.85	U	µg/l	4.85	0.605	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.85	U	µg/l	4.85	0.736	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.85	U	µg/l	4.85	0.634	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	9.37		µg/l	4.85	0.444	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.85	U	µg/l	4.85	0.310	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.85	U	µg/l	4.85	0.545	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.85	U	µg/l	4.85	0.653	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.85	U	µg/l	4.85	0.576	1	"	"	"	"	"	X

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Sample Identification

MW-7 (2018-04-02)

SC45319-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 10:01

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	54.0		µg/l	4.85	0.394	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
206-44-0	Fluoranthene	< 4.85	U	µg/l	4.85	0.619	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.85	U	µg/l	4.85	0.594	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.85	U	µg/l	4.85	0.554	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.85	U	µg/l	4.85	0.377	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.85	U	µg/l	4.85	1.01	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.85	U	µg/l	4.85	0.620	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.85	U	µg/l	4.85	0.563	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.85	U	µg/l	4.85	0.557	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.85	U	µg/l	4.85	0.646	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.71	U	µg/l	9.71	0.597	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.85	U	µg/l	4.85	0.665	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.85	U	µg/l	4.85	0.588	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.85	U	µg/l	4.85	0.527	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.85	U	µg/l	4.85	0.363	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.85	U	µg/l	4.85	0.670	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.85	U	µg/l	4.85	0.451	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 19.4	U	µg/l	19.4	0.814	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.85	U	µg/l	4.85	0.653	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.85	U	µg/l	4.85	0.561	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.85	U	µg/l	4.85	0.632	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.4	U	µg/l	19.4	0.362	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.85	U	µg/l	4.85	0.626	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.85	U	µg/l	4.85	0.592	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.85	U	µg/l	4.85	0.795	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.85	U	µg/l	4.85	0.667	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.85	U	µg/l	4.85	0.712	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.85	U	µg/l	4.85	0.505	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.85	U	µg/l	4.85	0.503	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.85	U	µg/l	4.85	0.676	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.85	U	µg/l	4.85	0.704	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	32			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	30			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	42			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	19			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	48			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	46			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
000301-02-0	9-Octadecenamide, (Z)-(01)	8.0	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	

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Sample Identification

MW-9 (2018-04-02)

SC45319-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 10:54

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.85	U	µg/l	4.85	0.671	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
208-96-8	Acenaphthylene	< 4.85	U	µg/l	4.85	0.663	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.85	U	µg/l	4.85	1.72	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.85	U	µg/l	4.85	0.590	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.71	U	µg/l	9.71	1.11	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.85	U	µg/l	4.85	0.520	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.85	U	µg/l	4.85	0.424	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.85	U	µg/l	4.85	0.466	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.85	U	µg/l	4.85	0.512	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.85	U	µg/l	4.85	0.757	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.85	U	µg/l	4.85	0.647	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.85	U	µg/l	4.85	0.713	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.85	U	µg/l	4.85	0.755	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	1.23	J	µg/l	4.85	0.619	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.584	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.85	U	µg/l	4.85	0.425	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.85	U	µg/l	4.85	1.51	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.85	U	µg/l	4.85	0.486	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.85	U	µg/l	4.85	1.09	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.85	U	µg/l	4.85	0.573	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.85	U	µg/l	4.85	0.726	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.85	U	µg/l	4.85	0.585	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.85	U	µg/l	4.85	0.517	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.85	U	µg/l	4.85	0.437	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.85	U	µg/l	4.85	0.718	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.546	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.628	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.85	U	µg/l	4.85	0.596	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.85	U	µg/l	4.85	1.93	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.85	U	µg/l	4.85	0.515	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.85	U	µg/l	4.85	0.605	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.85	U	µg/l	4.85	0.736	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.85	U	µg/l	4.85	0.634	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	8.37		µg/l	4.85	0.444	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.85	U	µg/l	4.85	0.310	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.85	U	µg/l	4.85	0.545	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.85	U	µg/l	4.85	0.653	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.85	U	µg/l	4.85	0.576	1	"	"	"	"	"	X

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Sample Identification

MW-9 (2018-04-02)

SC45319-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 10:54

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	2.36	J	µg/l	4.85	0.394	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
206-44-0	Fluoranthene	< 4.85	U	µg/l	4.85	0.619	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.85	U	µg/l	4.85	0.594	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.85	U	µg/l	4.85	0.554	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.85	U	µg/l	4.85	0.377	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.85	U	µg/l	4.85	1.01	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.85	U	µg/l	4.85	0.620	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.85	U	µg/l	4.85	0.563	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.85	U	µg/l	4.85	0.557	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.85	U	µg/l	4.85	0.646	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.71	U	µg/l	9.71	0.597	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.85	U	µg/l	4.85	0.665	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.85	U	µg/l	4.85	0.588	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.85	U	µg/l	4.85	0.527	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.85	U	µg/l	4.85	0.363	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.85	U	µg/l	4.85	0.670	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.85	U	µg/l	4.85	0.451	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 19.4	U	µg/l	19.4	0.814	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.85	U	µg/l	4.85	0.653	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.85	U	µg/l	4.85	0.561	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.85	U	µg/l	4.85	0.632	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.4	U	µg/l	19.4	0.362	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.85	U	µg/l	4.85	0.569	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.85	U	µg/l	4.85	0.626	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.85	U	µg/l	4.85	0.592	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.85	U	µg/l	4.85	0.795	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.85	U	µg/l	4.85	0.667	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.85	U	µg/l	4.85	0.712	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.85	U	µg/l	4.85	0.505	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.85	U	µg/l	4.85	0.503	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.85	U	µg/l	4.85	0.676	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.85	U	µg/l	4.85	0.704	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	24	SBN		30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	23			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	31			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	15			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	37			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	33			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
000112-84-5	13-Docosenamide, (Z)-	4.8	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	

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Sample Identification

MW-D (2018-04-02)

SC45319-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 00:00

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.84	U	µg/l	4.84	0.668	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
208-96-8	Acenaphthylene	< 4.84	U	µg/l	4.84	0.661	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.84	U	µg/l	4.84	1.71	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.84	U	µg/l	4.84	0.588	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.84	U	µg/l	4.84	0.723	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.67	U	µg/l	9.67	1.11	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.84	U	µg/l	4.84	0.518	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.84	U	µg/l	4.84	0.544	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.84	U	µg/l	4.84	0.423	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.84	U	µg/l	4.84	0.513	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.84	U	µg/l	4.84	0.464	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.84	U	µg/l	4.84	0.510	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.84	U	µg/l	4.84	0.754	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.84	U	µg/l	4.84	0.644	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.84	U	µg/l	4.84	0.710	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.84	U	µg/l	4.84	0.752	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	0.841	J	µg/l	4.84	0.617	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.84	U	µg/l	4.84	0.582	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.84	U	µg/l	4.84	0.424	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.84	U	µg/l	4.84	1.51	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.84	U	µg/l	4.84	0.485	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.84	U	µg/l	4.84	1.08	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.84	U	µg/l	4.84	0.571	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.84	U	µg/l	4.84	0.723	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.84	U	µg/l	4.84	0.583	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.84	U	µg/l	4.84	0.515	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.84	U	µg/l	4.84	0.435	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.84	U	µg/l	4.84	0.716	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.84	U	µg/l	4.84	0.544	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.84	U	µg/l	4.84	0.626	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.84	U	µg/l	4.84	0.594	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.84	U	µg/l	4.84	1.92	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.84	U	µg/l	4.84	0.513	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.84	U	µg/l	4.84	0.603	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.84	U	µg/l	4.84	0.733	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.84	U	µg/l	4.84	0.632	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	8.38		µg/l	4.84	0.442	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.84	U	µg/l	4.84	0.309	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.84	U	µg/l	4.84	0.543	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.84	U	µg/l	4.84	0.651	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.84	U	µg/l	4.84	0.574	1	"	"	"	"	"	X

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Sample Identification

MW-D (2018-04-02)

SC45319-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

02-Apr-18 00:00

Received

03-Apr-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	1.59	J	µg/l	4.84	0.393	1	SW846 8270D	03-Apr-18	04-Apr-18	MSL	1804437	X
206-44-0	Fluoranthene	< 4.84	U	µg/l	4.84	0.617	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.84	U	µg/l	4.84	0.592	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.84	U	µg/l	4.84	0.552	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.84	U	µg/l	4.84	0.375	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.84	U	µg/l	4.84	1.00	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.84	U	µg/l	4.84	0.618	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.84	U	µg/l	4.84	0.561	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.84	U	µg/l	4.84	0.567	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.84	U	µg/l	4.84	0.555	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.84	U	µg/l	4.84	0.643	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.67	U	µg/l	9.67	0.595	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.84	U	µg/l	4.84	0.662	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.84	U	µg/l	4.84	0.586	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.84	U	µg/l	4.84	0.525	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.84	U	µg/l	4.84	0.362	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.84	U	µg/l	4.84	0.667	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.84	U	µg/l	4.84	0.450	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 19.3	U	µg/l	19.3	0.810	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.84	U	µg/l	4.84	0.651	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.84	U	µg/l	4.84	0.559	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.84	U	µg/l	4.84	0.630	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.3	U	µg/l	19.3	0.361	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.84	U	µg/l	4.84	0.567	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.84	U	µg/l	4.84	0.624	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.84	U	µg/l	4.84	0.590	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.84	U	µg/l	4.84	0.792	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.84	U	µg/l	4.84	0.664	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.84	U	µg/l	4.84	0.709	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.84	U	µg/l	4.84	0.503	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.84	U	µg/l	4.84	0.501	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.84	U	µg/l	4.84	0.673	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.84	U	µg/l	4.84	0.701	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	29	SBN		30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	26			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	37			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	16			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	43			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	40			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
000112-84-5	13-Docosenamide, (Z)-	5.6	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804437 - SW846 3510C										
<u>Blank (1804437-BLK1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
Acenaphthene	< 5.00	U	µg/l	5.00						
Acenaphthylene	< 5.00	U	µg/l	5.00						
Aniline	< 5.00	U	µg/l	5.00						
Anthracene	< 5.00	U	µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00	U	µg/l	5.00						
Benzidine	< 10.0	U	µg/l	10.0						
Benzo (a) anthracene	< 5.00	U	µg/l	5.00						
Benzo (a) pyrene	< 5.00	U	µg/l	5.00						
Benzo (b) fluoranthene	< 5.00	U	µg/l	5.00						
Benzo (g,h,i) perylene	< 5.00	U	µg/l	5.00						
Benzo (k) fluoranthene	< 5.00	U	µg/l	5.00						
Benzoic acid	< 5.00	U	µg/l	5.00						
Benzyl alcohol	< 5.00	U	µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00	U	µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00	U	µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Butyl benzyl phthalate	< 5.00	U	µg/l	5.00						
Carbazole	< 5.00	U	µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00	U	µg/l	5.00						
4-Chloroaniline	< 5.00	U	µg/l	5.00						
2-Chloronaphthalene	< 5.00	U	µg/l	5.00						
2-Chlorophenol	< 5.00	U	µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Chrysene	< 5.00	U	µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00	U	µg/l	5.00						
Dibenzofuran	< 5.00	U	µg/l	5.00						
1,2-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,3-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,4-Dichlorobenzene	< 5.00	U	µg/l	5.00						
3,3'-Dichlorobenzidine	< 5.00	U	µg/l	5.00						
2,4-Dichlorophenol	< 5.00	U	µg/l	5.00						
Diethyl phthalate	< 5.00	U	µg/l	5.00						
Dimethyl phthalate	< 5.00	U	µg/l	5.00						
2,4-Dimethylphenol	< 5.00	U	µg/l	5.00						
Di-n-butyl phthalate	< 5.00	U	µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrophenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrotoluene	< 5.00	U	µg/l	5.00						
2,6-Dinitrotoluene	< 5.00	U	µg/l	5.00						
Di-n-octyl phthalate	< 5.00	U	µg/l	5.00						
Fluoranthene	< 5.00	U	µg/l	5.00						
Fluorene	< 5.00	U	µg/l	5.00						
Hexachlorobenzene	< 5.00	U	µg/l	5.00						
Hexachlorobutadiene	< 5.00	U	µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00	U	µg/l	5.00						
Hexachloroethane	< 5.00	U	µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00	U	µg/l	5.00						
Isophorone	< 5.00	U	µg/l	5.00						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804437 - SW846 3510C										
<u>Blank (1804437-BLK1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
2-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2-Methylphenol	< 5.00	U	µg/l	5.00						
3 & 4-Methylphenol	< 10.0	U	µg/l	10.0						
Naphthalene	< 5.00	U	µg/l	5.00						
2-Nitroaniline	< 5.00	U	µg/l	5.00						
3-Nitroaniline	< 5.00	U	µg/l	5.00						
4-Nitroaniline	< 5.00	U	µg/l	5.00						
Nitrobenzene	< 5.00	U	µg/l	5.00						
2-Nitrophenol	< 5.00	U	µg/l	5.00						
4-Nitrophenol	< 20.0	U	µg/l	20.0						
N-Nitrosodimethylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00	U	µg/l	5.00						
Pentachlorophenol	< 20.0	U	µg/l	20.0						
Phenanthrene	< 5.00	U	µg/l	5.00						
Phenol	< 5.00	U	µg/l	5.00						
Pyrene	< 5.00	U	µg/l	5.00						
Pyridine	< 5.00	U	µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00	U	µg/l	5.00						
1-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00	U	µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00	U	µg/l	5.00						
Pentachloronitrobenzene	< 5.00	U	µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00	U	µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	26.6		µg/l		50.0		53	30-130		
Surrogate: 2-Fluorophenol	22.1		µg/l		50.0		44	15-110		
Surrogate: Nitrobenzene-d5	32.2		µg/l		50.0		64	30-130		
Surrogate: Phenol-d5	14.5		µg/l		50.0		29	15-110		
Surrogate: Terphenyl-d14	37.9		µg/l		50.0		76	30-130		
Surrogate: 2,4,6-Tribromophenol	35.5		µg/l		50.0		71	15-110		
<u>LCS (1804437-BS1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
Acenaphthene	27.0		µg/l	5.00	50.0		54	40-140		
Acenaphthylene	26.6		µg/l	5.00	50.0		53	40-140		
Aniline	18.2	QC6	µg/l	5.00	50.0		36	40-140		
Anthracene	33.3		µg/l	5.00	50.0		67	40-140		
Azobenzene/Diphenyldiazene	29.1		µg/l	5.00	50.0		58	40-140		
Benzidine	35.4		µg/l	10.0	50.0		71	40-140		
Benzo (a) anthracene	32.0		µg/l	5.00	50.0		64	40-140		
Benzo (a) pyrene	31.9		µg/l	5.00	50.0		64	40-140		
Benzo (b) fluoranthene	32.7		µg/l	5.00	50.0		65	40-140		
Benzo (g,h,i) perylene	30.2		µg/l	5.00	50.0		60	40-140		
Benzo (k) fluoranthene	33.0		µg/l	5.00	50.0		66	40-140		
Benzoic acid	20.2		µg/l	5.00	50.0		40	30-130		
Benzyl alcohol	29.2		µg/l	5.00	50.0		58	40-140		
Bis(2-chloroethoxy)methane	23.5		µg/l	5.00	50.0		47	40-140		
Bis(2-chloroethyl)ether	24.1		µg/l	5.00	50.0		48	40-140		
Bis(2-chloroisopropyl)ether	22.1		µg/l	5.00	50.0		44	40-140		
Bis(2-ethylhexyl)phthalate	33.3		µg/l	5.00	50.0		67	40-140		
4-Bromophenyl phenyl ether	31.5		µg/l	5.00	50.0		63	40-140		
Butyl benzyl phthalate	32.9		µg/l	5.00	50.0		66	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804437 - SW846 3510C										
<u>LCS (1804437-BS1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
Carbazole	50.6		µg/l	5.00	50.0	101	40-140			
4-Chloro-3-methylphenol	30.7		µg/l	5.00	50.0	61	30-130			
4-Chloroaniline	26.5		µg/l	5.00	50.0	53	40-140			
2-Chloronaphthalene	31.1		µg/l	5.00	50.0	62	40-140			
2-Chlorophenol	27.3		µg/l	5.00	50.0	55	30-130			
4-Chlorophenyl phenyl ether	24.8		µg/l	5.00	50.0	50	40-140			
Chrysene	30.0		µg/l	5.00	50.0	60	40-140			
Dibenzo (a,h) anthracene	32.1		µg/l	5.00	50.0	64	40-140			
Dibenzofuran	30.2		µg/l	5.00	50.0	60	40-140			
1,2-Dichlorobenzene	32.5		µg/l	5.00	50.0	65	40-140			
1,3-Dichlorobenzene	31.7		µg/l	5.00	50.0	63	40-140			
1,4-Dichlorobenzene	31.7		µg/l	5.00	50.0	63	40-140			
3,3'-Dichlorobenzidine	40.9		µg/l	5.00	50.0	82	40-140			
2,4-Dichlorophenol	30.9		µg/l	5.00	50.0	62	30-130			
Diethyl phthalate	26.6		µg/l	5.00	50.0	53	40-140			
Dimethyl phthalate	25.6		µg/l	5.00	50.0	51	40-140			
2,4-Dimethylphenol	29.1		µg/l	5.00	50.0	58	30-130			
Di-n-butyl phthalate	33.1		µg/l	5.00	50.0	66	40-140			
4,6-Dinitro-2-methylphenol	44.6		µg/l	5.00	50.0	89	30-130			
2,4-Dinitrophenol	34.2		µg/l	5.00	50.0	68	30-130			
2,4-Dinitrotoluene	38.9		µg/l	5.00	50.0	78	40-140			
2,6-Dinitrotoluene	38.4		µg/l	5.00	50.0	77	40-140			
Di-n-octyl phthalate	33.8		µg/l	5.00	50.0	68	40-140			
Fluoranthene	31.8		µg/l	5.00	50.0	64	40-140			
Fluorene	25.5		µg/l	5.00	50.0	51	40-140			
Hexachlorobenzene	37.5		µg/l	5.00	50.0	75	40-140			
Hexachlorobutadiene	26.9		µg/l	5.00	50.0	54	40-140			
Hexachlorocyclopentadiene	32.0		µg/l	5.00	50.0	64	40-140			
Hexachloroethane	30.6		µg/l	5.00	50.0	61	40-140			
Indeno (1,2,3-cd) pyrene	32.1		µg/l	5.00	50.0	64	40-140			
Isophorone	29.2		µg/l	5.00	50.0	58	40-140			
2-Methylnaphthalene	35.3		µg/l	5.00	50.0	71	40-140			
2-Methylphenol	26.3		µg/l	5.00	50.0	53	30-130			
3 & 4-Methylphenol	25.2		µg/l	10.0	50.0	50	30-130			
Naphthalene	28.1		µg/l	5.00	50.0	56	40-140			
2-Nitroaniline	29.1		µg/l	5.00	50.0	58	40-140			
3-Nitroaniline	36.5		µg/l	5.00	50.0	73	40-140			
4-Nitroaniline	44.3		µg/l	5.00	50.0	89	40-140			
Nitrobenzene	37.0		µg/l	5.00	50.0	74	40-140			
2-Nitrophenol	33.5		µg/l	5.00	50.0	67	30-130			
4-Nitrophenol	19.1	J	µg/l	20.0	50.0	38	30-130			
N-Nitrosodimethylamine	20.3		µg/l	5.00	50.0	41	40-140			
N-Nitrosodi-n-propylamine	27.2		µg/l	5.00	50.0	54	40-140			
N-Nitrosodiphenylamine	37.3		µg/l	5.00	50.0	75	40-140			
Pentachlorophenol	31.5		µg/l	20.0	50.0	63	30-130			
Phenanthrene	31.4		µg/l	5.00	50.0	63	40-140			
Phenol	13.6	QC6	µg/l	5.00	50.0	27	30-130			
Pyrene	30.9		µg/l	5.00	50.0	62	40-140			
Pyridine	12.2	QC6	µg/l	5.00	50.0	24	40-140			
1,2,4-Trichlorobenzene	33.1		µg/l	5.00	50.0	66	40-140			

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804437 - SW846 3510C										
<u>LCS (1804437-BS1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
1-Methylnaphthalene	<b>26.1</b>		µg/l	5.00	50.0		52	40-140		
2,4,5-Trichlorophenol	<b>28.6</b>		µg/l	5.00	50.0		57	30-130		
2,4,6-Trichlorophenol	<b>25.9</b>		µg/l	5.00	50.0		52	30-130		
Pentachloronitrobenzene	<b>33.4</b>		µg/l	5.00	50.0		67	40-140		
1,2,4,5-Tetrachlorobenzene	<b>23.3</b>		µg/l	5.00	50.0		47	40-140		
<i>Surrogate: 2-Fluorobiphenyl</i>	25.7		µg/l		50.0		51	30-130		
<i>Surrogate: 2-Fluorophenol</i>	20.2		µg/l		50.0		40	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	31.0		µg/l		50.0		62	30-130		
<i>Surrogate: Phenol-d5</i>	13.6		µg/l		50.0		27	15-110		
<i>Surrogate: Terphenyl-d14</i>	35.2		µg/l		50.0		70	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	36.2		µg/l		50.0		72	15-110		
<u>LCS Dup (1804437-BSD1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
Acenaphthene	<b>27.9</b>		µg/l	5.00	50.0		56	40-140	3	20
Acenaphthylene	<b>27.5</b>		µg/l	5.00	50.0		55	40-140	3	20
Aniline	<b>19.9</b>		µg/l	5.00	50.0		40	40-140	9	20
Anthracene	<b>35.0</b>		µg/l	5.00	50.0		70	40-140	5	20
Azobenzene/Diphenyldiazene	<b>30.1</b>		µg/l	5.00	50.0		60	40-140	3	20
Benzidine	<b>51.9</b>	QR2	µg/l	10.0	50.0		104	40-140	38	20
Benzo (a) anthracene	<b>32.9</b>		µg/l	5.00	50.0		66	40-140	3	20
Benzo (a) pyrene	<b>33.1</b>		µg/l	5.00	50.0		66	40-140	4	20
Benzo (b) fluoranthene	<b>35.6</b>		µg/l	5.00	50.0		71	40-140	9	20
Benzo (g,h,i) perylene	<b>32.2</b>		µg/l	5.00	50.0		64	40-140	7	20
Benzo (k) fluoranthene	<b>31.9</b>		µg/l	5.00	50.0		64	40-140	3	20
Benzoic acid	<b>20.0</b>		µg/l	5.00	50.0		40	30-130	1	20
Benzyl alcohol	<b>29.8</b>		µg/l	5.00	50.0		60	40-140	2	20
Bis(2-chloroethoxy)methane	<b>23.7</b>		µg/l	5.00	50.0		47	40-140	0.8	20
Bis(2-chloroethyl)ether	<b>25.5</b>		µg/l	5.00	50.0		51	40-140	6	20
Bis(2-chloroisopropyl)ether	<b>23.0</b>		µg/l	5.00	50.0		46	40-140	4	20
Bis(2-ethylhexyl)phthalate	<b>33.6</b>		µg/l	5.00	50.0		67	40-140	0.8	20
4-Bromophenyl phenyl ether	<b>32.6</b>		µg/l	5.00	50.0		65	40-140	3	20
Butyl benzyl phthalate	<b>33.7</b>		µg/l	5.00	50.0		67	40-140	2	20
Carbazole	<b>52.6</b>		µg/l	5.00	50.0		105	40-140	4	20
4-Chloro-3-methylphenol	<b>30.8</b>		µg/l	5.00	50.0		62	30-130	0.4	20
4-Chloroaniline	<b>27.8</b>		µg/l	5.00	50.0		56	40-140	5	20
2-Chloronaphthalene	<b>32.2</b>		µg/l	5.00	50.0		64	40-140	3	20
2-Chlorophenol	<b>28.4</b>		µg/l	5.00	50.0		57	30-130	4	20
4-Chlorophenyl phenyl ether	<b>25.2</b>		µg/l	5.00	50.0		50	40-140	1	20
Chrysene	<b>31.0</b>		µg/l	5.00	50.0		62	40-140	3	20
Dibenzo (a,h) anthracene	<b>33.8</b>		µg/l	5.00	50.0		68	40-140	5	20
Dibenzofuran	<b>31.2</b>		µg/l	5.00	50.0		62	40-140	3	20
1,2-Dichlorobenzene	<b>34.4</b>		µg/l	5.00	50.0		69	40-140	6	20
1,3-Dichlorobenzene	<b>33.6</b>		µg/l	5.00	50.0		67	40-140	6	20
1,4-Dichlorobenzene	<b>33.4</b>		µg/l	5.00	50.0		67	40-140	5	20
3,3'-Dichlorobenzidined	<b>43.7</b>		µg/l	5.00	50.0		87	40-140	7	20
2,4-Dichlorophenol	<b>31.4</b>		µg/l	5.00	50.0		63	30-130	2	20
Diethyl phthalate	<b>26.8</b>		µg/l	5.00	50.0		54	40-140	0.9	20
Dimethyl phthalate	<b>26.1</b>		µg/l	5.00	50.0		52	40-140	2	20
2,4-Dimethylphenol	<b>29.3</b>		µg/l	5.00	50.0		59	30-130	0.6	20
Di-n-butyl phthalate	<b>34.0</b>		µg/l	5.00	50.0		68	40-140	3	20
4,6-Dinitro-2-methylphenol	<b>46.9</b>		µg/l	5.00	50.0		94	30-130	5	20

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1804437 - SW846 3510C										
<u>LCS Dup (1804437-BSD1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
2,4-Dinitrophenol	35.7		µg/l	5.00	50.0	71	30-130	4	20	
2,4-Dinitrotoluene	40.4		µg/l	5.00	50.0	81	40-140	4	20	
2,6-Dinitrotoluene	39.6		µg/l	5.00	50.0	79	40-140	3	20	
Di-n-octyl phthalate	34.0		µg/l	5.00	50.0	68	40-140	0.4	20	
Fluoranthene	33.0		µg/l	5.00	50.0	66	40-140	4	20	
Fluorene	26.2		µg/l	5.00	50.0	52	40-140	3	20	
Hexachlorobenzene	39.6		µg/l	5.00	50.0	79	40-140	5	20	
Hexachlorobutadiene	27.9		µg/l	5.00	50.0	56	40-140	3	20	
Hexachlorocyclopentadiene	33.6		µg/l	5.00	50.0	67	40-140	5	20	
Hexachloroethane	32.4		µg/l	5.00	50.0	65	40-140	6	20	
Indeno (1,2,3-cd) pyrene	34.3		µg/l	5.00	50.0	69	40-140	6	20	
Isophorone	28.9		µg/l	5.00	50.0	58	40-140	0.9	20	
2-Methylnaphthalene	36.6		µg/l	5.00	50.0	73	40-140	4	20	
2-Methylphenol	27.1		µg/l	5.00	50.0	54	30-130	3	20	
3 & 4-Methylphenol	25.5		µg/l	10.0	50.0	51	30-130	1	20	
Naphthalene	28.9		µg/l	5.00	50.0	58	40-140	3	20	
2-Nitroaniline	30.3		µg/l	5.00	50.0	61	40-140	4	20	
3-Nitroaniline	36.7		µg/l	5.00	50.0	73	40-140	0.6	20	
4-Nitroaniline	45.7		µg/l	5.00	50.0	91	40-140	3	20	
Nitrobenzene	37.7		µg/l	5.00	50.0	75	40-140	2	20	
2-Nitrophenol	34.2		µg/l	5.00	50.0	68	30-130	2	20	
4-Nitrophenol	18.0	J	µg/l	20.0	50.0	36	30-130	6	20	
N-Nitrosodimethylamine	20.2		µg/l	5.00	50.0	40	40-140	0.7	20	
N-Nitrosodi-n-propylamine	27.7		µg/l	5.00	50.0	55	40-140	2	20	
N-Nitrosodiphenylamine	38.9		µg/l	5.00	50.0	78	40-140	4	20	
Pentachlorophenol	33.1		µg/l	20.0	50.0	66	30-130	5	20	
Phenanthrene	32.6		µg/l	5.00	50.0	65	40-140	4	20	
Phenol	13.9	QC6	µg/l	5.00	50.0	28	30-130	2	20	
Pyrene	32.0		µg/l	5.00	50.0	64	40-140	4	20	
Pyridine	18.1	QC6, QR5	µg/l	5.00	50.0	36	40-140	39	20	
1,2,4-Trichlorobenzene	34.2		µg/l	5.00	50.0	68	40-140	3	20	
1-Methylnaphthalene	27.1		µg/l	5.00	50.0	54	40-140	4	20	
2,4,5-Trichlorophenol	29.2		µg/l	5.00	50.0	58	30-130	2	20	
2,4,6-Trichlorophenol	26.6		µg/l	5.00	50.0	53	30-130	3	20	
Pentachloronitrobenzene	34.3		µg/l	5.00	50.0	69	40-140	3	20	
1,2,4,5-Tetrachlorobenzene	24.4		µg/l	5.00	50.0	49	40-140	5	20	
<i>Surrogate: 2-Fluorobiphenyl</i>	26.3		µg/l		50.0	53	30-130			
<i>Surrogate: 2-Fluorophenol</i>	20.4		µg/l		50.0	41	15-110			
<i>Surrogate: Nitrobenzene-d5</i>	31.7		µg/l		50.0	63	30-130			
<i>Surrogate: Phenol-d5</i>	13.5		µg/l		50.0	27	15-110			
<i>Surrogate: Terphenyl-d14</i>	35.2		µg/l		50.0	70	30-130			
<i>Surrogate: 2,4,6-Tribromophenol</i>	37.8		µg/l		50.0	76	15-110			
<b>SW846 8270D TICS</b>										
Batch 1804437 - SW846 3510C										
<u>Blank (1804437-BLK1)</u>										
<u>Prepared: 03-Apr-18 Analyzed: 04-Apr-18</u>										
Tentatively Identified Compounds	0.0	U	µg/l							
Cyclododecane	7.5	J N	µg/l							
n-Hexadecanoic Acid	4.1	J N	µg/l							
Propanoic acid, 3,3'-thiobi...	7.5	J N	µg/l							

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## Notes and Definitions

J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
JN	(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
SBN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
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

Report To: AECC  
6308 Fly Rd  
East Syracuse, NY 13057

Telephone #: (315) 432-9400  
Project Mgr: Rich McKenna

F=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= \_\_\_\_\_ 12= \_\_\_\_\_

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=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic
---------	------------	-------	-------	------	--------	----------------	------------------	------------------	--------------

45319-01	MW-7 (2018-04-02)	4/2/18	1001	G GW		1				X
-02	MW-9 (2018-04-02)	4/2/18	1054	G GW		1				X
-03	MW-D (2018-04-02)	4/2/18	-	G GW		1				X

Relinquished by:

Drew Brantner  
Fed Ex

Received by:

FedEx  
Bm

Date:

4/2/18

Time:

1030

Temp °C

Observed  
3.7

Correction Factor  
0

Corrected  
3.7

IR ID #  
2

EDD format:

PDF, Excel

E-mail to:

rmckenna@aeccgroup.com

dbrantner@aeccgroup.com

Condition upon receipt: Custody Seals:  Present  Intact  Broken

Ambient  Iced  Refrigerated  DI VOA Frozen  Soil Jar Frozen

## 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.

18-051

700 art Panel

Syracuse  
Drew Brantner

State: NY

## 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\* SP B\* NJ Reduced\*  NJ Full\* Tier II\*  Tier IV\* Other: EQuis

State-specific reporting standards:

**FedEx**  
Express      Package  
US Airbill

FedEx  
Tracking  
Number

8116 7330 4564

**1 From**Date 4/2/12

Sender's Name

Drew BrantnerPhone 315 482-9400

Company

AECC

Address

16308 Fly RdState NY ZIP 13057

Dept/Floor/Suite/Room

**2 Your Internal Billing Reference****3 To**

Recipient's Name

Sample DrawingPhone 413 789-9018

Company

Eurofins / Spectrum Analytical

Address

11 Almgren Dr

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

**Hold Weekly**  
FedEx location address  
REQUIRED. NOT available for  
FedEx First Overnight.

**Hold Saturday**  
FedEx location address  
REQUIRED. Available ONLY for  
FedEx Priority Overnight and  
FedEx 2Day to selected locations.

001

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

Agawan

State



8116 7330 4564

Form ID No. 0200

Recipients Corp

**4 Express Package Service**

\*To most locations.

**Packages up to 150 lbs.**  
For packages over 150 lbs., use the  
FedEx Express Freight US Airbill.**Next Business Day**

FedEx First Overnight  
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Priority Overnight  
Next business morning.\* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Standard Overnight  
Next business afternoon.\* Saturday Delivery NOT available.

**2 or 3 Business Days**

FedEx 2Day A.M.  
Second business morning.\* Saturday Delivery NOT available.

FedEx 2Day  
Second business afternoon.\* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Express Saver  
Third business day.\* Saturday Delivery NOT available.

**5 Packaging**

\*Declared value limit \$500.

FedEx Envelope\*     FedEx Pak\*     FedEx Box     FedEx Tube     Other

**6 Special Handling and Delivery Signature Options**

Fees may apply. See the FedEx Service Guide.

Saturday Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required  
Package may be left without obtaining a signature for delivery.

Direct Signature  
Someone at recipient's address may sign for delivery.

Indirect Signature  
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

**Does this shipment contain dangerous goods?**

One box must be checked.

<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> As per attached Shipper's Declaration.	<input type="checkbox"/> Yes	Shipper's Declaration not required.	<input type="checkbox"/> Dry Ice	Dry Ice Dry Ice, UN 1845	x	kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.								
<input type="checkbox"/> Cargo Aircraft Only								

**7 Payment Bill to:**

Enter FedEx Acct. No. or Credit Card No. below.      I obtain recip. Acct. No.

<input checked="" type="checkbox"/> Sender Acct. No. in Section will be billed.	<input type="checkbox"/> Recipient	<input type="checkbox"/> Third Party	<input type="checkbox"/> Credit Card	<input type="checkbox"/> Cash/Check
---	------------------------------------	--------------------------------------	--------------------------------------	-------------------------------------

Total Packages

Total Weight



Credit Card Auth.

Your liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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644

## Batch Summary

### 1804437

#### *Semivolatile Organic Compounds by GCMS*

1804437-BLK1  
1804437-BS1  
1804437-BSD1  
SC45319-01 (MW-7 (2018-04-02))  
SC45319-02 (MW-9 (2018-04-02))  
SC45319-03 (MW-D (2018-04-02))

### 8815859

#### *Semivolatile Organic Compounds by GCMS*

S815859-CAL1  
S815859-CAL2  
S815859-CAL3  
S815859-CAL4  
S815859-CAL5  
S815859-CAL6  
S815859-CAL7  
S815859-CAL8  
S815859-CAL9  
S815859-CALA  
S815859-ICV1  
S815859-LCV1  
S815859-LCV2  
S815859-TUN1

### 8818202

#### *Semivolatile Organic Compounds by GCMS*

S818202-CCV1  
S818202-TUN1

Report Date:  
 02-Jul-18 17:16

**Laboratory Report**  
**SC47714**

AECC Environmental Consulting  
 6308 Fly Road  
 East Syracuse, NY 13057  
 Attn: Rich McKenna

Project: 700 Out Parcel - Syracuse, NY

Project #: 18-051

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



*Dawn E. Wojcik*

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 76 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:** SC47714  
**Project:** 700 Out Parcel - Syracuse, NY  
**Project Number:** 18-051

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SC47714-01	MW-5 (2018-06-13)	Ground Water	13-Jun-18 10:54	14-Jun-18 09:42
SC47714-02	MW-7 (2018-06-13)	Ground Water	13-Jun-18 11:41	14-Jun-18 09:42
SC47714-03	MW-8 (2018-06-13)	Ground Water	13-Jun-18 12:40	14-Jun-18 09:42
SC47714-04	MW-9 (2018-06-13)	Ground Water	13-Jun-18 13:15	14-Jun-18 09:42
SC47714-05	Trip Blank (2018-06)	Aqueous	13-Jun-18 00:00	14-Jun-18 09:42
SC47714-06	MW-D (2018-06-13)	Ground Water	13-Jun-18 00:00	14-Jun-18 09:42

## 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 2.0 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.**

## **SW846 6010C**

### **Laboratory Control Samples:**

1808547 BS/BSD

---

Beryllium percent recoveries (112/116) are outside individual acceptance criteria (85-115), but within overall method allowances.

All reported results of the following samples are considered to have a potentially high bias:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)

### **Spikes:**

1808547-MS2                  *Source: SC47714-03*

---

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.

Calcium

1808547-MSD1                  *Source: SC47714-03*

---

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  
Sodium

1808547-MSD2                  *Source: SC47714-03*

---

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.

Calcium

### **Duplicates:**

1808547-DUP3                  *Source: SC47714-01*

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

## **SW846 6010C**

### **Samples:**

SC47714-01                  *MW-5 (2018-06-13)*

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

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

Sodium

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

Thallium

SC47714-02                  *MW-7 (2018-06-13)*

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

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

Magnesium

Sodium

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

Thallium

SC47714-03                  *MW-8 (2018-06-13)*

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

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

Calcium

SC47714-04                  *MW-9 (2018-06-13)*

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

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

Calcium

Sodium

## **SW846 6010C**

### **Samples:**

SC47714-06                  MW-D (2018-06-13)

---

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

Manganese

MRL raised to correlate to batch QC reporting limits.

Manganese

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

Calcium

## **SW846 8260C**

### **Calibration:**

1805057

---

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene  
1,2,4-Trichlorobenzene  
1,2,4-Trimethylbenzene  
1,3,5-Trichlorobenzene  
1,3,5-Trimethylbenzene  
1,4-Dioxane  
2-Chlorotoluene  
2-Hexanone (MBK)  
4-Chlorotoluene  
4-Isopropyltoluene  
Bromoform  
Carbon tetrachloride  
Cyclohexane  
Isopropylbenzene  
m,p-Xylene  
Methylcyclohexane  
Naphthalene  
n-Butylbenzene  
n-Propylbenzene  
o-Xylene  
sec-Butylbenzene  
Styrene  
tert-Butylbenzene  
trans-1,3-Dichloropropene

This affected the following samples:

1808472-BLK1  
1808472-BS1  
1808472-BSD1  
1808472-MS1  
1808472-MSD1  
MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
S819667-ICV1  
S820210-CCV1  
Trip Blank (2018-06)

## **SW846 8260C**

### **Calibration:**

1806025

---

Analyte quantified by quadratic equation type calibration.

1,2,4-Trimethylbenzene  
1,3,5-Trimethylbenzene  
Ethylbenzene  
m,p-Xylene  
Naphthalene  
n-Propylbenzene  
o-Xylene

This affected the following samples:

1808627-BLK1  
1808627-BS1  
1808627-BSD1  
1808627-MS1  
1808627-MSD1  
MW-D (2018-06-13)  
S820051-ICV1  
S820269-CCV1

S819667-ICV1

---

Analyte percent recovery is outside individual acceptance criteria (80-120).

Bromomethane (75%)

This affected the following samples:

1808472-BLK1  
1808472-BS1  
1808472-BSD1  
1808472-MS1  
1808472-MSD1  
MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
S820210-CCV1  
Trip Blank (2018-06)

### **Laboratory Control Samples:**

1808472 BS/BSD

---

Chloromethane percent recoveries (144/146) 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:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
Trip Blank (2018-06)

## **SW846 8260C**

### **Laboratory Control Samples:**

1808472 BS/BSD

---

Dichlorodifluoromethane (Freon12) percent recoveries (131/124) 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:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
Trip Blank (2018-06)

Vinyl chloride percent recoveries (149/140) 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:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
Trip Blank (2018-06)

### **Spikes:**

1808472-MS1              *Source: SC47714-03*

---

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

1,1,2-Trichloroethane  
1,2,3-Trichlorobenzene  
1,2,4-Trichlorobenzene  
1,2,4-Trimethylbenzene  
1,2-Dibromo-3-chloropropane  
2-Butanone (MEK)  
2-Hexanone (MBK)  
4-Isopropyltoluene  
4-Methyl-2-pentanone (MIBK)  
Acrylonitrile  
Chloroethane  
Naphthalene  
Tetrahydrofuran

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.

1,2,4-Trimethylbenzene

1808472-MSD1              *Source: SC47714-03*

---

RPD out of acceptance range.

Chloroethane  
Trichlorofluoromethane (Freon 11)

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

Ethanol

## **SW846 8260C**

### **Spikes:**

1808472-MSD1      *Source: SC47714-03*

---

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

1,1,2-Trichloroethane  
1,4-Dioxane  
2-Butanone (MEK)  
2-Hexanone (MBK)  
4-Isopropyltoluene  
4-Methyl-2-pentanone (MIBK)  
Acrylonitrile  
Bromomethane  
Chloroethane  
Tetrahydrofuran  
Trichlorofluoromethane (Freon 11)

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.

1,2,4-Trimethylbenzene

1808627-MS1      *Source: SC47714-06REI*

---

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

Acetone

1808627-MSD1      *Source: SC47714-06REI*

---

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

1,3,5-Trichlorobenzene  
Acetone

### **Samples:**

S820210-CCV1

---

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

2-Butanone (MEK) (25.7%)  
Chloromethane (23.4%)

This affected the following samples:

1808472-BLK1  
1808472-BS1  
1808472-BSD1  
1808472-MS1  
1808472-MSD1  
MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
Trip Blank (2018-06)

S820269-CCV1

---

## **SW846 8260C**

### **Samples:**

S820269-CCV1

---

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

1,1-Dichloroethene (24.2%)  
2,2-Dichloropropane (39.8%)  
Ethyl tert-butyl ether (22.1%)  
Methyl tert-butyl ether (21.9%)  
Tert-Butanol / butyl alcohol (21.0%)

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

Acetone (26.2%)  
Ethanol (22.0%)  
Trichlorofluoromethane (Freon 11) (24.7%)

This affected the following samples:

1808627-BLK1  
1808627-BS1  
1808627-BSD1  
1808627-MS1  
1808627-MSD1

---

SC47714-03                  *MW-8 (2018-06-13)*

Non-target concentration sufficient to be reported as one of the highest TICs.

Cyclohexane  
Methylcyclohexane

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

---

SC47714-06                  *MW-D (2018-06-13)*

Non-target concentration sufficient to be reported as one of the highest TICs.

Cyclohexane  
Methylcyclohexane

---

SC47714-06RE1                  *MW-D (2018-06-13)*

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

## **SW846 8260C TICs**

### **Samples:**

---

SC47714-03                  *MW-8 (2018-06-13)*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

---

SC47714-04                  *MW-9 (2018-06-13)*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

---

SC47714-06                  *MW-D (2018-06-13)*

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

## **SW846 8270D**

### **Calibration:**

1804057

---

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol  
4,6-Dinitro-2-methylphenol  
Benzoic acid  
Carbazole  
Pentachlorophenol

This affected the following samples:

1808368-BLK1  
1808368-BS1  
1808368-BSD1  
MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)  
S818863-ICV1  
S820321-CCV1  
S820397-CCV1

### **Laboratory Control Samples:**

1808368 BS/BSD

---

Benzoic acid percent recoveries (29/34) are outside individual acceptance criteria (30-130), but within overall method allowances.

All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)

N-Nitrosodimethylamine percent recoveries (38/44) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)

Phenol percent recoveries (25/28) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)

Pyridine percent recoveries (32/36) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)  
MW-D (2018-06-13)

## **SW846 8270D**

### **Laboratory Control Samples:**

1808368 BSD

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Benzo (g,h,i) perylene RPD 43% (20%) is outside individual acceptance criteria.

Benzo (k) fluoranthene RPD 33% (20%) is outside individual acceptance criteria.

Dibenzo (a,h) anthracene RPD 30% (20%) is outside individual acceptance criteria.

Di-n-octyl phthalate RPD 29% (20%) is outside individual acceptance criteria.

Indeno (1,2,3-cd) pyrene RPD 33% (20%) is outside individual acceptance criteria.

Pentachlorophenol RPD 21% (20%) is outside individual acceptance criteria.

1808368-BS1

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Benzoic acid

N-Nitrosodimethylamine

Phenol

Pyridine

1808368-BSD1

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Phenol

Pyridine

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Benzo (g,h,i) perylene

Benzo (k) fluoranthene

Dibenzo (a,h) anthracene

Di-n-octyl phthalate

Indeno (1,2,3-cd) pyrene

Pentachlorophenol

### **Samples:**

S820321-CCV1

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

3-Nitroaniline (-35.5%)

4-Chloroaniline (-33.2%)

4-Chlorophenyl phenyl ether (23.2%)

Aniline (-60.2%)

Diethyl phthalate (20.8%)

Hexachlorocyclopentadiene (27.7%)

Nitrobenzene (50.5%)

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

Carbazole (-24.0%)

## **SW846 8270D**

### **Samples:**

S820321-CCV1

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This affected the following samples:

1808368-BLK1  
1808368-BS1  
1808368-BSD1  
MW-5 (2018-06-13)  
MW-7 (2018-06-13)  
MW-8 (2018-06-13)  
MW-9 (2018-06-13)

S820397-CCV1

---

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

3-Nitroaniline (-33.7%)  
Aniline (-31.8%)  
Benzidine (29.4%)  
Benzo (b) fluoranthene (20.8%)  
Hexachlorocyclopentadiene (33.5%)  
Nitrobenzene (54.7%)

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

Carbazole (-30.6%)

This affected the following samples:

MW-D (2018-06-13)

SC47714-06                  *MW-D (2018-06-13)*

---

Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.

2-Fluorobiphenyl

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

## **SW846 8270D TICS**

### **Blanks:**

1808368-BLK1

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

5-Eicosene, (E)-  
n-Hexadecanoic Acid

### **Samples:**

SC47714-01                  *MW-5 (2018-06-13)*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

5-Eicosene, (E)-  
n-Hexadecanoic Acid

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

5-Eicosene, (E)-  
n-Hexadecanoic Acid

## **SW846 8270D TICS**

### **Samples:**

SC47714-03                  *MW-8 (2018-06-13)*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1,3-Cyclopentadiene, 1,2,3,...  
1H-Indene, 2,3-dihydro-1,3-...  
1-Nonadecene  
Benzene, (1-methylethyl)-  
Benzene, 1,2,3-trimethyl-  
Benzene, 1,2,4,5-tetramethyl-  
Benzene, 1,2,4-trimethyl-  
Benzene, 1,3,5-trimethyl-  
Benzene, 1-ethyl-4-methyl-  
Benzene, 1-methyl-2-(1-meth...  
Benzene, 1-methyl-3-propyl-  
Benzene, 1-methyl-4-propyl-  
Benzene, 2-ethenyl-1,4-dime...  
Benzene, 2-ethyl-1,3-dimethyl-  
Benzene, propyl-  
Cyclic octaatomic sulfur  
Ethylbenzene  
Indane  
n-Hexadecanoic Acid  
p-Xylene

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

n-Hexadecanoic Acid

SC47714-04                  *MW-9 (2018-06-13)*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

Benzoic acid, 2,4-dichloro-  
n-Hexadecanoic Acid

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

n-Hexadecanoic Acid

SC47714-06                  *MW-D (2018-06-13)*

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## **SW846 8270D TICS**

### **Samples:**

SC47714-06                  *MW-D (2018-06-13)*

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(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1H-Indene, 2,3-dihydro-1,3-...  
2-Tolyloxirane  
Benzene, (1-methyl-1-butenyl)-  
Benzene, 1,2,3-trimethyl-  
Benzene, 1,2,4,5-tetramethyl- (01)  
Benzene, 1,2-diethyl-  
Benzene, 1-ethyl-2,3-dimethyl-  
Benzene, 1-ethyl-2-methyl- (01)  
Benzene, 1-ethyl-3-methyl-  
Benzene, 1-methyl-2-(1-meth...  
Benzene, 1-methyl-4-propyl-  
Benzene, propyl-  
Cyclic octaatomic sulfur  
Ethylbenzene  
Indane  
p-Xylene  
Undecane

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

## Sample Acceptance Check Form

Client: AECC Environmental Consulting  
Project: 700 Out Parcel - Syracuse, NY / 18-051  
Work Order: SC47714  
Sample(s) received on: 6/14/2018

***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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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:** SC47714-01

**Client ID:** MW-5 (2018-06-13)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	3.31		0.0250	mg/l	SW846 6010C
Antimony	0.0024	J	0.0060	mg/l	SW846 6010C
Arsenic	0.00455		0.00400	mg/l	SW846 6010C
Barium	0.342		0.0050	mg/l	SW846 6010C
Cadmium	0.0005	J	0.0025	mg/l	SW846 6010C
Calcium	181		0.100	mg/l	SW846 6010C
Chromium	0.0055		0.0050	mg/l	SW846 6010C
Cobalt	0.0023	J	0.0050	mg/l	SW846 6010C
Copper	0.0124		0.0050	mg/l	SW846 6010C
Iron	3.13		0.125	mg/l	SW846 6010C
Lead	0.0092		0.0075	mg/l	SW846 6010C
Magnesium	25.2		0.0200	mg/l	SW846 6010C
Manganese	0.108		R05, R0.625	mg/l	SW846 6010C
Nickel	0.0040	J	0.0050	mg/l	SW846 6010C
Potassium	9.38		0.500	mg/l	SW846 6010C
Sodium	1660		GS1, D15.0	mg/l	SW846 6010C
Vanadium	0.0070		0.0050	mg/l	SW846 6010C
Zinc	0.0329		0.0250	mg/l	SW846 6010C
Isopropylbenzene	0.72	J	1.00	µg/l	SW846 8260C
n-Propylbenzene	0.67	J	1.00	µg/l	SW846 8260C

**Lab ID:** SC47714-02

**Client ID:** MW-7 (2018-06-13)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.287		0.0250	mg/l	SW846 6010C
Arsenic	0.01835		0.00400	mg/l	SW846 6010C
Barium	0.303		0.0050	mg/l	SW846 6010C
Calcium	265		0.100	mg/l	SW846 6010C
Cobalt	0.0020	J	0.0050	mg/l	SW846 6010C
Iron	3.71		0.125	mg/l	SW846 6010C
Magnesium	55.2		GS1, D0.100	mg/l	SW846 6010C
Manganese	0.0418		R05, R0.625	mg/l	SW846 6010C
Nickel	0.0020	J	0.0050	mg/l	SW846 6010C
Potassium	4.68		0.500	mg/l	SW846 6010C
Sodium	1310		GS1, D7.50	mg/l	SW846 6010C
Zinc	0.0042	J	0.0250	mg/l	SW846 6010C

Lab ID: SC47714-03

Client ID: MW-8 (2018-06-13)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.01500		0.00400	mg/l	SW846 6010C
Barium	1.87		0.0050	mg/l	SW846 6010C
Calcium	262		GS1, D0.500	mg/l	SW846 6010C
Iron	1.66		0.125	mg/l	SW846 6010C
Lead	0.0168		0.0075	mg/l	SW846 6010C
Magnesium	43.4		0.0200	mg/l	SW846 6010C
Manganese	0.441		R05, R(0.625	mg/l	SW846 6010C
Potassium	5.88		0.500	mg/l	SW846 6010C
Sodium	141		0.750	mg/l	SW846 6010C
Zinc	0.0033	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	921	D	10.0	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	274	D	10.0	µg/l	SW846 8260C
4-Isopropyltoluene	16.5	D	10.0	µg/l	SW846 8260C
Benzene	44.1	D	10.0	µg/l	SW846 8260C
Cyclohexane	330		NonTR50.0	µg/l	SW846 8260C
Ethylbenzene	301	D	10.0	µg/l	SW846 8260C
Isopropylbenzene	37.3	D	10.0	µg/l	SW846 8260C
m,p-Xylene	693	D	20.0	µg/l	SW846 8260C
Methylcyclohexane	373		NonTR50.0	µg/l	SW846 8260C
Naphthalene	171	D	20.0	µg/l	SW846 8260C
n-Butylbenzene	39.7	D	10.0	µg/l	SW846 8260C
n-Propylbenzene	116	D	10.0	µg/l	SW846 8260C
o-Xylene	163	D	10.0	µg/l	SW846 8260C
sec-Butylbenzene	17.0	D	10.0	µg/l	SW846 8260C
tert-Butylbenzene	6.50	J, D	10.0	µg/l	SW846 8260C
Toluene	42.7	D	10.0	µg/l	SW846 8260C
1-Methylnaphthalene	27.8		4.67	µg/l	SW846 8270D
2-Methylnaphthalene	65.2		4.67	µg/l	SW846 8270D
Bis(2-ethylhexyl)phthalate	2.53	J	4.67	µg/l	SW846 8270D
Di-n-octyl phthalate	0.916	J	4.67	µg/l	SW846 8270D
Fluorene	0.579	J	4.67	µg/l	SW846 8270D
Naphthalene	53.9		4.67	µg/l	SW846 8270D

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

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	2.19		0.0250	mg/l	SW846 6010C
Arsenic	0.00500		0.00400	mg/l	SW846 6010C
Barium	0.468		0.0050	mg/l	SW846 6010C
Cadmium	0.0007	J	0.0025	mg/l	SW846 6010C
Calcium	236		GS1, D0.500	mg/l	SW846 6010C
Chromium	0.0039	J	0.0050	mg/l	SW846 6010C
Cobalt	0.0016	J	0.0050	mg/l	SW846 6010C
Copper	0.0054		0.0050	mg/l	SW846 6010C
Iron	8.72		0.125	mg/l	SW846 6010C
Magnesium	38.6		0.0200	mg/l	SW846 6010C
Manganese	0.570		R05, R0.625	mg/l	SW846 6010C
Nickel	0.0030	J	0.0050	mg/l	SW846 6010C
Potassium	15.4		0.500	mg/l	SW846 6010C
Sodium	465		GS1, D3.75	mg/l	SW846 6010C
Vanadium	0.0048	J	0.0050	mg/l	SW846 6010C
Zinc	0.0117	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	0.85	J	1.00	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	0.55	J	1.00	µg/l	SW846 8260C
Benzene	0.79	J	1.00	µg/l	SW846 8260C
Isopropylbenzene	2.14		1.00	µg/l	SW846 8260C
m,p-Xylene	0.60	J	2.00	µg/l	SW846 8260C
n-Butylbenzene	0.62	J	1.00	µg/l	SW846 8260C
n-Propylbenzene	1.92		1.00	µg/l	SW846 8260C
sec-Butylbenzene	1.11		1.00	µg/l	SW846 8260C
tert-Butylbenzene	0.73	J	1.00	µg/l	SW846 8260C
Bis(2-ethylhexyl)phthalate	1.74	J	4.67	µg/l	SW846 8270D

Lab ID: SC47714-06

Client ID: MW-D (2018-06-13)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.01765		0.00400	mg/l	SW846 6010C
Barium	1.87		0.0050	mg/l	SW846 6010C
Calcium	269		GS1, D0.500	mg/l	SW846 6010C
Iron	1.60		0.125	mg/l	SW846 6010C
Lead	0.0166		0.0075	mg/l	SW846 6010C
Magnesium	43.3		0.0200	mg/l	SW846 6010C
Manganese	0.456		R05, R(0.625	mg/l	SW846 6010C
Potassium	5.86		0.500	mg/l	SW846 6010C
Sodium	140		0.750	mg/l	SW846 6010C
Zinc	0.0026	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	370	E	1.00	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	226	E	1.00	µg/l	SW846 8260C
4-Isopropyltoluene	13.8		1.00	µg/l	SW846 8260C
Benzene	42.6		1.00	µg/l	SW846 8260C
Cyclohexane	238		NonTR5.00	µg/l	SW846 8260C
Ethanol	43.4	J	200	µg/l	SW846 8260C
Ethylbenzene	227	E	1.00	µg/l	SW846 8260C
Isopropylbenzene	40.1		1.00	µg/l	SW846 8260C
m,p-Xylene	489	E	2.00	µg/l	SW846 8260C
Methylcyclohexane	285		NonTR5.00	µg/l	SW846 8260C
Naphthalene	147	E	2.00	µg/l	SW846 8260C
n-Butylbenzene	38.0		1.00	µg/l	SW846 8260C
n-Propylbenzene	118	E	1.00	µg/l	SW846 8260C
o-Xylene	147	E	1.00	µg/l	SW846 8260C
sec-Butylbenzene	14.5		1.00	µg/l	SW846 8260C
tert-Butylbenzene	2.82		1.00	µg/l	SW846 8260C
Toluene	42.9		1.00	µg/l	SW846 8260C
1-Methylnaphthalene	53.3	D	23.4	µg/l	SW846 8270D
2-Methylnaphthalene	162	D	23.4	µg/l	SW846 8270D
Bis(2-ethylhexyl)phthalate	5.05	J, D	23.4	µg/l	SW846 8270D
Naphthalene	82.7	D	23.4	µg/l	SW846 8270D

Lab ID: SC47714-06RE1

Client ID: MW-D (2018-06-13)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,2,4-Trimethylbenzene	1120	D	20.0	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	313	D	20.0	µg/l	SW846 8260C
Ethylbenzene	342	D	20.0	µg/l	SW846 8260C
m,p-Xylene	739	D	40.0	µg/l	SW846 8260C
Naphthalene	204	D	40.0	µg/l	SW846 8260C
n-Propylbenzene	115	D	20.0	µg/l	SW846 8260C
o-Xylene	126	D	20.0	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

MW-5 (2018-06-13)

SC47714-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 10:54

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	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	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-5 (2018-06-13)

SC47714-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 10:54

Received

14-Jun-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>													
<b>Volatile Organic Compounds by SW846 8260</b>													
98-82-8	Isopropylbenzene	0.72	J	µg/l	1.00	0.30	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	0.67	J	µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	102			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	100			70-130 %			"	"	"	"	"	
<b>Tentatively Identified Compounds by GC/MS</b>													
	Tentatively Identified Compounds	None found		µg/l			1	SW846 8260C TICs	"	"	GMA	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													

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Sample Identification

MW-5 (2018-06-13)

SC47714-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 10:54

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.59	U	µg/l	4.59	0.634	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
208-96-8	Acenaphthylene	< 4.59	U	µg/l	4.59	0.627	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.59	U	µg/l	4.59	1.62	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.59	U	µg/l	4.59	0.558	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.59	U	µg/l	4.59	0.686	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.17	U	µg/l	9.17	1.05	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.59	U	µg/l	4.59	0.492	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.59	U	µg/l	4.59	0.516	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.59	U	µg/l	4.59	0.401	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.59	U	µg/l	4.59	0.486	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.59	U	µg/l	4.59	0.440	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.59	U	µg/l	4.59	0.483	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.59	U	µg/l	4.59	0.716	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.59	U	µg/l	4.59	0.611	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.59	U	µg/l	4.59	0.673	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.59	U	µg/l	4.59	0.714	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.59	U	µg/l	4.59	0.585	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.59	U	µg/l	4.59	0.552	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.59	U	µg/l	4.59	0.402	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.59	U	µg/l	4.59	1.43	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.59	U	µg/l	4.59	0.460	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.59	U	µg/l	4.59	1.03	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.59	U	µg/l	4.59	0.541	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.59	U	µg/l	4.59	0.686	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.59	U	µg/l	4.59	0.553	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.59	U	µg/l	4.59	0.488	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.59	U	µg/l	4.59	0.413	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.59	U	µg/l	4.59	0.679	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.59	U	µg/l	4.59	0.516	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.59	U	µg/l	4.59	0.594	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.59	U	µg/l	4.59	0.563	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.59	U	µg/l	4.59	1.82	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.59	U	µg/l	4.59	0.486	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.59	U	µg/l	4.59	0.572	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.59	U	µg/l	4.59	0.695	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.59	U	µg/l	4.59	0.599	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.59	U	µg/l	4.59	0.419	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.59	U	µg/l	4.59	0.293	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.59	U	µg/l	4.59	0.515	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.59	U	µg/l	4.59	0.617	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.59	U	µg/l	4.59	0.544	1	"	"	"	"	"	X

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Sample Identification

MW-5 (2018-06-13)

SC47714-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 10:54

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	< 4.59	U	µg/l	4.59	0.372	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
206-44-0	Fluoranthene	< 4.59	U	µg/l	4.59	0.585	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.59	U	µg/l	4.59	0.561	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.59	U	µg/l	4.59	0.524	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.59	U	µg/l	4.59	0.356	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.59	U	µg/l	4.59	0.950	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.59	U	µg/l	4.59	0.586	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.59	U	µg/l	4.59	0.532	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.59	U	µg/l	4.59	0.538	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.59	U	µg/l	4.59	0.527	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.59	U	µg/l	4.59	0.610	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.17	U	µg/l	9.17	0.564	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.59	U	µg/l	4.59	0.628	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.59	U	µg/l	4.59	0.556	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.59	U	µg/l	4.59	0.498	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.59	U	µg/l	4.59	0.343	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.59	U	µg/l	4.59	0.633	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.59	U	µg/l	4.59	0.427	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.3	U	µg/l	18.3	0.769	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.59	U	µg/l	4.59	0.617	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.59	U	µg/l	4.59	0.530	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.59	U	µg/l	4.59	0.597	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.3	U	µg/l	18.3	0.342	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.59	U	µg/l	4.59	0.538	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.59	U	µg/l	4.59	0.592	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.59	U	µg/l	4.59	0.560	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.59	U	µg/l	4.59	0.751	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.59	U	µg/l	4.59	0.630	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.59	U	µg/l	4.59	0.672	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.59	U	µg/l	4.59	0.477	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.59	U	µg/l	4.59	0.475	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.59	U	µg/l	4.59	0.639	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.59	U	µg/l	4.59	0.665	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	50			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	48			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	60			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	35			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	57			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	69			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
074685-30-6	5-Eicosene, (E)-	14	J N, B	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
112-39-0	n-Hexadecanoic Acid	13	J N, B	µg/l			1	"	"	"	"	"	

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MW-5 (2018-06-13)

SC47714-01

Client Project #

18-051

Matrix

Ground Water

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	15-Jun-18		KP1	1808348	
<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	21-Jun-18	22-Jun-18	SJR/T	1808547	X
7429-90-5	Aluminum	<b>3.31</b>		mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	<b>0.00455</b>		mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	<b>0.342</b>		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	<b>181</b>		mg/l	0.100	0.0071	1	"	"	"	26-Jun-18	"	X
7440-43-9	Cadmium	<b>0.0005</b>	J	mg/l	0.0025	0.0004	1	"	"	"	22-Jun-18	"	X
7440-48-4	Cobalt	<b>0.0023</b>	J	mg/l	0.0050	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	<b>0.0055</b>		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	<b>0.0124</b>		mg/l	0.0050	0.0023	1	"	"	"	"	"	X
7439-89-6	Iron	<b>3.13</b>		mg/l	0.125	0.0045	1	"	"	"	26-Jun-18	"	X
7440-09-7	Potassium	<b>9.38</b>		mg/l	0.500	0.0600	1	"	"	"	22-Jun-18	"	X
7439-95-4	Magnesium	<b>25.2</b>		mg/l	0.0200	0.0044	1	"	"	"	"	"	X
7439-96-5	Manganese	<b>0.108</b>	R05, R06, J, D	mg/l	0.625	0.0095	5	"	"	"	30-Jun-18	"	X
7440-23-5	Sodium	<b>1,660</b>	GS1, D	mg/l	15.0	0.785	20	"	"	"	26-Jun-18	"	X
7440-02-0	Nickel	<b>0.0040</b>	J	mg/l	0.0050	0.0009	1	"	"	"	22-Jun-18	"	X
7439-92-1	Lead	<b>0.0092</b>		mg/l	0.0075	0.0062	1	"	"	"	26-Jun-18	"	X
7440-36-0	Antimony	<b>0.0024</b>	J	mg/l	0.0060	0.0016	1	"	"	"	22-Jun-18	"	X
7782-49-2	Selenium	< 0.0150	U	mg/l	0.0150	0.0042	1	"	"	"	"	"	X
7440-28-0	Thallium	< 0.0250	R01, U, D	mg/l	0.0250	0.0105	5	"	"	"	30-Jun-18	"	X
7440-62-2	Vanadium	<b>0.0070</b>		mg/l	0.0050	0.0011	1	"	"	"	22-Jun-18	"	X
7440-66-6	Zinc	<b>0.0329</b>		mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	21-Jun-18	25-Jun-18	TSF/T	1808550	X

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Sample Identification

MW-7 (2018-06-13)

SC47714-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 11:41

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	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	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-7 (2018-06-13)

SC47714-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 11:41

Received

14-Jun-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>															
<b>Volatile Organic Compounds by SW846 8260</b>															
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.30	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X		
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X		
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X		
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X		
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X		
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X		
103-65-1	n-Propylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X		
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X		
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X		
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X		
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X		
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X		
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"			
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X		
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X		
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X		
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X		
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X		
95-63-6	1,2,4-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.62	1	"	"	"	"	"	X		
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X		
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X		
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X		
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X		
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"			
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X		
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X		
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X		
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X		
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X		
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X		
<i>Surrogate recoveries:</i>															
460-00-4	4-Bromofluorobenzene	97			70-130 %			"	"	"	"	"			
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"			
17060-07-0	1,2-Dichloroethane-d4	101			70-130 %			"	"	"	"	"			
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"			
<b>Tentatively Identified Compounds by GC/MS</b>															
Tentatively Identified Compounds		None found		µg/l			1	SW846 8260C TICs	"	"	GMA	"			
<b>Semivolatile Organic Compounds by GCMS</b>															
<b>Semivolatile Organic Compounds</b>															

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Sample Identification

MW-7 (2018-06-13)

SC47714-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 11:41

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.67	U	µg/l	4.67	0.646	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
208-96-8	Acenaphthylene	< 4.67	U	µg/l	4.67	0.638	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.67	U	µg/l	4.67	1.65	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.67	U	µg/l	4.67	0.568	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.35	U	µg/l	9.35	1.07	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.67	U	µg/l	4.67	0.501	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.67	U	µg/l	4.67	0.408	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.67	U	µg/l	4.67	0.449	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.67	U	µg/l	4.67	0.493	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.67	U	µg/l	4.67	0.729	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.67	U	µg/l	4.67	0.622	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.67	U	µg/l	4.67	0.686	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.67	U	µg/l	4.67	0.727	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.67	U	µg/l	4.67	0.596	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.563	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.67	U	µg/l	4.67	0.409	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.67	U	µg/l	4.67	1.46	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.67	U	µg/l	4.67	0.468	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.67	U	µg/l	4.67	1.05	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.67	U	µg/l	4.67	0.551	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.564	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.67	U	µg/l	4.67	0.497	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.67	U	µg/l	4.67	0.421	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.67	U	µg/l	4.67	0.692	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.605	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.574	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.67	U	µg/l	4.67	1.86	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.67	U	µg/l	4.67	0.582	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.67	U	µg/l	4.67	0.708	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.67	U	µg/l	4.67	0.610	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.67	U	µg/l	4.67	0.427	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.67	U	µg/l	4.67	0.298	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.67	U	µg/l	4.67	0.524	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.554	1	"	"	"	"	"	X

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Sample Identification

MW-7 (2018-06-13)

SC47714-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 11:41

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	< 4.67	U	µg/l	4.67	0.379	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
206-44-0	Fluoranthene	< 4.67	U	µg/l	4.67	0.596	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.67	U	µg/l	4.67	0.572	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.67	U	µg/l	4.67	0.534	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.67	U	µg/l	4.67	0.363	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.67	U	µg/l	4.67	0.968	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.67	U	µg/l	4.67	0.597	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.67	U	µg/l	4.67	0.542	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.67	U	µg/l	4.67	0.536	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.67	U	µg/l	4.67	0.621	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.35	U	µg/l	9.35	0.575	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.67	U	µg/l	4.67	0.640	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.67	U	µg/l	4.67	0.566	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.67	U	µg/l	4.67	0.507	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.67	U	µg/l	4.67	0.350	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.67	U	µg/l	4.67	0.645	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.67	U	µg/l	4.67	0.435	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.7	U	µg/l	18.7	0.783	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.67	U	µg/l	4.67	0.540	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.67	U	µg/l	4.67	0.608	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.7	U	µg/l	18.7	0.349	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.67	U	µg/l	4.67	0.603	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.67	U	µg/l	4.67	0.570	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.67	U	µg/l	4.67	0.765	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.67	U	µg/l	4.67	0.642	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.67	U	µg/l	4.67	0.685	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.67	U	µg/l	4.67	0.486	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.67	U	µg/l	4.67	0.484	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.67	U	µg/l	4.67	0.650	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.67	U	µg/l	4.67	0.678	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	43			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	39			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	45			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	30			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	49			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	60			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
Tentatively Identified Compounds		<b>None found</b>		µg/l			1	SW846 8270D TICS	"	"	MSL	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													

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Sample Identification

MW-7 (2018-06-13)

SC47714-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 11:41

Received

14-Jun-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>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	15-Jun-18		KP1	1808348	
<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	21-Jun-18	22-Jun-18	SJR/T	1808547	X
7429-90-5	Aluminum	<b>0.287</b>		mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	<b>0.01835</b>		mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	<b>0.303</b>		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	<b>265</b>		mg/l	0.100	0.0071	1	"	"	"	26-Jun-18	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	"	22-Jun-18	"	X
7440-48-4	Cobalt	<b>0.0020</b>	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	<b>3.71</b>		mg/l	0.125	0.0045	1	"	"	"	26-Jun-18	"	X
7440-09-7	Potassium	<b>4.68</b>		mg/l	0.500	0.0600	1	"	"	"	22-Jun-18	"	X
7439-95-4	Magnesium	<b>55.2</b>	GS1, D	mg/l	0.100	0.0221	5	"	"	"	26-Jun-18	"	X
7439-96-5	Manganese	<b>0.0418</b>	R05, R06, J, D	mg/l	0.625	0.0095	5	"	"	"	30-Jun-18	"	X
7440-23-5	Sodium	<b>1,310</b>	GS1, D	mg/l	7.50	0.392	10	"	"	"	26-Jun-18	"	X
7440-02-0	Nickel	<b>0.0020</b>	J	mg/l	0.0050	0.0009	1	"	"	"	22-Jun-18	"	X
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	26-Jun-18	"	X
7440-36-0	Antimony	< 0.0060	U	mg/l	0.0060	0.0016	1	"	"	"	22-Jun-18	"	X
7782-49-2	Selenium	< 0.0150	U	mg/l	0.0150	0.0042	1	"	"	"	"	"	X
7440-28-0	Thallium	< 0.0250	R01, U, D	mg/l	0.0250	0.0105	5	"	"	"	26-Jun-18	"	X
7440-62-2	Vanadium	< 0.0050	U	mg/l	0.0050	0.0011	1	"	"	"	22-Jun-18	"	X
7440-66-6	Zinc	<b>0.0042</b>	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	21-Jun-18	25-Jun-18	TSF/T	1808550	X

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
GS1													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 10.0	U, D	µg/l	10.0	5.81	10	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 100	U, D	µg/l	100	37.6	10	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 5.00	U, D	µg/l	5.00	4.75	10	"	"	"	"	"	X
71-43-2	Benzene	<b>44.1</b>	D	µg/l	10.0	3.39	10	"	"	"	"	"	X
108-86-1	Bromobenzene	< 10.0	U, D	µg/l	10.0	2.79	10	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 10.0	U, D	µg/l	10.0	3.39	10	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 5.00	U, D	µg/l	5.00	2.91	10	"	"	"	"	"	X
75-25-2	Bromoform	< 10.0	U, D	µg/l	10.0	2.42	10	"	"	"	"	"	X
74-83-9	Bromomethane	< 20.0	U, D	µg/l	20.0	4.46	10	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 20.0	U, D	µg/l	20.0	7.03	10	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>39.7</b>	D	µg/l	10.0	4.68	10	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>17.0</b>	D	µg/l	10.0	3.11	10	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	<b>6.50</b>	J, D	µg/l	10.0	2.96	10	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 20.0	U, D	µg/l	20.0	7.00	10	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 10.0	U, D	µg/l	10.0	3.92	10	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 10.0	U, D	µg/l	10.0	3.00	10	"	"	"	"	"	X
75-00-3	Chloroethane	< 20.0	U, D	µg/l	20.0	4.03	10	"	"	"	"	"	X
67-66-3	Chloroform	< 10.0	U, D	µg/l	10.0	2.86	10	"	"	"	"	"	X
74-87-3	Chloromethane	< 20.0	U, D	µg/l	20.0	3.60	10	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 10.0	U, D	µg/l	10.0	3.13	10	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 20.0	U, D	µg/l	20.0	4.71	10	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 5.00	U, D	µg/l	5.00	2.91	10	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 5.00	U, D	µg/l	5.00	3.01	10	"	"	"	"	"	X
74-95-3	Dibromomethane	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.45	10	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	3.00	10	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 20.0	U, D	µg/l	20.0	3.45	10	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 10.0	U, D	µg/l	10.0	1.81	10	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.14	10	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.97	10	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.80	10	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.89	10	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	4.45	10	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 10.0	U, D	µg/l	10.0	3.34	10	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.28	10	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.06	10	"	"	"	"	"	X
100-41-4	Ethylbenzene	<b>301</b>	D	µg/l	10.0	3.17	10	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 5.00	U, D	µg/l	5.00	2.58	10	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 20.0	U, D	µg/l	20.0	6.34	10	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
				GS1									
98-82-8	Isopropylbenzene	37.3	D	µg/l	10.0	3.02	10	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
99-87-6	4-Isopropyltoluene	16.5	D	µg/l	10.0	4.20	10	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.95	10	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 20.0	U, D	µg/l	20.0	3.54	10	"	"	"	"	"	X
75-09-2	Methylene chloride	< 20.0	U, D	µg/l	20.0	3.85	10	"	"	"	"	"	X
91-20-3	Naphthalene	171	D	µg/l	20.0	13.9	10	"	"	"	"	"	X
103-65-1	n-Propylbenzene	116	D	µg/l	10.0	3.20	10	"	"	"	"	"	X
100-42-5	Styrene	< 10.0	U, D	µg/l	10.0	3.28	10	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 10.0	U, D	µg/l	10.0	3.17	10	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 5.00	U, D	µg/l	5.00	2.57	10	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.0	U, D	µg/l	10.0	3.11	10	"	"	"	"	"	X
108-88-3	Toluene	42.7	D	µg/l	10.0	2.90	10	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.81	10	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.23	10	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.90	10	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 10.0	U, D	µg/l	10.0	2.45	10	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 10.0	U, D	µg/l	10.0	3.09	10	"	"	"	"	"	X
79-01-6	Trichloroethene	< 10.0	U, D	µg/l	10.0	3.55	10	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 10.0	U, D	µg/l	10.0	2.76	10	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 10.0	U, D	µg/l	10.0	2.60	10	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	921	D	µg/l	10.0	6.20	10	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	274	D	µg/l	10.0	5.40	10	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 10.0	U, D	µg/l	10.0	4.02	10	"	"	"	"	"	X
179601-23-1	m,p-Xylene	693	D	µg/l	20.0	4.74	10	"	"	"	"	"	X
95-47-6	o-Xylene	163	D	µg/l	10.0	4.10	10	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 20.0	U, D	µg/l	20.0	4.98	10	"	"	"	"	"	
60-29-7	Ethyl ether	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 10.0	U, D	µg/l	10.0	2.98	10	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.90	10	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 10.0	U, D	µg/l	10.0	2.94	10	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 100	U, D	µg/l	100	31.3	10	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 200	U, D	µg/l	200	58.1	10	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 50.0	U, D	µg/l	50.0	6.13	10	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	U, D	µg/l	2000	132	10	"	"	"	"	"	X
110-82-7	Cyclohexane	330	NonTR G TIC, D	µg/l	50.0	4.36	10	"	"	"	"	"	X
108-87-2	Methylcyclohexane	373	NonTR G TIC, D	µg/l	50.0	3.90	10	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	100			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	105			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	99			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	94			70-130 %			"	"	"	"	"	

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Tentatively Identified Compounds by GC/MS</u>													
95-93-2	Benzene, 1,2,4,5-tetramethyl-	120	D	µg/l			10	SW846 8260C TICs	19-Jun-18	20-Jun-18	GMA	1808472	
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	120	D	µg/l			10	"	"	"	"	"	
611-14-3	Benzene, 1-ethyl-2-methyl-	410	D	µg/l			10	"	"	"	"	"	
622-96-8	Benzene, 1-ethyl-4-methyl-	120	D	µg/l			10	"	"	"	"	"	
002039-89-6	Benzene, 2-ethenyl-1,4-dime...	160	D	µg/l			10	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	360	D	µg/l			10	"	"	"	"	"	
96-14-0	Pentane, 3-methyl-	140	D	µg/l			10	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.67	U	µg/l	4.67	0.646	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
208-96-8	Acenaphthylene	< 4.67	U	µg/l	4.67	0.638	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.67	U	µg/l	4.67	1.65	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.67	U	µg/l	4.67	0.568	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.35	U	µg/l	9.35	1.07	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.67	U	µg/l	4.67	0.501	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.67	U	µg/l	4.67	0.408	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.67	U	µg/l	4.67	0.449	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.67	U	µg/l	4.67	0.493	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.67	U	µg/l	4.67	0.729	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.67	U	µg/l	4.67	0.622	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.67	U	µg/l	4.67	0.686	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.67	U	µg/l	4.67	0.727	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	2.53	J	µg/l	4.67	0.596	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.563	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.67	U	µg/l	4.67	0.409	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.67	U	µg/l	4.67	1.46	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.67	U	µg/l	4.67	0.468	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.67	U	µg/l	4.67	1.05	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.67	U	µg/l	4.67	0.551	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.564	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.67	U	µg/l	4.67	0.497	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.67	U	µg/l	4.67	0.421	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.67	U	µg/l	4.67	0.692	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
541-73-1	1,3-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.605	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
106-46-7	1,4-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.574	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.67	U	µg/l	4.67	1.86	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.67	U	µg/l	4.67	0.582	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.67	U	µg/l	4.67	0.708	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.67	U	µg/l	4.67	0.610	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.67	U	µg/l	4.67	0.427	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.67	U	µg/l	4.67	0.298	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.67	U	µg/l	4.67	0.524	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.554	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	0.916	J	µg/l	4.67	0.379	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.67	U	µg/l	4.67	0.596	1	"	"	"	"	"	X
86-73-7	Fluorene	0.579	J	µg/l	4.67	0.572	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.67	U	µg/l	4.67	0.534	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.67	U	µg/l	4.67	0.363	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.67	U	µg/l	4.67	0.968	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.67	U	µg/l	4.67	0.597	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.67	U	µg/l	4.67	0.542	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	65.2		µg/l	4.67	0.536	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.67	U	µg/l	4.67	0.621	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.35	U	µg/l	9.35	0.575	1	"	"	"	"	"	X
91-20-3	Naphthalene	53.9		µg/l	4.67	0.640	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.67	U	µg/l	4.67	0.566	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.67	U	µg/l	4.67	0.507	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.67	U	µg/l	4.67	0.350	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.67	U	µg/l	4.67	0.645	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.67	U	µg/l	4.67	0.435	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.7	U	µg/l	18.7	0.783	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.67	U	µg/l	4.67	0.540	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.67	U	µg/l	4.67	0.608	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.7	U	µg/l	18.7	0.349	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.67	U	µg/l	4.67	0.603	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.67	U	µg/l	4.67	0.570	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.67	U	µg/l	4.67	0.765	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.67	U	µg/l	4.67	0.642	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	27.8		µg/l	4.67	0.685	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 4.67	U	µg/l	4.67	0.486	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.67	U	µg/l	4.67	0.484	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.67	U	µg/l	4.67	0.650	1	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.67	U	µg/l	4.67	0.678	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	34			30-130 %			"	"	"	"	"	"
367-12-4	2-Fluorophenol	44			15-110 %			"	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	53			30-130 %			"	"	"	"	"	"
4165-62-2	Phenol-d5	35			15-110 %			"	"	"	"	"	"
1718-51-0	Terphenyl-dl4	40			30-130 %			"	"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	53			15-110 %			"	"	"	"	"	"
<b>Tentatively Identified Compounds</b>													
076089-59-3	1,3-Cyclopentadiene, 1,2,3,...	26	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
018435-45-5	1-Nonadecene	19	J N	µg/l			1	"	"	"	"	"	"
	1H-Indene, 2,3-dihydro-1,3-...	18	J N	µg/l			1	"	"	"	"	"	"
	Benzene, (1-methylethyl)-	16	J N	µg/l			1	"	"	"	"	"	"
95-36-3	Benzene, 1,2,3-trimethyl-	94	J N	µg/l			1	"	"	"	"	"	"
95-93-2	Benzene, 1,2,4,5-tetramethyl-	24	J N	µg/l			1	"	"	"	"	"	"
95-63-6	Benzene, 1,2,4-trimethyl-	55	J N	µg/l			1	"	"	"	"	"	"
108-67-8	Benzene, 1,3,5-trimethyl-	85	J N	µg/l			1	"	"	"	"	"	"
622-96-8	Benzene, 1-ethyl-4-methyl-	140	J N	µg/l			1	"	"	"	"	"	"
000527-84-4	Benzene, 1-methyl-2-(1-meth...)	70	J N	µg/l			1	"	"	"	"	"	"
001074-43-7	Benzene, 1-methyl-3-propyl-	59	J N	µg/l			1	"	"	"	"	"	"
001074-55-1	Benzene, 1-methyl-4-propyl-	14	J N	µg/l			1	"	"	"	"	"	"
002039-89-6	Benzene, 2-ethenyl-1,4-dime...	44	J N	µg/l			1	"	"	"	"	"	"
002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	81	J N	µg/l			1	"	"	"	"	"	"
103-65-1	Benzene, propyl-	22	J N	µg/l			1	"	"	"	"	"	"
010544-50-0	Cyclic octaatomic sulfur	42	J N	µg/l			1	"	"	"	"	"	"
100-41-4	Ethylbenzene	79	J N	µg/l			1	"	"	"	"	"	"
496-11-7	Indane	52	J N	µg/l			1	"	"	"	"	"	"
112-39-0	n-Hexadecanoic Acid	24	J N, B	µg/l			1	"	"	"	"	"	"
106-42-3	p-Xylene	200	J N	µg/l			1	"	"	"	"	"	"
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<b>Prepared by method General Prep-Metal</b>													
Preservation		Field Preserved; pH<2 confirmed		N/A				1	EPA 200/6000 methods	15-Jun-18	KP1	1808348	
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
<b>Prepared by method SW846 3005A</b>													
7440-22-4	Silver	< 0.0050	U	mg/l	0.0050	0.0006	1	SW846 6010C	21-Jun-18	22-Jun-18	SJR/T	1808547	X
7429-90-5	Aluminum	< 0.0250	U	mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	0.01500		mg/l	0.00400	0.00138	1	"	"	"	"	"	X

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Sample Identification

MW-8 (2018-06-13)

SC47714-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 12:40

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
7440-39-3	Barium	<b>1.87</b>		mg/l	0.0050	0.0007	1	SW846 6010C	21-Jun-18	22-Jun-18	SJR/T	1808547	X
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"	X
7440-70-2	Calcium	<b>262</b>	GS1, D	mg/l	0.500	0.0355	5	"	"	"	26-Jun-18	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	"	22-Jun-18	"	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	< 0.0050	U	mg/l	0.0050	0.0023	1	"	"	"	"	"	X
7439-89-6	Iron	<b>1.66</b>		mg/l	0.125	0.0045	1	"	"	"	26-Jun-18	"	X
7440-09-7	Potassium	<b>5.88</b>		mg/l	0.500	0.0600	1	"	"	"	22-Jun-18	"	X
7439-95-4	Magnesium	<b>43.4</b>		mg/l	0.0200	0.0044	1	"	"	"	"	"	X
7439-96-5	Manganese	<b>0.441</b>	R05, R06, J, D	mg/l	0.625	0.0095	5	"	"	"	26-Jun-18	"	X
7440-23-5	Sodium	<b>141</b>		mg/l	0.750	0.0392	1	"	"	"	22-Jun-18	"	X
7440-02-0	Nickel	< 0.0050	U	mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7439-92-1	Lead	<b>0.0168</b>		mg/l	0.0075	0.0062	1	"	"	"	26-Jun-18	"	X
7440-36-0	Antimony	< 0.0060	U	mg/l	0.0060	0.0016	1	"	"	"	22-Jun-18	"	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	<b>0.0033</b>	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	21-Jun-18	25-Jun-18	TSF/T	1808550	X

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Sample Identification

MW-9 (2018-06-13)

SC47714-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 13:15

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	0.79	J	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	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	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	0.62	J	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	1.11		µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	0.73	J	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-9 (2018-06-13)

SC47714-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 13:15

Received

14-Jun-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>													
<b>Volatile Organic Compounds by SW846 8260</b>													
98-82-8	Isopropylbenzene	<b>2.14</b>		µg/l	1.00	0.30	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	<b>1.92</b>		µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	<b>0.85</b>	J	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	<b>0.55</b>	J	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	<b>0.60</b>	J	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	103			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	88			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
<i>Tentatively Identified Compounds by GC/MS</i>													
105-05-5	Benzene, 1,4-diethyl-	<b>5.5</b>		µg/l			1	SW846 8260C TICs	"	"	GMA	"	
007525-62-4	Benzene, 1-ethenyl-3-ethyl-	<b>7.9</b>		µg/l			1	"	"	"	"	"	

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Sample Identification

MW-9 (2018-06-13)

SC47714-04

Client Project #

18-051

Matrix

Ground Water

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13-Jun-18 13:15

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14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Tentatively Identified Compounds by GC/MS</u>													
			J N										
	Cyclohexane, 1,1-dimethyl-	7.2		µg/l			1	SW846 8260C TICs	19-Jun-18	20-Jun-18	GMA	1808472	
473-91-6	Cyclopentene, 1,2,3-trimethyl-	12		µg/l			1	"	"	"	"	"	
872-56-0	Isopropylcyclobutane	9.2		µg/l			1	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.67	U	µg/l	4.67	0.646	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
208-96-8	Acenaphthylene	< 4.67	U	µg/l	4.67	0.638	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.67	U	µg/l	4.67	1.65	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.67	U	µg/l	4.67	0.568	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.35	U	µg/l	9.35	1.07	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.67	U	µg/l	4.67	0.501	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.67	U	µg/l	4.67	0.408	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.67	U	µg/l	4.67	0.449	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.67	U	µg/l	4.67	0.493	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.67	U	µg/l	4.67	0.729	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.67	U	µg/l	4.67	0.622	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.67	U	µg/l	4.67	0.686	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.67	U	µg/l	4.67	0.727	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	1.74	J	µg/l	4.67	0.596	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.563	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.67	U	µg/l	4.67	0.409	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.67	U	µg/l	4.67	1.46	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.67	U	µg/l	4.67	0.468	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.67	U	µg/l	4.67	1.05	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.67	U	µg/l	4.67	0.551	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.67	U	µg/l	4.67	0.699	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.564	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.67	U	µg/l	4.67	0.497	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.67	U	µg/l	4.67	0.421	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.67	U	µg/l	4.67	0.692	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.525	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.605	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.67	U	µg/l	4.67	0.574	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.67	U	µg/l	4.67	1.86	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.67	U	µg/l	4.67	0.495	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.67	U	µg/l	4.67	0.582	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.67	U	µg/l	4.67	0.708	1	"	"	"	"	"	X

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Sample Identification

MW-9 (2018-06-13)

SC47714-04

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18-051

Matrix

Ground Water

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13-Jun-18 13:15

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14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
105-67-9	2,4-Dimethylphenol	< 4.67	U	µg/l	4.67	0.610	1	SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368	X
84-74-2	Di-n-butyl phthalate	< 4.67	U	µg/l	4.67	0.427	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.67	U	µg/l	4.67	0.298	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.67	U	µg/l	4.67	0.524	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.67	U	µg/l	4.67	0.554	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 4.67	U	µg/l	4.67	0.379	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.67	U	µg/l	4.67	0.596	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.67	U	µg/l	4.67	0.572	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.67	U	µg/l	4.67	0.534	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.67	U	µg/l	4.67	0.363	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.67	U	µg/l	4.67	0.968	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.67	U	µg/l	4.67	0.597	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.67	U	µg/l	4.67	0.542	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.67	U	µg/l	4.67	0.536	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.67	U	µg/l	4.67	0.621	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.35	U	µg/l	9.35	0.575	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.67	U	µg/l	4.67	0.640	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.67	U	µg/l	4.67	0.566	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.67	U	µg/l	4.67	0.507	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.67	U	µg/l	4.67	0.350	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.67	U	µg/l	4.67	0.645	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.67	U	µg/l	4.67	0.435	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.7	U	µg/l	18.7	0.783	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.67	U	µg/l	4.67	0.629	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.67	U	µg/l	4.67	0.540	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.67	U	µg/l	4.67	0.608	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.7	U	µg/l	18.7	0.349	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.67	U	µg/l	4.67	0.548	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.67	U	µg/l	4.67	0.603	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.67	U	µg/l	4.67	0.570	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.67	U	µg/l	4.67	0.765	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.67	U	µg/l	4.67	0.642	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.67	U	µg/l	4.67	0.685	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.67	U	µg/l	4.67	0.486	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.67	U	µg/l	4.67	0.484	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.67	U	µg/l	4.67	0.650	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.67	U	µg/l	4.67	0.678	1	"	"	"	"	"	X

**Surrogate recoveries:**

321-60-8	2-Fluorobiphenyl	46	30-130 %	"	"	"	"	"
367-12-4	2-Fluorophenol	43	15-110 %	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	54	30-130 %	"	"	"	"	"

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MW-9 (2018-06-13)

SC47714-04

Client Project #

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Matrix

Ground Water

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.		
<b>Semivolatile Organic Compounds by GCMS</b>															
<b>Semivolatile Organic Compounds</b>															
4165-62-2	Phenol-d5	33			15-110 %			SW846 8270D	18-Jun-18	21-Jun-18	MSL	1808368			
1718-51-0	Terphenyl-dl4	36			30-130 %			"	"	"	"	"			
118-79-6	2,4,6-Tribromophenol	62			15-110 %			"	"	"	"	"			
<b>Tentatively Identified Compounds</b>															
000050-84-0	Benzoic acid, 2,4-dichloro-	8.5	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"			
112-39-0	n-Hexadecanoic Acid	19	J N, B	µg/l			1	"	"	"	"	"			
<b>Total Metals by EPA 200/6000 Series Methods</b>															
<b>Prepared by method General Prep-Metal</b>															
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	15-Jun-18		KP1	1808348			
<b>Total Metals by EPA 6000/7000 Series Methods</b>															
<b>Prepared by method SW846 3005A</b>															
7440-22-4	Silver	< 0.0050	U	mg/l	0.0050	0.0006	1	SW846 6010C	21-Jun-18	22-Jun-18	SJR/T	1808547			
7429-90-5	Aluminum	2.19		mg/l	0.0250	0.0103	1	"	"	"	"	"			
7440-38-2	Arsenic	0.00500		mg/l	0.00400	0.00138	1	"	"	"	"	"			
7440-39-3	Barium	0.468		mg/l	0.0050	0.0007	1	"	"	"	"	"			
7440-41-7	Beryllium	< 0.0020	U	mg/l	0.0020	0.0003	1	"	"	"	"	"			
7440-70-2	Calcium	236	GS1, D	mg/l	0.500	0.0355	5	"	"	"	26-Jun-18	"			
7440-43-9	Cadmium	0.0007	J	mg/l	0.0025	0.0004	1	"	"	"	22-Jun-18	"			
7440-48-4	Cobalt	0.0016	J	mg/l	0.0050	0.0008	1	"	"	"	"	"			
7440-47-3	Chromium	0.0039	J	mg/l	0.0050	0.0009	1	"	"	"	"	"			
7440-50-8	Copper	0.0054		mg/l	0.0050	0.0023	1	"	"	"	"	"			
7439-89-6	Iron	8.72		mg/l	0.125	0.0045	1	"	"	"	26-Jun-18	"			
7440-09-7	Potassium	15.4		mg/l	0.500	0.0600	1	"	"	"	22-Jun-18	"			
7439-95-4	Magnesium	38.6		mg/l	0.0200	0.0044	1	"	"	"	"	"			
7439-96-5	Manganese	0.570	R05, R06, J, D	mg/l	0.625	0.0095	5	"	"	"	26-Jun-18	"			
7440-23-5	Sodium	465	GS1, D	mg/l	3.75	0.196	5	"	"	"	"	"			
7440-02-0	Nickel	0.0030	J	mg/l	0.0050	0.0009	1	"	"	"	22-Jun-18	"			
7439-92-1	Lead	< 0.0075	U	mg/l	0.0075	0.0062	1	"	"	"	26-Jun-18	"			
7440-36-0	Antimony	< 0.0060	U	mg/l	0.0060	0.0016	1	"	"	"	22-Jun-18	"			
7782-49-2	Selenium	< 0.0150	U	mg/l	0.0150	0.0042	1	"	"	"	"	"			
7440-28-0	Thallium	< 0.0050	U	mg/l	0.0050	0.0021	1	"	"	"	"	"			
7440-62-2	Vanadium	0.0048	J	mg/l	0.0050	0.0011	1	"	"	"	"	"			
7440-66-6	Zinc	0.0117	J	mg/l	0.0250	0.0016	1	"	"	"	"	"			
<b>Total Metals by EPA 200 Series Methods</b>															
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	21-Jun-18	25-Jun-18	TSF/T	1808550	X		

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Sample Identification

Trip Blank (2018-06)

SC47714-05

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

Trip Blank (2018-06)

SC47714-05

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.30	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	98			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	96			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	89			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
	Tentatively Identified Compounds	<b>None found</b>		µg/l			1	SW846 8260C TICs	"	"	GMA	"	

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	<b>42.6</b>		µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	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	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>38.0</b>		µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>14.5</b>		µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	<b>2.82</b>		µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	<b>227</b>	E	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	40.1		µg/l	1.00	0.30	1	SW846 8260C	19-Jun-18	20-Jun-18	GMA	1808472	X
99-87-6	4-Isopropyltoluene	13.8		µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	147	E	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	118	E	µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	42.9		µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	370	E	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	226	E	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	489	E	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	147	E	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	43.4	J	µg/l	200	13.2	1	"	"	"	"	"	X
110-82-7	Cyclohexane	238	NonTR G TIC, E	µg/l	5.00	0.44	1	"	"	"	"	"	X
108-87-2	Methylcyclohexane	285	NonTR G TIC, E	µg/l	5.00	0.39	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	108	70-130 %	"	"	"	"	"
2037-26-5	Toluene-d8	108	70-130 %	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	93	70-130 %	"	"	"	"	"
1868-53-7	Dibromofluoromethane	81	70-130 %	"	"	"	"	"

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.		
<b>Volatile Organic Compounds</b>															
<u>Re-analysis of Volatile Organic Compounds by SW846 8260</u>															
<u>Prepared by method SW846 5030 Water MS</u>															
100-41-4	Ethylbenzene	342	D	µg/l	20.0	6.34	20	SW846 8260C	21-Jun-18	21-Jun-18	GMA	1808627	X		
91-20-3	Naphthalene	204	D	µg/l	40.0	27.8	20	"	"	"	"	"	X		
103-65-1	n-Propylbenzene	115	D	µg/l	20.0	6.40	20	"	"	"	"	"	X		
95-63-6	1,2,4-Trimethylbenzene	1,120	D	µg/l	20.0	12.4	20	"	"	"	"	"	X		
108-67-8	1,3,5-Trimethylbenzene	313	D	µg/l	20.0	10.8	20	"	"	"	"	"	X		
179601-23-1	m,p-Xylene	739	D	µg/l	40.0	9.48	20	"	"	"	"	"	X		
95-47-6	o-Xylene	126	D	µg/l	20.0	8.20	20	"	"	"	"	"	X		
<i>Surrogate recoveries:</i>															
460-00-4	4-Bromofluorobenzene	101			70-130 %		"	"	"	"	"	"			
2037-26-5	Toluene-d8	108			70-130 %		"	"	"	"	"	"			
17060-07-0	1,2-Dichloroethane-d4	103			70-130 %		"	"	"	"	"	"			
1868-53-7	Dibromofluoromethane	109			70-130 %		"	"	"	"	"	"			
<u>Tentatively Identified Compounds by GC/MS</u>															
<u>Prepared by method SW846 5030 Water MS</u>															
611-14-3	Benzene, 1-ethyl-2-methyl-	100		µg/l			1	SW846 8260C TICs	19-Jun-18	20-Jun-18	GMA	1808472			
78-78-4	Butane, 2-methyl-	92		µg/l			1	"	"	"	"	"			
001528-22-9	Cyclobutane, (1-methylethyl...)	64		µg/l			1	"	"	"	"	"			
000638-04-0	Cyclohexane, 1,3-dimethyl-,...	62		µg/l			1	"	"	"	"	"			
000822-50-4	Cyclopentane, 1,2-dimethyl-...	53		µg/l			1	"	"	"	"	"			
2453-00-1	Cyclopentane, 1,3-dimethyl-	59		µg/l			1	"	"	"	"	"			
96-37-7	Cyclopentane, methyl-	220		µg/l			1	"	"	"	"	"			
107-83-5	Pentane, 2-methyl-	180		µg/l			1	"	"	"	"	"			
96-14-0	Pentane, 3-methyl-	88		µg/l			1	"	"	"	"	"			
<b>Semivolatile Organic Compounds by GCMS</b>															
<u>Semivolatile Organic Compounds</u>															
<u>Prepared by method SW846 3510C</u>															
83-32-9	Acenaphthene	< 23.4	U, D	µg/l	23.4	3.23	5	SW846 8270D	18-Jun-18	25-Jun-18	MSL	1808368	X		
208-96-8	Acenaphthylene	< 23.4	U, D	µg/l	23.4	3.19	5	"	"	"	"	"	X		
62-53-3	Aniline	< 23.4	U, D	µg/l	23.4	8.27	5	"	"	"	"	"	X		
120-12-7	Anthracene	< 23.4	U, D	µg/l	23.4	2.84	5	"	"	"	"	"	X		
103-33-3	Azobenzene/Diphenyldiazene	< 23.4	U, D	µg/l	23.4	3.50	5	"	"	"	"	"			
92-87-5	Benzidine	< 46.7	U, D	µg/l	46.7	5.36	5	"	"	"	"	"	X		
56-55-3	Benzo (a) anthracene	< 23.4	U, D	µg/l	23.4	2.50	5	"	"	"	"	"	X		
50-32-8	Benzo (a) pyrene	< 23.4	U, D	µg/l	23.4	2.63	5	"	"	"	"	"	X		
205-99-2	Benzo (b) fluoranthene	< 23.4	U, D	µg/l	23.4	2.04	5	"	"	"	"	"	X		
191-24-2	Benzo (g,h,i) perlylene	< 23.4	U, D	µg/l	23.4	2.48	5	"	"	"	"	"	X		
207-08-9	Benzo (k) fluoranthene	< 23.4	U, D	µg/l	23.4	2.24	5	"	"	"	"	"	X		
65-85-0	Benzoic acid	< 23.4	U, D	µg/l	23.4	2.46	5	"	"	"	"	"	X		
100-51-6	Benzyl alcohol	< 23.4	U, D	µg/l	23.4	3.64	5	"	"	"	"	"	X		
111-91-1	Bis(2-chloroethoxy)methane	< 23.4	U, D	µg/l	23.4	3.11	5	"	"	"	"	"	X		

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
				GS1									
111-44-4	Bis(2-chloroethyl)ether	< 23.4	U, D	µg/l	23.4	3.43	5	SW846 8270D	18-Jun-18	25-Jun-18	MSL	1808368	X
108-60-1	Bis(2-chloroisopropyl)ether	< 23.4	U, D	µg/l	23.4	3.64	5	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	<b>5.05</b>	J, D	µg/l	23.4	2.98	5	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 23.4	U, D	µg/l	23.4	2.81	5	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 23.4	U, D	µg/l	23.4	2.05	5	"	"	"	"	"	X
86-74-8	Carbazole	< 23.4	U, D	µg/l	23.4	7.29	5	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 23.4	U, D	µg/l	23.4	2.34	5	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 23.4	U, D	µg/l	23.4	5.24	5	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 23.4	U, D	µg/l	23.4	2.76	5	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 23.4	U, D	µg/l	23.4	3.50	5	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 23.4	U, D	µg/l	23.4	2.82	5	"	"	"	"	"	X
218-01-9	Chrysene	< 23.4	U, D	µg/l	23.4	2.49	5	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 23.4	U, D	µg/l	23.4	2.10	5	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 23.4	U, D	µg/l	23.4	3.46	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 23.4	U, D	µg/l	23.4	2.63	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 23.4	U, D	µg/l	23.4	3.02	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 23.4	U, D	µg/l	23.4	2.87	5	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 23.4	U, D	µg/l	23.4	9.29	5	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 23.4	U, D	µg/l	23.4	2.48	5	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 23.4	U, D	µg/l	23.4	2.91	5	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 23.4	U, D	µg/l	23.4	3.54	5	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 23.4	U, D	µg/l	23.4	3.05	5	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 23.4	U, D	µg/l	23.4	2.14	5	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 23.4	U, D	µg/l	23.4	1.49	5	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 23.4	U, D	µg/l	23.4	2.62	5	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 23.4	U, D	µg/l	23.4	3.14	5	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 23.4	U, D	µg/l	23.4	2.77	5	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 23.4	U, D	µg/l	23.4	1.90	5	"	"	"	"	"	X
206-44-0	Fluoranthene	< 23.4	U, D	µg/l	23.4	2.98	5	"	"	"	"	"	X
86-73-7	Fluorene	< 23.4	U, D	µg/l	23.4	2.86	5	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 23.4	U, D	µg/l	23.4	2.67	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 23.4	U, D	µg/l	23.4	1.81	5	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 23.4	U, D	µg/l	23.4	4.84	5	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 23.4	U, D	µg/l	23.4	2.99	5	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 23.4	U, D	µg/l	23.4	2.71	5	"	"	"	"	"	X
78-59-1	Isophorone	< 23.4	U, D	µg/l	23.4	2.74	5	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	<b>162</b>	D	µg/l	23.4	2.68	5	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 23.4	U, D	µg/l	23.4	3.11	5	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 46.7	U, D	µg/l	46.7	2.87	5	"	"	"	"	"	X
91-20-3	Naphthalene	<b>82.7</b>	D	µg/l	23.4	3.20	5	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 23.4	U, D	µg/l	23.4	2.83	5	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 23.4	U, D	µg/l	23.4	2.54	5	"	"	"	"	"	X

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
				GS1									
100-01-6	4-Nitroaniline	< 23.4	U, D	µg/l	23.4	1.75	5	SW846 8270D	18-Jun-18	25-Jun-18	MSL	1808368	X
98-95-3	Nitrobenzene	< 23.4	U, D	µg/l	23.4	3.22	5	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 23.4	U, D	µg/l	23.4	2.17	5	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 93.5	U, D	µg/l	93.5	3.92	5	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 23.4	U, D	µg/l	23.4	3.14	5	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 23.4	U, D	µg/l	23.4	2.70	5	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 23.4	U, D	µg/l	23.4	3.04	5	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 93.5	U, D	µg/l	93.5	1.74	5	"	"	"	"	"	X
85-01-8	Phenanthrene	< 23.4	U, D	µg/l	23.4	2.74	5	"	"	"	"	"	X
108-95-2	Phenol	< 23.4	U, D	µg/l	23.4	3.01	5	"	"	"	"	"	X
129-00-0	Pyrene	< 23.4	U, D	µg/l	23.4	2.85	5	"	"	"	"	"	X
110-86-1	Pyridine	< 23.4	U, D	µg/l	23.4	3.83	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 23.4	U, D	µg/l	23.4	3.21	5	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	53.3	D	µg/l	23.4	3.43	5	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 23.4	U, D	µg/l	23.4	2.43	5	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 23.4	U, D	µg/l	23.4	2.42	5	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 23.4	U, D	µg/l	23.4	3.25	5	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 23.4	U, D	µg/l	23.4	3.39	5	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	29	SBN		30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	28			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	52			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	35			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	33			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	36			15-110 %			"	"	"	"	"	
<u>Tentatively Identified Compounds</u>													
				GS1									
	1H-Indene, 2,3-dihydro-1,3-...	57	J N, D	µg/l			5	SW846 8270D TICS	"	"	MSL	"	
002783-26-8	2-Tolyloxirane	300	J N, D	µg/l			5	"	"	"	"	"	
53172-84-2	Benzene, (1-methyl-1-butenyl)-	220	J N, D	µg/l			5	"	"	"	"	"	
95-36-3	Benzene, 1,2,3-trimethyl-	220	J N, D	µg/l			5	"	"	"	"	"	
000095-93-2	Benzene, 1,2,4,5-tetramethyl- (01)	320	J N, D	µg/l			5	"	"	"	"	"	
135-01-3	Benzene, 1,2-diethyl-	170	J N, D	µg/l			5	"	"	"	"	"	
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	120	J N, D	µg/l			5	"	"	"	"	"	
000611-14-3	Benzene, 1-ethyl-2-methyl- (01)	320	J N, D	µg/l			5	"	"	"	"	"	
000620-14-4	Benzene, 1-ethyl-3-methyl-	260	J N, D	µg/l			5	"	"	"	"	"	
000527-84-4	Benzene, 1-methyl-2- (1-meth...	290	J N, D	µg/l			5	"	"	"	"	"	
001074-55-1	Benzene, 1-methyl-4-propyl-	63	J N, D	µg/l			5	"	"	"	"	"	
103-65-1	Benzene, propyl-	58	J N, D	µg/l			5	"	"	"	"	"	
010544-50-0	Cyclic octaatomic sulfur	57	J N, D	µg/l			5	"	"	"	"	"	

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Sample Identification

MW-D (2018-06-13)

SC47714-06

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

13-Jun-18 00:00

Received

14-Jun-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Tentatively Identified Compounds</u>													
100-41-4	Ethylbenzene	66	J N, D	µg/l			5	SW846 8270D TICS	18-Jun-18	25-Jun-18	MSL	1808368	
496-11-7	Indane	110	J N, D	µg/l			5	"	"	"	"	"	
106-42-3	p-Xylene	160	J N, D	µg/l			5	"	"	"	"	"	
1120-21-4	Undecane	120	J N, D	µg/l			5	"	"	"	"	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	15-Jun-18		KP1	1808348	
<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	21-Jun-18	22-Jun-18	SJR/T	1808547	X
7429-90-5	Aluminum	< 0.0250	U	mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	0.01765		mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	1.87		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	269	GS1, D	mg/l	0.500	0.0355	5	"	"	26-Jun-18	"	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	22-Jun-18	"	"	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	< 0.0050	U	mg/l	0.0050	0.0023	1	"	"	"	"	"	X
7439-89-6	Iron	1.60		mg/l	0.125	0.0045	1	"	"	26-Jun-18	"	"	X
7440-09-7	Potassium	5.86		mg/l	0.500	0.0600	1	"	"	22-Jun-18	"	"	X
7439-95-4	Magnesium	43.3		mg/l	0.0200	0.0044	1	"	"	"	"	"	X
7439-96-5	Manganese	0.456	R05, R06, J, D	mg/l	0.625	0.0095	5	"	"	26-Jun-18	"	"	X
7440-23-5	Sodium	140		mg/l	0.750	0.0392	1	"	"	22-Jun-18	"	"	X
7440-02-0	Nickel	< 0.0050	U	mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7439-92-1	Lead	0.0166		mg/l	0.0075	0.0062	1	"	"	26-Jun-18	"	"	X
7440-36-0	Antimony	< 0.0060	U	mg/l	0.0060	0.0016	1	"	"	22-Jun-18	"	"	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	0.0026	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	21-Jun-18	25-Jun-18	TSF/T	1808550	X

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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>										
Batch 1808472 - SW846 5030 Water MS										
<u>Blank (1808472-BLK1)</u>										
<u>Prepared &amp; Analyzed: 19-Jun-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	< 2.00	U	µg/l	2.00						
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>										
Batch 1808472 - SW846 5030 Water MS										
<u>Blank (1808472-BLK1)</u>										
<u>Prepared &amp; Analyzed: 19-Jun-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						
Trichloroethylene	< 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						
Surrogate: 4-Bromofluorobenzene	50.0		µg/l		50.0		100	70-130		
Surrogate: Toluene-d8	49.5		µg/l		50.0		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	50.3		µg/l		50.0		101	70-130		
Surrogate: Dibromofluoromethane	50.5		µg/l		50.0		101	70-130		
<u>LCS (1808472-BS1)</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.3		µg/l		20.0		107	70-130		
Acetone	17.9		µg/l		20.0		90	70-130		
Acrylonitrile	21.8		µg/l		20.0		109	70-130		
Benzene	22.0		µg/l		20.0		110	70-130		
Bromobenzene	20.8		µg/l		20.0		104	70-130		
Bromoform	20.0		µg/l		20.0		100	70-130		
Bromochloromethane	20.2		µg/l		20.0		101	70-130		
Bromodichloromethane	19.2		µg/l		20.0		96	70-130		
Bromomethane	19.9		µg/l		20.0		100	70-130		
2-Butanone (MEK)	25.0		µg/l		20.0		125	70-130		
n-Butylbenzene	19.5		µg/l		20.0		98	70-130		
sec-Butylbenzene	17.6		µg/l		20.0		88	70-130		
tert-Butylbenzene	19.1		µg/l		20.0		95	70-130		
Carbon disulfide	21.8		µg/l		20.0		109	70-130		
Carbon tetrachloride	20.2		µg/l		20.0		101	70-130		
Chlorobenzene	19.9		µg/l		20.0		99	70-130		
Chloroethane	16.7		µg/l		20.0		84	70-130		
Chloroform	18.2		µg/l		20.0		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>										
Batch 1808472 - SW846 5030 Water MS										
<u>LCS (1808472-BS1)</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
Chloromethane	28.8		µg/l		20.0	144	70-130			
2-Chlorotoluene	19.4		µg/l		20.0	97	70-130			
4-Chlorotoluene	19.2		µg/l		20.0	96	70-130			
1,2-Dibromo-3-chloropropane	22.7		µg/l		20.0	114	70-130			
Dibromochloromethane	19.2		µg/l		20.0	96	70-130			
1,2-Dibromoethane (EDB)	20.0		µg/l		20.0	100	70-130			
Dibromomethane	19.8		µg/l		20.0	99	70-130			
1,2-Dichlorobenzene	20.9		µg/l		20.0	104	70-130			
1,3-Dichlorobenzene	16.4		µg/l		20.0	82	70-130			
1,4-Dichlorobenzene	19.9		µg/l		20.0	99	70-130			
Dichlorodifluoromethane (Freon12)	26.3		µg/l		20.0	131	70-130			
1,1-Dichloroethane	21.7		µg/l		20.0	109	70-130			
1,2-Dichloroethane	19.9		µg/l		20.0	100	70-130			
1,1-Dichloroethene	20.1		µg/l		20.0	100	70-130			
cis-1,2-Dichloroethene	20.3		µg/l		20.0	101	70-130			
trans-1,2-Dichloroethene	20.4		µg/l		20.0	102	70-130			
1,2-Dichloropropane	22.8		µg/l		20.0	114	70-130			
1,3-Dichloropropane	21.4		µg/l		20.0	107	70-130			
2,2-Dichloropropane	23.9		µg/l		20.0	119	70-130			
1,1-Dichloropropene	19.2		µg/l		20.0	96	70-130			
cis-1,3-Dichloropropene	20.7		µg/l		20.0	103	70-130			
trans-1,3-Dichloropropene	21.1		µg/l		20.0	105	70-130			
Ethylbenzene	20.0		µg/l		20.0	100	70-130			
Hexachlorobutadiene	21.4		µg/l		20.0	107	70-130			
2-Hexanone (MBK)	19.6		µg/l		20.0	98	70-130			
Isopropylbenzene	19.5		µg/l		20.0	97	70-130			
4-Isopropyltoluene	21.9		µg/l		20.0	109	70-130			
Methyl tert-butyl ether	18.3		µg/l		20.0	91	70-130			
4-Methyl-2-pentanone (MIBK)	21.8		µg/l		20.0	109	70-130			
Methylene chloride	19.6		µg/l		20.0	98	70-130			
Naphthalene	18.4		µg/l		20.0	92	70-130			
n-Propylbenzene	19.7		µg/l		20.0	98	70-130			
Styrene	19.1		µg/l		20.0	96	70-130			
1,1,1,2-Tetrachloroethane	20.8		µg/l		20.0	104	70-130			
1,1,2,2-Tetrachloroethane	21.6		µg/l		20.0	108	70-130			
Tetrachloroethene	19.1		µg/l		20.0	95	70-130			
Toluene	20.5		µg/l		20.0	103	70-130			
1,2,3-Trichlorobenzene	19.1		µg/l		20.0	95	70-130			
1,2,4-Trichlorobenzene	18.1		µg/l		20.0	91	70-130			
1,3,5-Trichlorobenzene	19.0		µg/l		20.0	95	70-130			
1,1,1-Trichloroethane	20.6		µg/l		20.0	103	70-130			
1,1,2-Trichloroethane	19.7		µg/l		20.0	99	70-130			
Trichloroethene	21.4		µg/l		20.0	107	70-130			
Trichlorofluoromethane (Freon 11)	19.2		µg/l		20.0	96	70-130			
1,2,3-Trichloropropane	23.5		µg/l		20.0	117	70-130			
1,2,4-Trimethylbenzene	18.7		µg/l		20.0	94	70-130			
1,3,5-Trimethylbenzene	19.6		µg/l		20.0	98	70-130			
Vinyl chloride	29.8	QC2	µg/l		20.0	149	70-130			
m,p-Xylene	18.5		µg/l		20.0	92	70-130			
o-Xylene	18.9		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>SW846 8260C</b>										
Batch 1808472 - SW846 5030 Water MS										
<u>LCS (1808472-BS1)</u>										
Tetrahydrofuran	21.2		µg/l		20.0	106	70-130			
Ethyl ether	17.7		µg/l		20.0	89	70-130			
Tert-amyl methyl ether	18.3		µg/l		20.0	91	70-130			
Ethyl tert-butyl ether	17.9		µg/l		20.0	89	70-130			
Di-isopropyl ether	19.6		µg/l		20.0	98	70-130			
Tert-Butanol / butyl alcohol	188		µg/l		200	94	70-130			
1,4-Dioxane	192		µg/l		200	96	70-130			
trans-1,4-Dichloro-2-butene	24.3		µg/l		20.0	122	70-130			
Ethanol	381		µg/l		400	95	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
Surrogate: Toluene-d8	51.3		µg/l		50.0	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	50.1		µg/l		50.0	100	70-130			
Surrogate: Dibromofluoromethane	48.9		µg/l		50.0	98	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
<u>LCS Dup (1808472-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.4		µg/l		20.0	97	70-130	10	20	
Acetone	20.5		µg/l		20.0	102	70-130	13	20	
Acrylonitrile	24.5		µg/l		20.0	122	70-130	11	20	
Benzene	22.4		µg/l		20.0	112	70-130	1	20	
Bromobenzene	20.8		µg/l		20.0	104	70-130	0.2	20	
Bromochloromethane	21.6		µg/l		20.0	108	70-130	8	20	
Bromodichloromethane	20.9		µg/l		20.0	105	70-130	3	20	
Bromoform	19.8		µg/l		20.0	99	70-130	3	20	
Bromomethane	19.4		µg/l		20.0	97	70-130	3	20	
2-Butanone (MEK)	25.6		µg/l		20.0	128	70-130	2	20	
n-Butylbenzene	19.7		µg/l		20.0	98	70-130	0.7	20	
sec-Butylbenzene	17.9		µg/l		20.0	90	70-130	2	20	
tert-Butylbenzene	19.6		µg/l		20.0	98	70-130	3	20	
Carbon disulfide	20.8		µg/l		20.0	104	70-130	5	20	
Carbon tetrachloride	19.5		µg/l		20.0	97	70-130	4	20	
Chlorobenzene	20.3		µg/l		20.0	102	70-130	2	20	
Chloroethane	15.7		µg/l		20.0	78	70-130	6	20	
Chloroform	18.6		µg/l		20.0	93	70-130	2	20	
Chloromethane	29.2		µg/l		20.0	146	70-130	2	20	
2-Chlorotoluene	19.3		µg/l		20.0	97	70-130	0.4	20	
4-Chlorotoluene	19.0		µg/l		20.0	95	70-130	0.7	20	
1,2-Dibromo-3-chloropropane	23.6		µg/l		20.0	118	70-130	4	20	
Dibromochloromethane	20.2		µg/l		20.0	101	70-130	5	20	
1,2-Dibromoethane (EDB)	21.2		µg/l		20.0	106	70-130	6	20	
Dibromomethane	20.9		µg/l		20.0	104	70-130	5	20	
1,2-Dichlorobenzene	21.6		µg/l		20.0	108	70-130	3	20	
1,3-Dichlorobenzene	16.9		µg/l		20.0	85	70-130	3	20	
1,4-Dichlorobenzene	20.0		µg/l		20.0	100	70-130	0.7	20	
Dichlorodifluoromethane (Freon12)	24.9		µg/l		20.0	124	70-130	5	20	
1,1-Dichloroethane	22.2		µg/l		20.0	111	70-130	2	20	
1,2-Dichloroethane	20.9		µg/l		20.0	104	70-130	5	20	
1,1-Dichloroethene	20.0		µg/l		20.0	100	70-130	0.3	20	
cis-1,2-Dichloroethene	21.1		µg/l		20.0	106	70-130	4	20	
trans-1,2-Dichloroethene	20.2		µg/l		20.0	101	70-130	1	20	
1,2-Dichloropropane	23.3		µg/l		20.0	116	70-130	2	20	
1,3-Dichloropropane	22.9		µg/l		20.0	115	70-130	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>										
Batch 1808472 - SW846 5030 Water MS										
<u>LCS Dup (1808472-BSD1)</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
2,2-Dichloropropane	23.0		µg/l		20.0	115	70-130	4	20	
1,1-Dichloropropene	18.7		µg/l		20.0	94	70-130	2	20	
cis-1,3-Dichloropropene	21.8		µg/l		20.0	109	70-130	5	20	
trans-1,3-Dichloropropene	21.7		µg/l		20.0	108	70-130	3	20	
Ethylbenzene	19.8		µg/l		20.0	99	70-130	1	20	
Hexachlorobutadiene	22.0		µg/l		20.0	110	70-130	2	20	
2-Hexanone (MBK)	20.0		µg/l		20.0	100	70-130	2	20	
Isopropylbenzene	19.1		µg/l		20.0	96	70-130	2	20	
4-Isopropyltoluene	21.8		µg/l		20.0	109	70-130	0.1	20	
Methyl tert-butyl ether	19.4		µg/l		20.0	97	70-130	6	20	
4-Methyl-2-pentanone (MIBK)	22.9		µg/l		20.0	115	70-130	5	20	
Methylene chloride	21.4		µg/l		20.0	107	70-130	9	20	
Naphthalene	18.8		µg/l		20.0	94	70-130	2	20	
n-Propylbenzene	19.6		µg/l		20.0	98	70-130	0.6	20	
Styrene	18.1		µg/l		20.0	90	70-130	5	20	
1,1,1,2-Tetrachloroethane	21.2		µg/l		20.0	106	70-130	2	20	
1,1,2,2-Tetrachloroethane	22.5		µg/l		20.0	112	70-130	4	20	
Tetrachloroethene	18.7		µg/l		20.0	93	70-130	2	20	
Toluene	20.3		µg/l		20.0	101	70-130	1	20	
1,2,3-Trichlorobenzene	20.3		µg/l		20.0	101	70-130	6	20	
1,2,4-Trichlorobenzene	19.5		µg/l		20.0	98	70-130	7	20	
1,3,5-Trichlorobenzene	19.9		µg/l		20.0	100	70-130	5	20	
1,1,1-Trichloroethane	19.8		µg/l		20.0	99	70-130	4	20	
1,1,2-Trichloroethane	21.4		µg/l		20.0	107	70-130	8	20	
Trichloroethene	20.8		µg/l		20.0	104	70-130	3	20	
Trichlorofluoromethane (Freon 11)	17.8		µg/l		20.0	89	70-130	8	20	
1,2,3-Trichloropropane	23.8		µg/l		20.0	119	70-130	2	20	
1,2,4-Trimethylbenzene	17.7		µg/l		20.0	88	70-130	6	20	
1,3,5-Trimethylbenzene	18.5		µg/l		20.0	92	70-130	6	20	
Vinyl chloride	28.0	QC2	µg/l		20.0	140	70-130	6	20	
m,p-Xylene	18.3		µg/l		20.0	92	70-130	1	20	
o-Xylene	18.6		µg/l		20.0	93	70-130	1	20	
Tetrahydrofuran	22.9		µg/l		20.0	114	70-130	8	20	
Ethyl ether	18.1		µg/l		20.0	91	70-130	2	20	
Tert-amyl methyl ether	20.0		µg/l		20.0	100	70-130	9	20	
Ethyl tert-butyl ether	19.3		µg/l		20.0	97	70-130	8	20	
Di-isopropyl ether	21.2		µg/l		20.0	106	70-130	8	20	
Tert-Butanol / butyl alcohol	198		µg/l		200	99	70-130	5	20	
1,4-Dioxane	169		µg/l		200	84	70-130	13	20	
trans-1,4-Dichloro-2-butene	24.1		µg/l		20.0	120	70-130	1	20	
Ethanol	457		µg/l		400	114	70-130	18	20	
Surrogate: 4-Bromofluorobenzene	51.8		µg/l		50.0	104	70-130			
Surrogate: Toluene-d8	50.4		µg/l		50.0	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	49.1		µg/l		50.0	98	70-130			
Surrogate: Dibromofluoromethane	49.9		µg/l		50.0	100	70-130			
<u>Matrix Spike (1808472-MS1)</u>										
<u>Source: SC47714-03</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.7	D	µg/l		20.0	0.00	89	70-130		
Acetone	22.4	D	µg/l		20.0	0.00	112	70-130		
Acrylonitrile	56.8	QM7, D	µg/l		20.0	0.00	284	70-130		
Benzene	26.6	D	µg/l		20.0	4.41	111	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>										
Batch 1808472 - SW846 5030 Water MS										
<u>Matrix Spike (1808472-MS1)</u>										
<u>Source: SC47714-03</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
Bromobenzene	19.4	D	µg/l		20.0	0.00	97	70-130		
Bromoform	18.9	D	µg/l		20.0	0.00	95	70-130		
Bromochloromethane	19.2	D	µg/l		20.0	0.00	96	70-130		
Bromodichloromethane	18.8	D	µg/l		20.0	0.00	94	70-130		
Bromomethane	15.3	D	µg/l		20.0	0.00	76	70-130		
2-Butanone (MEK)	43.1	QM7, D	µg/l		20.0	0.00	216	70-130		
n-Butylbenzene	27.4	D	µg/l		20.0	3.97	117	70-130		
sec-Butylbenzene	20.1	D	µg/l		20.0	1.70	92	70-130		
tert-Butylbenzene	19.8	D	µg/l		20.0	0.65	96	70-130		
Carbon disulfide	18.7	D	µg/l		20.0	0.00	93	70-130		
Carbon tetrachloride	19.2	D	µg/l		20.0	0.00	96	70-130		
Chlorobenzene	19.5	D	µg/l		20.0	0.00	98	70-130		
Chloroethane	13.1	QM7, D	µg/l		20.0	0.00	66	70-130		
Chloroform	16.4	D	µg/l		20.0	0.00	82	70-130		
Chloromethane	25.1	D	µg/l		20.0	0.00	125	70-130		
2-Chlorotoluene	23.6	D	µg/l		20.0	0.00	118	70-130		
4-Chlorotoluene	19.0	D	µg/l		20.0	0.00	95	70-130		
1,2-Dibromo-3-chloropropane	30.3	QM7, D	µg/l		20.0	0.00	152	70-130		
Dibromochloromethane	20.1	D	µg/l		20.0	0.00	101	70-130		
1,2-Dibromoethane (EDB)	21.8	D	µg/l		20.0	0.00	109	70-130		
Dibromomethane	20.7	D	µg/l		20.0	0.00	104	70-130		
1,2-Dichlorobenzene	23.2	D	µg/l		20.0	0.00	116	70-130		
1,3-Dichlorobenzene	17.1	D	µg/l		20.0	0.00	86	70-130		
1,4-Dichlorobenzene	20.1	D	µg/l		20.0	0.00	100	70-130		
Dichlorodifluoromethane (Freon12)	21.5	D	µg/l		20.0	0.00	108	70-130		
1,1-Dichloroethane	20.2	D	µg/l		20.0	0.00	101	70-130		
1,2-Dichloroethane	18.5	D	µg/l		20.0	0.00	92	70-130		
1,1-Dichloroethene	17.3	D	µg/l		20.0	0.00	86	70-130		
cis-1,2-Dichloroethene	21.2	D	µg/l		20.0	0.00	106	70-130		
trans-1,2-Dichloroethene	18.9	D	µg/l		20.0	0.00	95	70-130		
1,2-Dichloropropane	24.6	D	µg/l		20.0	0.00	123	70-130		
1,3-Dichloropropane	23.6	D	µg/l		20.0	0.00	118	70-130		
2,2-Dichloropropane	18.6	D	µg/l		20.0	0.00	93	70-130		
1,1-Dichloropropene	19.4	D	µg/l		20.0	0.00	97	70-130		
cis-1,3-Dichloropropene	25.7	D	µg/l		20.0	0.00	128	70-130		
trans-1,3-Dichloropropene	21.2	D	µg/l		20.0	0.00	106	70-130		
Ethylbenzene	50.5	D	µg/l		20.0	30.1	102	70-130		
Hexachlorobutadiene	24.4	D	µg/l		20.0	0.00	122	70-130		
2-Hexanone (MBK)	27.4	QM7, D	µg/l		20.0	0.00	137	70-130		
Isopropylbenzene	24.0	D	µg/l		20.0	3.73	101	70-130		
4-Isopropyltoluene	28.4	QM7, D	µg/l		20.0	1.65	134	70-130		
Methyl tert-butyl ether	18.3	D	µg/l		20.0	0.00	92	70-130		
4-Methyl-2-pentanone (MIBK)	27.5	QM7, D	µg/l		20.0	0.00	138	70-130		
Methylene chloride	19.4	D	µg/l		20.0	0.00	97	70-130		
Naphthalene	46.2	QM7, D	µg/l		20.0	17.1	145	70-130		
n-Propylbenzene	32.4	D	µg/l		20.0	11.6	104	70-130		
Styrene	19.9	D	µg/l		20.0	0.00	99	70-130		
1,1,1,2-Tetrachloroethane	19.5	D	µg/l		20.0	0.00	98	70-130		
1,1,2,2-Tetrachloroethane	22.0	D	µg/l		20.0	0.00	110	70-130		
Tetrachloroethene	19.6	D	µg/l		20.0	0.00	98	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>										
Batch 1808472 - SW846 5030 Water MS										
<b>Matrix Spike (1808472-MS1)</b>										
<u>Source: SC47714-03</u> <u>Prepared &amp; Analyzed: 19-Jun-18</u>										
Toluene	24.5	D	µg/l		20.0	4.27	101	70-130		
1,2,3-Trichlorobenzene	26.4	QM7, D	µg/l		20.0	0.00	132	70-130		
1,2,4-Trichlorobenzene	26.8	QM7, D	µg/l		20.0	0.00	134	70-130		
1,3,5-Trichlorobenzene	24.6	D	µg/l		20.0	0.00	123	70-130		
1,1,1-Trichloroethane	17.8	D	µg/l		20.0	0.00	89	70-130		
1,1,2-Trichloroethane	42.5	QM7, D	µg/l		20.0	0.00	212	70-130		
Trichloroethylene	20.7	D	µg/l		20.0	0.00	104	70-130		
Trichlorofluoromethane (Freon 11)	15.8	D	µg/l		20.0	0.00	79	70-130		
1,2,3-Trichloropropane	25.7	D	µg/l		20.0	0.00	129	70-130		
1,2,4-Trimethylbenzene	119	QM7, D, E	µg/l		20.0	92.1	137	70-130		
1,3,5-Trimethylbenzene	50.3	D	µg/l		20.0	27.4	114	70-130		
Vinyl chloride	25.0	D	µg/l		20.0	0.00	125	70-130		
m,p-Xylene	90.6	D	µg/l		20.0	69.3	106	70-130		
o-Xylene	38.6	D	µg/l		20.0	16.3	111	70-130		
Tetrahydrofuran	30.0	QM7, D	µg/l		20.0	0.00	150	70-130		
Ethyl ether	17.5	D	µg/l		20.0	0.00	88	70-130		
Tert-amyl methyl ether	19.7	D	µg/l		20.0	0.00	99	70-130		
Ethyl tert-butyl ether	18.4	D	µg/l		20.0	0.00	92	70-130		
Di-isopropyl ether	21.6	D	µg/l		20.0	0.00	108	70-130		
Tert-Butanol / butyl alcohol	186	D	µg/l		200	0.00	93	70-130		
1,4-Dioxane	214	D	µg/l		200	0.00	107	70-130		
trans-1,4-Dichloro-2-butene	21.7	D	µg/l		20.0	0.00	108	70-130		
Ethanol	373	D	µg/l		400	0.00	93	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	51.4		µg/l		50.0		103	70-130		
<i>Surrogate: Toluene-d8</i>	51.1		µg/l		50.0		102	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.9		µg/l		50.0		92	70-130		
<i>Surrogate: Dibromofluoromethane</i>	46.6		µg/l		50.0		93	70-130		
<b>Matrix Spike Dup (1808472-MSD1)</b>										
<u>Source: SC47714-03</u> <u>Prepared &amp; Analyzed: 19-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	16.9	D	µg/l		20.0	0.00	85	70-130	5	20
Acetone	21.0	D	µg/l		20.0	0.00	105	70-130		
Acrylonitrile	53.8	QM7, D	µg/l		20.0	0.00	269	70-130	6	20
Benzene	27.4	D	µg/l		20.0	4.41	115	70-130	3	20
Bromobenzene	19.2	D	µg/l		20.0	0.00	96	70-130	1	20
Bromoform	18.8	D	µg/l		20.0	0.00	94	70-130	0.4	20
Bromochloromethane	17.4	D	µg/l		20.0	0.00	87	70-130	10	20
Bromodichloromethane	17.8	D	µg/l		20.0	0.00	89	70-130	6	20
Bromomethane	12.6	QM7, D	µg/l		20.0	0.00	63	70-130	20	20
2-Butanone (MEK)	45.8	QM7, D	µg/l		20.0	0.00	229	70-130	6	20
n-Butylbenzene	25.4	D	µg/l		20.0	3.97	107	70-130	8	20
sec-Butylbenzene	18.4	D	µg/l		20.0	1.70	83	70-130	9	20
tert-Butylbenzene	18.6	D	µg/l		20.0	0.65	90	70-130	6	20
Carbon disulfide	19.3	D	µg/l		20.0	0.00	96	70-130	3	20
Carbon tetrachloride	16.5	D	µg/l		20.0	0.00	82	70-130	15	20
Chlorobenzene	19.5	D	µg/l		20.0	0.00	98	70-130	0	20
Chloroethane	8.58	QM7, QR5, D	µg/l		20.0	0.00	43	70-130	42	20
Chloroform	15.0	D	µg/l		20.0	0.00	75	70-130	9	20
Chloromethane	24.8	D	µg/l		20.0	0.00	124	70-130	0.9	20
2-Chlorotoluene	21.8	D	µg/l		20.0	0.00	109	70-130	8	20
4-Chlorotoluene	17.9	D	µg/l		20.0	0.00	89	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>										
Batch 1808472 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1808472-MSD1)</u>										
<u>Source: SC47714-03</u>										
<u>Prepared &amp; Analyzed: 19-Jun-18</u>										
1,2-Dibromo-3-chloropropane	26.0	D	µg/l		20.0	0.00	130	70-130	15	20
Dibromochloromethane	18.1	D	µg/l		20.0	0.00	91	70-130	11	20
1,2-Dibromoethane (EDB)	21.0	D	µg/l		20.0	0.00	105	70-130	4	20
Dibromomethane	19.4	D	µg/l		20.0	0.00	97	70-130	7	20
1,2-Dichlorobenzene	22.4	D	µg/l		20.0	0.00	112	70-130	4	20
1,3-Dichlorobenzene	15.6	D	µg/l		20.0	0.00	78	70-130	9	20
1,4-Dichlorobenzene	19.3	D	µg/l		20.0	0.00	96	70-130	4	20
Dichlorodifluoromethane (Freon12)	18.2	D	µg/l		20.0	0.00	91	70-130	17	20
1,1-Dichloroethane	19.7	D	µg/l		20.0	0.00	99	70-130	2	20
1,2-Dichloroethane	15.3	D	µg/l		20.0	0.00	76	70-130	19	20
1,1-Dichloroethene	18.6	D	µg/l		20.0	0.00	93	70-130	7	20
cis-1,2-Dichloroethene	21.7	D	µg/l		20.0	0.00	109	70-130	3	20
trans-1,2-Dichloroethene	20.1	D	µg/l		20.0	0.00	100	70-130	6	20
1,2-Dichloropropane	25.1	D	µg/l		20.0	0.00	126	70-130	2	20
1,3-Dichloropropane	22.6	D	µg/l		20.0	0.00	113	70-130	5	20
2,2-Dichloropropane	16.7	D	µg/l		20.0	0.00	83	70-130	11	20
1,1-Dichloropropene	18.7	D	µg/l		20.0	0.00	94	70-130	4	20
cis-1,3-Dichloropropene	24.2	D	µg/l		20.0	0.00	121	70-130	6	20
trans-1,3-Dichloropropene	19.0	D	µg/l		20.0	0.00	95	70-130	11	20
Ethylbenzene	49.7	D	µg/l		20.0	30.1	98	70-130	2	20
Hexachlorobutadiene	20.8	D	µg/l		20.0	0.00	104	70-130	16	20
2-Hexanone (MBK)	27.6	QM7, D	µg/l		20.0	0.00	138	70-130	0.9	20
Isopropylbenzene	23.6	D	µg/l		20.0	3.73	99	70-130	2	20
4-Isopropyltoluene	27.8	QM7, D	µg/l		20.0	1.65	131	70-130	2	20
Methyl tert-butyl ether	17.8	D	µg/l		20.0	0.00	89	70-130	3	20
4-Methyl-2-pentanone (MIBK)	28.0	QM7, D	µg/l		20.0	0.00	140	70-130	2	20
Methylene chloride	20.5	D	µg/l		20.0	0.00	102	70-130	6	20
Naphthalene	42.6	D	µg/l		20.0	17.1	127	70-130	8	20
n-Propylbenzene	31.3	D	µg/l		20.0	11.6	99	70-130	3	20
Styrene	19.9	D	µg/l		20.0	0.00	100	70-130	0.3	20
1,1,1,2-Tetrachloroethane	18.5	D	µg/l		20.0	0.00	92	70-130	5	20
1,1,2,2-Tetrachloroethane	23.2	D	µg/l		20.0	0.00	116	70-130	5	20
Tetrachloroethene	18.6	D	µg/l		20.0	0.00	93	70-130	5	20
Toluene	24.2	D	µg/l		20.0	4.27	99	70-130	2	20
1,2,3-Trichlorobenzene	22.6	D	µg/l		20.0	0.00	113	70-130	15	20
1,2,4-Trichlorobenzene	23.4	D	µg/l		20.0	0.00	117	70-130	14	20
1,3,5-Trichlorobenzene	21.6	D	µg/l		20.0	0.00	108	70-130	13	20
1,1,1-Trichloroethane	15.7	D	µg/l		20.0	0.00	78	70-130	13	20
1,1,2-Trichloroethane	40.9	QM7, D	µg/l		20.0	0.00	204	70-130	4	20
Trichloroethene	19.2	D	µg/l		20.0	0.00	96	70-130	7	20
Trichlorofluoromethane (Freon 11)	11.5	QM7, QR5, D	µg/l		20.0	0.00	58	70-130	31	20
1,2,3-Trichloropropane	24.5	D	µg/l		20.0	0.00	123	70-130	5	20
1,2,4-Trimethylbenzene	107	D, E	µg/l		20.0	92.1	77	70-130	11	20
1,3,5-Trimethylbenzene	46.5	D	µg/l		20.0	27.4	95	70-130	8	20
Vinyl chloride	24.3	D	µg/l		20.0	0.00	122	70-130	3	20
m,p-Xylene	90.0	D	µg/l		20.0	69.3	103	70-130	0.7	20
o-Xylene	38.2	D	µg/l		20.0	16.3	110	70-130	0.9	20
Tetrahydrofuran	31.3	QM7, D	µg/l		20.0	0.00	156	70-130	4	20
Ethyl ether	16.0	D	µg/l		20.0	0.00	80	70-130	9	20
Tert-amyl methyl ether	19.5	D	µg/l		20.0	0.00	98	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>										
Batch 1808472 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1808472-MSD1)</u>										
Ethyl tert-butyl ether	18.6	D	µg/l		20.0	0.00	93	70-130	1	20
Di-isopropyl ether	22.8	D	µg/l		20.0	0.00	114	70-130	5	20
Tert-Butanol / butyl alcohol	201	D	µg/l		200	0.00	101	70-130	8	20
1,4-Dioxane	261	QM7, D	µg/l		200	0.00	131	70-130	20	20
trans-1,4-Dichloro-2-butene	18.4	D	µg/l		20.0	0.00	92	70-130	16	20
Ethanol	465	QR2, D	µg/l		400	0.00	116	70-130	22	20
<i>Surrogate: 4-Bromofluorobenzene</i>	49.6		µg/l		50.0		99	70-130		
<i>Surrogate: Toluene-d8</i>	50.8		µg/l		50.0		102	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	38.7		µg/l		50.0		77	70-130		
<i>Surrogate: Dibromofluoromethane</i>	44.5		µg/l		50.0		89	70-130		
Batch 1808627 - SW846 5030 Water MS										
<u>Blank (1808627-BLK1)</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					
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					

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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>										
Batch 1808627 - SW846 5030 Water MS										
<u>Blank (1808627-BLK1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
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	< 2.00	U	µg/l	2.00						
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						
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						
Surrogate: 4-Bromofluorobenzene	46.0		µg/l	50.0		92	70-130			
Surrogate: Toluene-d8	51.4		µg/l	50.0		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	55.4		µg/l	50.0		111	70-130			
Surrogate: Dibromofluoromethane	56.3		µg/l	50.0		113	70-130			
<u>LCS (1808627-BS1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	<b>23.5</b>		µg/l	20.0		118	70-130			
Acetone	<b>25.2</b>		µg/l	20.0		126	70-130			
Acrylonitrile	<b>21.0</b>		µg/l	20.0		105	70-130			
Benzene	<b>22.9</b>		µg/l	20.0		114	70-130			
Bromobenzene	<b>21.8</b>		µg/l	20.0		109	70-130			
Bromochloromethane	<b>22.1</b>		µg/l	20.0		110	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>LCS (1808627-BS1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
Bromodichloromethane	22.0		µg/l		20.0	110	70-130			
Bromoform	21.2		µg/l		20.0	106	70-130			
Bromomethane	20.1		µg/l		20.0	100	70-130			
2-Butanone (MEK)	21.9		µg/l		20.0	109	70-130			
n-Butylbenzene	19.3		µg/l		20.0	96	70-130			
sec-Butylbenzene	20.6		µg/l		20.0	103	70-130			
tert-Butylbenzene	20.8		µg/l		20.0	104	70-130			
Carbon disulfide	23.4		µg/l		20.0	117	70-130			
Carbon tetrachloride	23.1		µg/l		20.0	115	70-130			
Chlorobenzene	20.2		µg/l		20.0	101	70-130			
Chloroethane	22.9		µg/l		20.0	114	70-130			
Chloroform	21.5		µg/l		20.0	108	70-130			
Chloromethane	19.6		µg/l		20.0	98	70-130			
2-Chlorotoluene	20.0		µg/l		20.0	100	70-130			
4-Chlorotoluene	20.2		µg/l		20.0	101	70-130			
1,2-Dibromo-3-chloropropane	19.5		µg/l		20.0	98	70-130			
Dibromochloromethane	22.8		µg/l		20.0	114	70-130			
1,2-Dibromoethane (EDB)	23.0		µg/l		20.0	115	70-130			
Dibromomethane	21.2		µg/l		20.0	106	70-130			
1,2-Dichlorobenzene	20.8		µg/l		20.0	104	70-130			
1,3-Dichlorobenzene	23.2		µg/l		20.0	116	70-130			
1,4-Dichlorobenzene	19.2		µg/l		20.0	96	70-130			
Dichlorodifluoromethane (Freon12)	23.7		µg/l		20.0	119	70-130			
1,1-Dichloroethane	23.0		µg/l		20.0	115	70-130			
1,2-Dichloroethane	21.8		µg/l		20.0	109	70-130			
1,1-Dichloroethene	24.8		µg/l		20.0	124	70-130			
cis-1,2-Dichloroethene	22.8		µg/l		20.0	114	70-130			
trans-1,2-Dichloroethene	23.4		µg/l		20.0	117	70-130			
1,2-Dichloropropane	20.8		µg/l		20.0	104	70-130			
1,3-Dichloropropane	21.2		µg/l		20.0	106	70-130			
2,2-Dichloropropane	28.0	QM9	µg/l		20.0	140	70-130			
1,1-Dichloropropene	21.6		µg/l		20.0	108	70-130			
cis-1,3-Dichloropropene	21.3		µg/l		20.0	107	70-130			
trans-1,3-Dichloropropene	23.1		µg/l		20.0	115	70-130			
Ethylbenzene	20.0		µg/l		20.0	100	70-130			
Hexachlorobutadiene	22.0		µg/l		20.0	110	70-130			
2-Hexanone (MBK)	20.8		µg/l		20.0	104	70-130			
Isopropylbenzene	23.0		µg/l		20.0	115	70-130			
4-Isopropyltoluene	19.3		µg/l		20.0	96	70-130			
Methyl tert-butyl ether	24.4		µg/l		20.0	122	70-130			
4-Methyl-2-pentanone (MIBK)	20.2		µg/l		20.0	101	70-130			
Methylene chloride	22.6		µg/l		20.0	113	70-130			
Naphthalene	18.7		µg/l		20.0	93	70-130			
n-Propylbenzene	19.7		µg/l		20.0	98	70-130			
Styrene	20.0		µg/l		20.0	100	70-130			
1,1,1,2-Tetrachloroethane	22.9		µg/l		20.0	114	70-130			
1,1,2,2-Tetrachloroethane	19.9		µg/l		20.0	100	70-130			
Tetrachloroethene	22.7		µg/l		20.0	114	70-130			
Toluene	22.6		µg/l		20.0	113	70-130			
1,2,3-Trichlorobenzene	20.8		µg/l		20.0	104	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>LCS (1808627-BS1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
1,2,4-Trichlorobenzene	20.0		µg/l		20.0	100	70-130			
1,3,5-Trichlorobenzene	21.2		µg/l		20.0	106	70-130			
1,1,1-Trichloroethane	22.9		µg/l		20.0	114	70-130			
1,1,2-Trichloroethane	21.9		µg/l		20.0	110	70-130			
Trichloroethylene	23.0		µg/l		20.0	115	70-130			
Trichlorofluoromethane (Freon 11)	24.9		µg/l		20.0	125	70-130			
1,2,3-Trichloropropane	21.2		µg/l		20.0	106	70-130			
1,2,4-Trimethylbenzene	20.4		µg/l		20.0	102	70-130			
1,3,5-Trimethylbenzene	20.5		µg/l		20.0	102	70-130			
Vinyl chloride	22.2		µg/l		20.0	111	70-130			
m,p-Xylene	20.3		µg/l		20.0	102	70-130			
o-Xylene	20.6		µg/l		20.0	103	70-130			
Tetrahydrofuran	19.4		µg/l		20.0	97	70-130			
Ethyl ether	21.6		µg/l		20.0	108	70-130			
Tert-amyl methyl ether	20.1		µg/l		20.0	100	70-130			
Ethyl tert-butyl ether	24.4		µg/l		20.0	122	70-130			
Di-isopropyl ether	21.9		µg/l		20.0	110	70-130			
Tert-Butanol / butyl alcohol	242		µg/l		200	121	70-130			
1,4-Dioxane	192		µg/l		200	96	70-130			
trans-1,4-Dichloro-2-butene	19.5		µg/l		20.0	98	70-130			
Ethanol	488		µg/l		400	122	70-130			
Surrogate: 4-Bromofluorobenzene	53.4		µg/l		50.0	107	70-130			
Surrogate: Toluene-d8	52.7		µg/l		50.0	105	70-130			
Surrogate: 1,2-Dichloroethane-d4	51.2		µg/l		50.0	102	70-130			
Surrogate: Dibromofluoromethane	54.3		µg/l		50.0	109	70-130			
<u>LCS Dup (1808627-BSD1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.7		µg/l		20.0	108	70-130	8	20	
Acetone	23.8		µg/l		20.0	119	70-130	6	20	
Acrylonitrile	21.6		µg/l		20.0	108	70-130	3	20	
Benzene	21.7		µg/l		20.0	108	70-130	5	20	
Bromobenzene	20.2		µg/l		20.0	101	70-130	8	20	
Bromochloromethane	22.4		µg/l		20.0	112	70-130	1	20	
Bromodichloromethane	21.4		µg/l		20.0	107	70-130	3	20	
Bromoform	20.8		µg/l		20.0	104	70-130	2	20	
Bromomethane	18.2		µg/l		20.0	91	70-130	10	20	
2-Butanone (MEK)	22.8		µg/l		20.0	114	70-130	4	20	
n-Butylbenzene	17.8		µg/l		20.0	89	70-130	8	20	
sec-Butylbenzene	18.8		µg/l		20.0	94	70-130	9	20	
tert-Butylbenzene	19.6		µg/l		20.0	98	70-130	6	20	
Carbon disulfide	21.4		µg/l		20.0	107	70-130	9	20	
Carbon tetrachloride	21.8		µg/l		20.0	109	70-130	5	20	
Chlorobenzene	19.3		µg/l		20.0	97	70-130	4	20	
Chloroethane	21.9		µg/l		20.0	110	70-130	4	20	
Chloroform	20.8		µg/l		20.0	104	70-130	4	20	
Chloromethane	19.4		µg/l		20.0	97	70-130	1	20	
2-Chlorotoluene	18.5		µg/l		20.0	92	70-130	8	20	
4-Chlorotoluene	18.6		µg/l		20.0	93	70-130	8	20	
1,2-Dibromo-3-chloropropane	19.6		µg/l		20.0	98	70-130	0.4	20	
Dibromochloromethane	22.4		µg/l		20.0	112	70-130	2	20	
1,2-Dibromoethane (EDB)	22.6		µg/l		20.0	113	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>LCS Dup (1808627-BSD1)</u>										
<u>Prepared &amp; Analyzed: 21-Jun-18</u>										
Dibromomethane	<b>20.8</b>		µg/l		20.0	104	70-130	2	20	
1,2-Dichlorobenzene	<b>19.3</b>		µg/l		20.0	97	70-130	7	20	
1,3-Dichlorobenzene	<b>21.3</b>		µg/l		20.0	106	70-130	9	20	
1,4-Dichlorobenzene	<b>17.8</b>		µg/l		20.0	89	70-130	8	20	
Dichlorodifluoromethane (Freon12)	<b>22.8</b>		µg/l		20.0	114	70-130	4	20	
1,1-Dichloroethane	<b>22.1</b>		µg/l		20.0	110	70-130	4	20	
1,2-Dichloroethane	<b>21.5</b>		µg/l		20.0	107	70-130	1	20	
1,1-Dichloroethene	<b>23.4</b>		µg/l		20.0	117	70-130	6	20	
cis-1,2-Dichloroethene	<b>21.8</b>		µg/l		20.0	109	70-130	4	20	
trans-1,2-Dichloroethene	<b>22.0</b>		µg/l		20.0	110	70-130	6	20	
1,2-Dichloropropane	<b>20.2</b>		µg/l		20.0	101	70-130	3	20	
1,3-Dichloropropane	<b>21.0</b>		µg/l		20.0	105	70-130	1	20	
2,2-Dichloropropane	<b>24.9</b>		µg/l		20.0	125	70-130	11	20	
1,1-Dichloropropene	<b>19.8</b>		µg/l		20.0	99	70-130	9	20	
cis-1,3-Dichloropropene	<b>21.0</b>		µg/l		20.0	105	70-130	1	20	
trans-1,3-Dichloropropene	<b>22.3</b>		µg/l		20.0	112	70-130	3	20	
Ethylbenzene	<b>18.3</b>		µg/l		20.0	92	70-130	9	20	
Hexachlorobutadiene	<b>19.8</b>		µg/l		20.0	99	70-130	10	20	
2-Hexanone (MBK)	<b>21.8</b>		µg/l		20.0	109	70-130	5	20	
Isopropylbenzene	<b>20.6</b>		µg/l		20.0	103	70-130	11	20	
4-Isopropyltoluene	<b>17.9</b>		µg/l		20.0	89	70-130	8	20	
Methyl tert-butyl ether	<b>24.0</b>		µg/l		20.0	120	70-130	2	20	
4-Methyl-2-pentanone (MIBK)	<b>21.9</b>		µg/l		20.0	110	70-130	8	20	
Methylene chloride	<b>21.6</b>		µg/l		20.0	108	70-130	4	20	
Naphthalene	<b>18.5</b>		µg/l		20.0	92	70-130	1	20	
n-Propylbenzene	<b>18.2</b>		µg/l		20.0	91	70-130	8	20	
Styrene	<b>18.8</b>		µg/l		20.0	94	70-130	6	20	
1,1,1,2-Tetrachloroethane	<b>21.3</b>		µg/l		20.0	106	70-130	7	20	
1,1,2,2-Tetrachloroethane	<b>19.8</b>		µg/l		20.0	99	70-130	0.6	20	
Tetrachloroethene	<b>20.9</b>		µg/l		20.0	104	70-130	9	20	
Toluene	<b>21.0</b>		µg/l		20.0	105	70-130	7	20	
1,2,3-Trichlorobenzene	<b>20.0</b>		µg/l		20.0	100	70-130	4	20	
1,2,4-Trichlorobenzene	<b>19.1</b>		µg/l		20.0	95	70-130	5	20	
1,3,5-Trichlorobenzene	<b>19.2</b>		µg/l		20.0	96	70-130	10	20	
1,1,1-Trichloroethane	<b>21.0</b>		µg/l		20.0	105	70-130	9	20	
1,1,2-Trichloroethane	<b>21.4</b>		µg/l		20.0	107	70-130	2	20	
Trichloroethene	<b>21.3</b>		µg/l		20.0	106	70-130	8	20	
Trichlorofluoromethane (Freon 11)	<b>23.5</b>		µg/l		20.0	118	70-130	6	20	
1,2,3-Trichloropropane	<b>20.9</b>		µg/l		20.0	104	70-130	2	20	
1,2,4-Trimethylbenzene	<b>19.1</b>		µg/l		20.0	95	70-130	7	20	
1,3,5-Trimethylbenzene	<b>19.1</b>		µg/l		20.0	95	70-130	7	20	
Vinyl chloride	<b>22.6</b>		µg/l		20.0	113	70-130	2	20	
m,p-Xylene	<b>19.2</b>		µg/l		20.0	96	70-130	6	20	
o-Xylene	<b>19.3</b>		µg/l		20.0	96	70-130	7	20	
Tetrahydrofuran	<b>21.0</b>		µg/l		20.0	105	70-130	8	20	
Ethyl ether	<b>21.6</b>		µg/l		20.0	108	70-130	0.4	20	
Tert-amyl methyl ether	<b>20.6</b>		µg/l		20.0	103	70-130	3	20	
Ethyl tert-butyl ether	<b>24.2</b>		µg/l		20.0	121	70-130	0.7	20	
Di-isopropyl ether	<b>21.6</b>		µg/l		20.0	108	70-130	1	20	
Tert-Butanol / butyl alcohol	<b>246</b>		µg/l		200	123	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>LCS Dup (1808627-BSD1)</u>										
1,4-Dioxane	224		µg/l		200	112	70-130	16	20	
trans-1,4-Dichloro-2-butene	20.0		µg/l		20.0	100	70-130	2	20	
Ethanol	568	QM9	µg/l		400	142	70-130	15	20	
Surrogate: 4-Bromofluorobenzene	52.7		µg/l		50.0	105	70-130			
Surrogate: Toluene-d8	53.0		µg/l		50.0	106	70-130			
Surrogate: 1,2-Dichloroethane-d4	52.1		µg/l		50.0	104	70-130			
Surrogate: Dibromofluoromethane	54.5		µg/l		50.0	109	70-130			
<u>Matrix Spike (1808627-MS1)</u>										
					<u>Source: SC47714-06RE1</u>	<u>Prepared &amp; Analyzed: 21-Jun-18</u>				
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.0	D	µg/l		20.0	0.00	115	70-130		
Acetone	52.4	QM7, D	µg/l		20.0	0.00	262	70-130		
Acrylonitrile	19.0	D	µg/l		20.0	0.00	95	70-130		
Benzene	24.2	D	µg/l		20.0	2.62	108	70-130		
Bromobenzene	20.0	D	µg/l		20.0	0.00	100	70-130		
Bromochloromethane	21.7	D	µg/l		20.0	0.00	109	70-130		
Bromodichloromethane	21.4	D	µg/l		20.0	0.00	107	70-130		
Bromoform	19.4	D	µg/l		20.0	0.00	97	70-130		
Bromomethane	16.2	D	µg/l		20.0	0.00	81	70-130		
2-Butanone (MEK)	23.0	D	µg/l		20.0	0.00	115	70-130		
n-Butylbenzene	24.1	D	µg/l		20.0	3.76	102	70-130		
sec-Butylbenzene	20.7	D	µg/l		20.0	1.72	95	70-130		
tert-Butylbenzene	20.3	D	µg/l		20.0	0.62	98	70-130		
Carbon disulfide	19.6	D	µg/l		20.0	1.32	91	70-130		
Carbon tetrachloride	23.3	D	µg/l		20.0	0.00	116	70-130		
Chlorobenzene	18.5	D	µg/l		20.0	0.00	92	70-130		
Chloroethane	20.9	D	µg/l		20.0	0.00	105	70-130		
Chloroform	21.1	D	µg/l		20.0	0.31	104	70-130		
Chloromethane	17.8	D	µg/l		20.0	0.00	89	70-130		
2-Chlorotoluene	16.0	D	µg/l		20.0	0.00	80	70-130		
4-Chlorotoluene	21.8	D	µg/l		20.0	0.00	109	70-130		
1,2-Dibromo-3-chloropropane	18.3	D	µg/l		20.0	0.00	92	70-130		
Dibromochloromethane	22.6	D	µg/l		20.0	0.00	113	70-130		
1,2-Dibromoethane (EDB)	23.6	D	µg/l		20.0	0.00	118	70-130		
Dibromomethane	20.2	D	µg/l		20.0	0.00	101	70-130		
1,2-Dichlorobenzene	20.8	D	µg/l		20.0	0.00	104	70-130		
1,3-Dichlorobenzene	21.8	D	µg/l		20.0	0.00	109	70-130		
1,4-Dichlorobenzene	18.2	D	µg/l		20.0	0.00	91	70-130		
Dichlorodifluoromethane (Freon12)	19.6	D	µg/l		20.0	0.00	98	70-130		
1,1-Dichloroethane	21.6	D	µg/l		20.0	0.00	108	70-130		
1,2-Dichloroethane	21.3	D	µg/l		20.0	0.00	106	70-130		
1,1-Dichloroethene	23.0	D	µg/l		20.0	0.00	115	70-130		
cis-1,2-Dichloroethene	21.5	D	µg/l		20.0	0.00	108	70-130		
trans-1,2-Dichloroethene	22.0	D	µg/l		20.0	0.00	110	70-130		
1,2-Dichloropropane	19.9	D	µg/l		20.0	0.00	100	70-130		
1,3-Dichloropropane	20.8	D	µg/l		20.0	0.00	104	70-130		
2,2-Dichloropropane	23.5	D	µg/l		20.0	0.00	117	70-130		
1,1-Dichloropropene	20.7	D	µg/l		20.0	0.00	104	70-130		
cis-1,3-Dichloropropene	20.6	D	µg/l		20.0	0.00	103	70-130		
trans-1,3-Dichloropropene	21.7	D	µg/l		20.0	0.00	108	70-130		
Ethylbenzene	37.0	D	µg/l		20.0	17.1	100	70-130		
Hexachlorobutadiene	20.4	D	µg/l		20.0	0.00	102	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>Matrix Spike (1808627-MS1)</u>										
<u>Source: SC47714-06RE1      Prepared &amp; Analyzed: 21-Jun-18</u>										
2-Hexanone (MBK)	21.1	D	µg/l		20.0	0.00	105	70-130		
Isopropylbenzene	23.4	D	µg/l		20.0	2.32	105	70-130		
4-Isopropyltoluene	19.7	D	µg/l		20.0	0.97	94	70-130		
Methyl tert-butyl ether	20.8	D	µg/l		20.0	0.00	104	70-130		
4-Methyl-2-pentanone (MIBK)	20.8	D	µg/l		20.0	0.00	104	70-130		
Methylene chloride	21.1	D	µg/l		20.0	0.00	105	70-130		
Naphthalene	33.6	D	µg/l		20.0	10.2	117	70-130		
n-Propylbenzene	28.3	D	µg/l		20.0	5.74	113	70-130		
Styrene	19.9	D	µg/l		20.0	0.00	99	70-130		
1,1,1,2-Tetrachloroethane	20.1	D	µg/l		20.0	0.00	100	70-130		
1,1,2,2-Tetrachloroethane	18.8	D	µg/l		20.0	0.00	94	70-130		
Tetrachloroethene	22.8	D	µg/l		20.0	0.00	114	70-130		
Toluene	24.3	D	µg/l		20.0	2.71	108	70-130		
1,2,3-Trichlorobenzene	22.1	D	µg/l		20.0	0.00	110	70-130		
1,2,4-Trichlorobenzene	23.9	D	µg/l		20.0	0.00	119	70-130		
1,3,5-Trichlorobenzene	25.3	D	µg/l		20.0	0.00	127	70-130		
1,1,1-Trichloroethane	21.3	D	µg/l		20.0	0.00	106	70-130		
1,1,2-Trichloroethane	21.5	D	µg/l		20.0	0.00	107	70-130		
Trichloroethene	21.4	D	µg/l		20.0	0.00	107	70-130		
Trichlorofluoromethane (Freon 11)	23.2	D	µg/l		20.0	0.00	116	70-130		
1,2,3-Trichloropropane	19.0	D	µg/l		20.0	0.00	95	70-130		
1,2,4-Trimethylbenzene	75.5	D	µg/l		20.0	55.9	98	70-130		
1,3,5-Trimethylbenzene	37.3	D	µg/l		20.0	15.6	108	70-130		
Vinyl chloride	22.4	D	µg/l		20.0	0.00	112	70-130		
m,p-Xylene	55.6	D	µg/l		20.0	37.0	93	70-130		
o-Xylene	26.9	D	µg/l		20.0	6.31	103	70-130		
Tetrahydrofuran	16.9	D	µg/l		20.0	0.00	84	70-130		
Ethyl ether	20.4	D	µg/l		20.0	0.00	102	70-130		
Tert-amyl methyl ether	23.5	D	µg/l		20.0	0.00	117	70-130		
Ethyl tert-butyl ether	21.5	D	µg/l		20.0	0.00	108	70-130		
Di-isopropyl ether	20.6	D	µg/l		20.0	0.00	103	70-130		
Tert-Butanol / butyl alcohol	188	D	µg/l		200	0.00	94	70-130		
1,4-Dioxane	208	D	µg/l		200	0.00	104	70-130		
trans-1,4-Dichloro-2-butene	20.3	D	µg/l		20.0	0.00	102	70-130		
Ethanol	483	D	µg/l		400	0.00	121	70-130		
Surrogate: 4-Bromofluorobenzene	51.1		µg/l		50.0		102	70-130		
Surrogate: Toluene-d8	54.6		µg/l		50.0		109	70-130		
Surrogate: 1,2-Dichloroethane-d4	50.3		µg/l		50.0		101	70-130		
Surrogate: Dibromofluoromethane	56.2		µg/l		50.0		112	70-130		
<u>Matrix Spike Dup (1808627-MSD1)</u>										
<u>Source: SC47714-06RE1      Prepared &amp; Analyzed: 21-Jun-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.8	D	µg/l		20.0	0.00	119	70-130	3	20
Acetone	53.8	QM7, D	µg/l		20.0	0.00	269	70-130		
Acrylonitrile	20.2	D	µg/l		20.0	0.00	101	70-130	6	20
Benzene	25.1	D	µg/l		20.0	2.62	113	70-130	4	20
Bromobenzene	20.9	D	µg/l		20.0	0.00	104	70-130	4	20
Bromochloromethane	22.0	D	µg/l		20.0	0.00	110	70-130	1	20
Bromodichloromethane	20.4	D	µg/l		20.0	0.00	102	70-130	5	20
Bromoform	19.2	D	µg/l		20.0	0.00	96	70-130	1	20
Bromomethane	17.2	D	µg/l		20.0	0.00	86	70-130	6	20
2-Butanone (MEK)	22.1	D	µg/l		20.0	0.00	111	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>SW846 8260C</b>										
Batch 1808627 - SW846 5030 Water MS										
<b>Matrix Spike Dup (1808627-MSD1)</b>										
<b>Source: SC47714-06RE1      Prepared &amp; Analyzed: 21-Jun-18</b>										
n-Butylbenzene	25.6	D	µg/l		20.0	3.76	109	70-130	6	20
sec-Butylbenzene	22.2	D	µg/l		20.0	1.72	102	70-130	7	20
tert-Butylbenzene	22.1	D	µg/l		20.0	0.62	108	70-130	9	20
Carbon disulfide	22.0	D	µg/l		20.0	1.32	103	70-130	11	20
Carbon tetrachloride	23.7	D	µg/l		20.0	0.00	119	70-130	2	20
Chlorobenzene	19.6	D	µg/l		20.0	0.00	98	70-130	6	20
Chloroethane	21.8	D	µg/l		20.0	0.00	109	70-130	4	20
Chloroform	20.5	D	µg/l		20.0	0.31	101	70-130	3	20
Chloromethane	19.1	D	µg/l		20.0	0.00	96	70-130	7	20
2-Chlorotoluene	16.3	D	µg/l		20.0	0.00	82	70-130	2	20
4-Chlorotoluene	23.1	D	µg/l		20.0	0.00	116	70-130	6	20
1,2-Dibromo-3-chloropropane	18.4	D	µg/l		20.0	0.00	92	70-130	0.2	20
Dibromochloromethane	21.9	D	µg/l		20.0	0.00	109	70-130	3	20
1,2-Dibromoethane (EDB)	23.6	D	µg/l		20.0	0.00	118	70-130	0.2	20
Dibromomethane	21.2	D	µg/l		20.0	0.00	106	70-130	5	20
1,2-Dichlorobenzene	21.6	D	µg/l		20.0	0.00	108	70-130	4	20
1,3-Dichlorobenzene	22.4	D	µg/l		20.0	0.00	112	70-130	3	20
1,4-Dichlorobenzene	18.9	D	µg/l		20.0	0.00	95	70-130	4	20
Dichlorodifluoromethane (Freon12)	20.6	D	µg/l		20.0	0.00	103	70-130	5	20
1,1-Dichloroethane	21.7	D	µg/l		20.0	0.00	108	70-130	0.3	20
1,2-Dichloroethane	21.0	D	µg/l		20.0	0.00	105	70-130	1	20
1,1-Dichloroethene	24.3	D	µg/l		20.0	0.00	121	70-130	5	20
cis-1,2-Dichloroethene	22.1	D	µg/l		20.0	0.00	110	70-130	3	20
trans-1,2-Dichloroethene	22.4	D	µg/l		20.0	0.00	112	70-130	2	20
1,2-Dichloropropane	20.3	D	µg/l		20.0	0.00	101	70-130	2	20
1,3-Dichloropropane	21.3	D	µg/l		20.0	0.00	106	70-130	2	20
2,2-Dichloropropane	23.6	D	µg/l		20.0	0.00	118	70-130	0.5	20
1,1-Dichloropropene	22.1	D	µg/l		20.0	0.00	111	70-130	7	20
cis-1,3-Dichloropropene	21.6	D	µg/l		20.0	0.00	108	70-130	5	20
trans-1,3-Dichloropropene	22.6	D	µg/l		20.0	0.00	113	70-130	4	20
Ethylbenzene	39.8	D	µg/l		20.0	17.1	113	70-130	7	20
Hexachlorobutadiene	23.1	D	µg/l		20.0	0.00	115	70-130	12	20
2-Hexanone (MBK)	22.0	D	µg/l		20.0	0.00	110	70-130	4	20
Isopropylbenzene	25.0	D	µg/l		20.0	2.32	113	70-130	7	20
4-Isopropyltoluene	20.8	D	µg/l		20.0	0.97	99	70-130	6	20
Methyl tert-butyl ether	21.2	D	µg/l		20.0	0.00	106	70-130	2	20
4-Methyl-2-pentanone (MIBK)	21.2	D	µg/l		20.0	0.00	106	70-130	2	20
Methylene chloride	22.0	D	µg/l		20.0	0.00	110	70-130	4	20
Naphthalene	35.6	D	µg/l		20.0	10.2	127	70-130	6	20
n-Propylbenzene	30.3	D	µg/l		20.0	5.74	123	70-130	7	20
Styrene	20.8	D	µg/l		20.0	0.00	104	70-130	4	20
1,1,1,2-Tetrachloroethane	21.1	D	µg/l		20.0	0.00	106	70-130	5	20
1,1,2,2-Tetrachloroethane	18.8	D	µg/l		20.0	0.00	94	70-130	0.3	20
Tetrachloroethene	23.6	D	µg/l		20.0	0.00	118	70-130	3	20
Toluene	25.5	D	µg/l		20.0	2.71	114	70-130	5	20
1,2,3-Trichlorobenzene	23.2	D	µg/l		20.0	0.00	116	70-130	5	20
1,2,4-Trichlorobenzene	25.2	D	µg/l		20.0	0.00	126	70-130	5	20
1,3,5-Trichlorobenzene	26.2	QM7, D	µg/l		20.0	0.00	131	70-130	3	20
1,1,1-Trichloroethane	21.8	D	µg/l		20.0	0.00	109	70-130	2	20
1,1,2-Trichloroethane	21.5	D	µg/l		20.0	0.00	108	70-130	0.3	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>										
Batch 1808627 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1808627-MSD1)</u>										
Trichloroethene	22.6	D	µg/l		20.0	0.00	113	70-130	5	20
Trichlorofluoromethane (Freon 11)	24.1	D	µg/l		20.0	0.00	121	70-130	4	20
1,2,3-Trichloropropane	19.8	D	µg/l		20.0	0.00	99	70-130	4	20
1,2,4-Trimethylbenzene	78.4	D	µg/l		20.0	55.9	112	70-130	4	20
1,3,5-Trimethylbenzene	38.4	D	µg/l		20.0	15.6	114	70-130	3	20
Vinyl chloride	23.2	D	µg/l		20.0	0.00	116	70-130	3	20
m,p-Xylene	57.9	D	µg/l		20.0	37.0	105	70-130	4	20
o-Xylene	28.5	D	µg/l		20.0	6.31	111	70-130	6	20
Tetrahydrofuran	17.8	D	µg/l		20.0	0.00	89	70-130	5	20
Ethyl ether	21.3	D	µg/l		20.0	0.00	107	70-130	4	20
Tert-amyl methyl ether	23.5	D	µg/l		20.0	0.00	118	70-130	0.3	20
Ethyl tert-butyl ether	21.9	D	µg/l		20.0	0.00	110	70-130	2	20
Di-isopropyl ether	21.0	D	µg/l		20.0	0.00	105	70-130	2	20
Tert-Butanol / butyl alcohol	204	D	µg/l		200	0.00	102	70-130	8	20
1,4-Dioxane	224	D	µg/l		200	0.00	112	70-130	7	20
trans-1,4-Dichloro-2-butene	20.6	D	µg/l		20.0	0.00	103	70-130	1	20
Ethanol	500	D	µg/l		400	0.00	125	70-130	3	20
Surrogate: 4-Bromofluorobenzene	52.7		µg/l		50.0		105	70-130		
Surrogate: Toluene-d8	53.7		µg/l		50.0		107	70-130		
Surrogate: 1,2-Dichloroethane-d4	49.7		µg/l		50.0		99	70-130		
Surrogate: Dibromofluoromethane	52.3		µg/l		50.0		105	70-130		

### SW846 8260C TICs

Batch 1808472 - SW846 5030 Water MS

#### Blank (1808472-BLK1)

Tentatively Identified Compounds

**None found**

Prepared & Analyzed: 19-Jun-18

# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1808368 - SW846 3510C										
<u>Blank (1808368-BLK1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
Acenaphthene	< 4.85	U	µg/l	4.85						
Acenaphthylene	< 4.85	U	µg/l	4.85						
Aniline	< 4.85	U	µg/l	4.85						
Anthracene	< 4.85	U	µg/l	4.85						
Azobenzene/Diphenyldiazene	< 4.85	U	µg/l	4.85						
Benzidine	< 9.71	U	µg/l	9.71						
Benzo (a) anthracene	< 4.85	U	µg/l	4.85						
Benzo (a) pyrene	< 4.85	U	µg/l	4.85						
Benzo (b) fluoranthene	< 4.85	U	µg/l	4.85						
Benzo (g,h,i) perylene	< 4.85	U	µg/l	4.85						
Benzo (k) fluoranthene	< 4.85	U	µg/l	4.85						
Benzoic acid	< 4.85	U	µg/l	4.85						
Benzyl alcohol	< 4.85	U	µg/l	4.85						
Bis(2-chloroethoxy)methane	< 4.85	U	µg/l	4.85						
Bis(2-chloroethyl)ether	< 4.85	U	µg/l	4.85						
Bis(2-chloroisopropyl)ether	< 4.85	U	µg/l	4.85						
Bis(2-ethylhexyl)phthalate	< 4.85	U	µg/l	4.85						
4-Bromophenyl phenyl ether	< 4.85	U	µg/l	4.85						
Butyl benzyl phthalate	< 4.85	U	µg/l	4.85						
Carbazole	< 4.85	U	µg/l	4.85						
4-Chloro-3-methylphenol	< 4.85	U	µg/l	4.85						
4-Chloroaniline	< 4.85	U	µg/l	4.85						
2-Chloronaphthalene	< 4.85	U	µg/l	4.85						
2-Chlorophenol	< 4.85	U	µg/l	4.85						
4-Chlorophenyl phenyl ether	< 4.85	U	µg/l	4.85						
Chrysene	< 4.85	U	µg/l	4.85						
Dibenzo (a,h) anthracene	< 4.85	U	µg/l	4.85						
Dibenzofuran	< 4.85	U	µg/l	4.85						
1,2-Dichlorobenzene	< 4.85	U	µg/l	4.85						
1,3-Dichlorobenzene	< 4.85	U	µg/l	4.85						
1,4-Dichlorobenzene	< 4.85	U	µg/l	4.85						
3,3'-Dichlorobenzidine	< 4.85	U	µg/l	4.85						
2,4-Dichlorophenol	< 4.85	U	µg/l	4.85						
Diethyl phthalate	< 4.85	U	µg/l	4.85						
Dimethyl phthalate	< 4.85	U	µg/l	4.85						
2,4-Dimethylphenol	< 4.85	U	µg/l	4.85						
Di-n-butyl phthalate	< 4.85	U	µg/l	4.85						
4,6-Dinitro-2-methylphenol	< 4.85	U	µg/l	4.85						
2,4-Dinitrophenol	< 4.85	U	µg/l	4.85						
2,4-Dinitrotoluene	< 4.85	U	µg/l	4.85						
2,6-Dinitrotoluene	< 4.85	U	µg/l	4.85						
Di-n-octyl phthalate	< 4.85	U	µg/l	4.85						
Fluoranthene	< 4.85	U	µg/l	4.85						
Fluorene	< 4.85	U	µg/l	4.85						
Hexachlorobenzene	< 4.85	U	µg/l	4.85						
Hexachlorobutadiene	< 4.85	U	µg/l	4.85						
Hexachlorocyclopentadiene	< 4.85	U	µg/l	4.85						
Hexachloroethane	< 4.85	U	µg/l	4.85						
Indeno (1,2,3-cd) pyrene	< 4.85	U	µg/l	4.85						
Isophorone	< 4.85	U	µg/l	4.85						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1808368 - SW846 3510C										
<u>Blank (1808368-BLK1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
2-Methylnaphthalene	< 4.85	U	µg/l	4.85						
2-Methylphenol	< 4.85	U	µg/l	4.85						
3 & 4-Methylphenol	< 9.71	U	µg/l	9.71						
Naphthalene	< 4.85	U	µg/l	4.85						
2-Nitroaniline	< 4.85	U	µg/l	4.85						
3-Nitroaniline	< 4.85	U	µg/l	4.85						
4-Nitroaniline	< 4.85	U	µg/l	4.85						
Nitrobenzene	< 4.85	U	µg/l	4.85						
2-Nitrophenol	< 4.85	U	µg/l	4.85						
4-Nitrophenol	< 19.4	U	µg/l	19.4						
N-Nitrosodimethylamine	< 4.85	U	µg/l	4.85						
N-Nitrosodi-n-propylamine	< 4.85	U	µg/l	4.85						
N-Nitrosodiphenylamine	< 4.85	U	µg/l	4.85						
Pentachlorophenol	< 19.4	U	µg/l	19.4						
Phenanthrene	< 4.85	U	µg/l	4.85						
Phenol	< 4.85	U	µg/l	4.85						
Pyrene	< 4.85	U	µg/l	4.85						
Pyridine	< 4.85	U	µg/l	4.85						
1,2,4-Trichlorobenzene	< 4.85	U	µg/l	4.85						
1-Methylnaphthalene	< 4.85	U	µg/l	4.85						
2,4,5-Trichlorophenol	< 4.85	U	µg/l	4.85						
2,4,6-Trichlorophenol	< 4.85	U	µg/l	4.85						
Pentachloronitrobenzene	< 4.85	U	µg/l	4.85						
1,2,4,5-Tetrachlorobenzene	< 4.85	U	µg/l	4.85						
Surrogate: 2-Fluorobiphenyl	27.3		µg/l	48.5		56	30-130			
Surrogate: 2-Fluorophenol	22.3		µg/l	48.5		46	15-110			
Surrogate: Nitrobenzene-d5	26.6		µg/l	48.5		55	30-130			
Surrogate: Phenol-d5	13.5		µg/l	48.5		28	15-110			
Surrogate: Terphenyl-d4	32.0		µg/l	48.5		66	30-130			
Surrogate: 2,4,6-Tribromophenol	31.5		µg/l	48.5		65	15-110			
<u>LCS (1808368-BS1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
Acenaphthene	30.1		µg/l	4.90	49.0	61	40-140			
Acenaphthylene	28.2		µg/l	4.90	49.0	58	40-140			
Aniline	22.8		µg/l	4.90	49.0	47	40-140			
Anthracene	31.2		µg/l	4.90	49.0	64	40-140			
Azobenzene/Diphenyldiazene	30.5		µg/l	4.90	49.0	62	40-140			
Benzidine	24.6		µg/l	9.80	49.0	50	40-140			
Benzo (a) anthracene	30.8		µg/l	4.90	49.0	63	40-140			
Benzo (a) pyrene	30.4		µg/l	4.90	49.0	62	40-140			
Benzo (b) fluoranthene	29.3		µg/l	4.90	49.0	60	40-140			
Benzo (g,h,i) perylene	24.5		µg/l	4.90	49.0	50	40-140			
Benzo (k) fluoranthene	26.6		µg/l	4.90	49.0	54	40-140			
Benzoic acid	14.2	QC6	µg/l	4.90	49.0	29	30-130			
Benzyl alcohol	27.7		µg/l	4.90	49.0	57	40-140			
Bis(2-chloroethoxy)methane	22.7		µg/l	4.90	49.0	46	40-140			
Bis(2-chloroethyl)ether	21.3		µg/l	4.90	49.0	43	40-140			
Bis(2-chloroisopropyl)ether	24.9		µg/l	4.90	49.0	51	40-140			
Bis(2-ethylhexyl)phthalate	31.1		µg/l	4.90	49.0	64	40-140			
4-Bromophenyl phenyl ether	27.6		µg/l	4.90	49.0	56	40-140			
Butyl benzyl phthalate	31.5		µg/l	4.90	49.0	64	40-140			

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1808368 - SW846 3510C										
<u>LCS (1808368-BS1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
Carbazole	38.8		µg/l	4.90	49.0	79	40-140			
4-Chloro-3-methylphenol	31.7		µg/l	4.90	49.0	65	30-130			
4-Chloroaniline	30.9		µg/l	4.90	49.0	63	40-140			
2-Chloronaphthalene	35.3		µg/l	4.90	49.0	72	40-140			
2-Chlorophenol	26.9		µg/l	4.90	49.0	55	30-130			
4-Chlorophenyl phenyl ether	31.9		µg/l	4.90	49.0	65	40-140			
Chrysene	33.2		µg/l	4.90	49.0	68	40-140			
Dibenzo (a,h) anthracene	27.0		µg/l	4.90	49.0	55	40-140			
Dibenzofuran	34.2		µg/l	4.90	49.0	70	40-140			
1,2-Dichlorobenzene	29.3		µg/l	4.90	49.0	60	40-140			
1,3-Dichlorobenzene	28.3		µg/l	4.90	49.0	58	40-140			
1,4-Dichlorobenzene	29.5		µg/l	4.90	49.0	60	40-140			
3,3'-Dichlorobenzidine	39.5		µg/l	4.90	49.0	81	40-140			
2,4-Dichlorophenol	29.0		µg/l	4.90	49.0	59	30-130			
Diethyl phthalate	31.1		µg/l	4.90	49.0	64	40-140			
Dimethyl phthalate	28.0		µg/l	4.90	49.0	57	40-140			
2,4-Dimethylphenol	26.5		µg/l	4.90	49.0	54	30-130			
Di-n-butyl phthalate	28.6		µg/l	4.90	49.0	58	40-140			
4,6-Dinitro-2-methylphenol	26.8		µg/l	4.90	49.0	55	30-130			
2,4-Dinitrophenol	20.3		µg/l	4.90	49.0	41	30-130			
2,4-Dinitrotoluene	35.2		µg/l	4.90	49.0	72	40-140			
2,6-Dinitrotoluene	35.8		µg/l	4.90	49.0	73	40-140			
Di-n-octyl phthalate	28.4		µg/l	4.90	49.0	58	40-140			
Fluoranthene	30.2		µg/l	4.90	49.0	62	40-140			
Fluorene	27.6		µg/l	4.90	49.0	56	40-140			
Hexachlorobenzene	40.4		µg/l	4.90	49.0	82	40-140			
Hexachlorobutadiene	30.6		µg/l	4.90	49.0	62	40-140			
Hexachlorocyclopentadiene	41.8		µg/l	4.90	49.0	85	40-140			
Hexachloroethane	31.7		µg/l	4.90	49.0	65	40-140			
Indeno (1,2,3-cd) pyrene	25.1		µg/l	4.90	49.0	51	40-140			
Isophorone	29.7		µg/l	4.90	49.0	61	40-140			
2-Methylnaphthalene	34.0		µg/l	4.90	49.0	69	40-140			
2-Methylphenol	27.1		µg/l	4.90	49.0	55	30-130			
3 & 4-Methylphenol	24.3		µg/l	9.80	49.0	50	30-130			
Naphthalene	25.8		µg/l	4.90	49.0	53	40-140			
2-Nitroaniline	28.0		µg/l	4.90	49.0	57	40-140			
3-Nitroaniline	28.8		µg/l	4.90	49.0	59	40-140			
4-Nitroaniline	38.4		µg/l	4.90	49.0	78	40-140			
Nitrobenzene	46.8		µg/l	4.90	49.0	96	40-140			
2-Nitrophenol	28.0		µg/l	4.90	49.0	57	30-130			
4-Nitrophenol	14.8	J	µg/l	19.6	49.0	30	30-130			
N-Nitrosodimethylamine	18.7	QC6	µg/l	4.90	49.0	38	40-140			
N-Nitrosodi-n-propylamine	28.4		µg/l	4.90	49.0	58	40-140			
N-Nitrosodiphenylamine	32.9		µg/l	4.90	49.0	67	40-140			
Pentachlorophenol	18.1	J	µg/l	19.6	49.0	37	30-130			
Phenanthrene	32.5		µg/l	4.90	49.0	66	40-140			
Phenol	12.1	QC6	µg/l	4.90	49.0	25	30-130			
Pyrene	32.8		µg/l	4.90	49.0	67	40-140			
Pyridine	15.7	QC6	µg/l	4.90	49.0	32	40-140			
1,2,4-Trichlorobenzene	32.6		µg/l	4.90	49.0	66	40-140			

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1808368 - SW846 3510C										
<u>LCS (1808368-BS1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
1-Methylnaphthalene	28.0		µg/l	4.90	49.0		57	40-140		
2,4,5-Trichlorophenol	29.8		µg/l	4.90	49.0		61	30-130		
2,4,6-Trichlorophenol	31.5		µg/l	4.90	49.0		64	30-130		
Pentachloronitrobenzene	36.3		µg/l	4.90	49.0		74	40-140		
1,2,4,5-Tetrachlorobenzene	27.7		µg/l	4.90	49.0		57	40-140		
<i>Surrogate: 2-Fluorobiphenyl</i>	24.0		µg/l		49.0		49	30-130		
<i>Surrogate: 2-Fluorophenol</i>	17.7		µg/l		49.0		36	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	29.6		µg/l		49.0		60	30-130		
<i>Surrogate: Phenol-d5</i>	15.2		µg/l		49.0		31	15-110		
<i>Surrogate: Terphenyl-d14</i>	30.4		µg/l		49.0		62	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	33.5		µg/l		49.0		68	15-110		
<u>LCS Dup (1808368-BSD1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
Acenaphthene	34.1		µg/l	4.76	47.6		72	40-140	13	20
Acenaphthylene	33.4		µg/l	4.76	47.6		70	40-140	17	20
Aniline	23.9		µg/l	4.76	47.6		50	40-140	5	20
Anthracene	32.2		µg/l	4.76	47.6		68	40-140	3	20
Azobenzene/Diphenyldiazene	35.4		µg/l	4.76	47.6		74	40-140	15	20
Benzidine	26.8		µg/l	9.52	47.6		56	40-140	9	20
Benzo (a) anthracene	35.3		µg/l	4.76	47.6		74	40-140	14	20
Benzo (a) pyrene	35.1		µg/l	4.76	47.6		74	40-140	14	20
Benzo (b) fluoranthene	34.9		µg/l	4.76	47.6		73	40-140	17	20
Benzo (g,h,i) perylene	38.0	QR9	µg/l	4.76	47.6		80	40-140	43	20
Benzo (k) fluoranthene	37.2	QR9	µg/l	4.76	47.6		78	40-140	33	20
Benzoic acid	16.2		µg/l	4.76	47.6		34	30-130	13	20
Benzyl alcohol	30.9		µg/l	4.76	47.6		65	40-140	11	20
Bis(2-chloroethoxy)methane	25.3		µg/l	4.76	47.6		53	40-140	11	20
Bis(2-chloroethyl)ether	25.7		µg/l	4.76	47.6		54	40-140	19	20
Bis(2-chloroisopropyl)ether	27.3		µg/l	4.76	47.6		57	40-140	9	20
Bis(2-ethylhexyl)phthalate	33.4		µg/l	4.76	47.6		70	40-140	7	20
4-Bromophenyl phenyl ether	33.2		µg/l	4.76	47.6		70	40-140	18	20
Butyl benzyl phthalate	31.0		µg/l	4.76	47.6		65	40-140	2	20
Carbazole	43.6		µg/l	4.76	47.6		92	40-140	12	20
4-Chloro-3-methylphenol	35.6		µg/l	4.76	47.6		75	30-130	12	20
4-Chloroaniline	35.7		µg/l	4.76	47.6		75	40-140	14	20
2-Chloronaphthalene	41.2		µg/l	4.76	47.6		86	40-140	15	20
2-Chlorophenol	30.0		µg/l	4.76	47.6		63	30-130	11	20
4-Chlorophenyl phenyl ether	33.8		µg/l	4.76	47.6		71	40-140	6	20
Chrysene	34.9		µg/l	4.76	47.6		73	40-140	5	20
Dibenzo (a,h) anthracene	36.7	QR9	µg/l	4.76	47.6		77	40-140	30	20
Dibenzofuran	36.1		µg/l	4.76	47.6		76	40-140	6	20
1,2-Dichlorobenzene	32.6		µg/l	4.76	47.6		68	40-140	10	20
1,3-Dichlorobenzene	31.2		µg/l	4.76	47.6		66	40-140	10	20
1,4-Dichlorobenzene	32.7		µg/l	4.76	47.6		69	40-140	11	20
3,3'-Dichlorobenzidine	42.9		µg/l	4.76	47.6		90	40-140	8	20
2,4-Dichlorophenol	33.3		µg/l	4.76	47.6		70	30-130	14	20
Diethyl phthalate	33.7		µg/l	4.76	47.6		71	40-140	8	20
Dimethyl phthalate	33.2		µg/l	4.76	47.6		70	40-140	17	20
2,4-Dimethylphenol	30.5		µg/l	4.76	47.6		64	30-130	14	20
Di-n-butyl phthalate	34.5		µg/l	4.76	47.6		72	40-140	19	20
4,6-Dinitro-2-methylphenol	29.2		µg/l	4.76	47.6		61	30-130	9	20

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW846 8270D</u></b>										
Batch 1808368 - SW846 3510C										
<u>LCS Dup (1808368-BSD1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
2,4-Dinitrophenol	20.3		µg/l	4.76	47.6	43	30-130	0.001		20
2,4-Dinitrotoluene	37.2		µg/l	4.76	47.6	78	40-140	6		20
2,6-Dinitrotoluene	40.0		µg/l	4.76	47.6	84	40-140	11		20
Di-n-octyl phthalate	38.0	QR9	µg/l	4.76	47.6	80	40-140	29		20
Fluoranthene	34.1		µg/l	4.76	47.6	72	40-140	12		20
Fluorene	29.8		µg/l	4.76	47.6	63	40-140	8		20
Hexachlorobenzene	43.4		µg/l	4.76	47.6	91	40-140	7		20
Hexachlorobutadiene	35.5		µg/l	4.76	47.6	74	40-140	15		20
Hexachlorocyclopentadiene	50.0		µg/l	4.76	47.6	105	40-140	18		20
Hexachloroethane	35.0		µg/l	4.76	47.6	74	40-140	10		20
Indeno (1,2,3-cd) pyrene	35.1	QR9	µg/l	4.76	47.6	74	40-140	33		20
Isophorone	31.3		µg/l	4.76	47.6	66	40-140	5		20
2-Methylnaphthalene	38.9		µg/l	4.76	47.6	82	40-140	13		20
2-Methylphenol	30.0		µg/l	4.76	47.6	63	30-130	10		20
3 & 4-Methylphenol	27.2		µg/l	9.52	47.6	57	30-130	11		20
Naphthalene	29.6		µg/l	4.76	47.6	62	40-140	14		20
2-Nitroaniline	32.7		µg/l	4.76	47.6	69	40-140	15		20
3-Nitroaniline	30.7		µg/l	4.76	47.6	65	40-140	7		20
4-Nitroaniline	40.0		µg/l	4.76	47.6	84	40-140	4		20
Nitrobenzene	48.0		µg/l	4.76	47.6	101	40-140	2		20
2-Nitrophenol	29.4		µg/l	4.76	47.6	62	30-130	5		20
4-Nitrophenol	15.8	J	µg/l	19.0	47.6	33	30-130	7		20
N-Nitrosodimethylamine	21.2		µg/l	4.76	47.6	44	40-140	12		20
N-Nitrosodi-n-propylamine	31.3		µg/l	4.76	47.6	66	40-140	10		20
N-Nitrosodiphenylamine	38.5		µg/l	4.76	47.6	81	40-140	16		20
Pentachlorophenol	22.4	QR9	µg/l	19.0	47.6	47	30-130	21		20
Phenanthrene	33.8		µg/l	4.76	47.6	71	40-140	4		20
Phenol	13.3	QC6	µg/l	4.76	47.6	28	30-130	9		20
Pyrene	30.4		µg/l	4.76	47.6	64	40-140	8		20
Pyridine	17.1	QC6	µg/l	4.76	47.6	36	40-140	9		20
1,2,4-Trichlorobenzene	37.3		µg/l	4.76	47.6	78	40-140	14		20
1-Methylnaphthalene	32.5		µg/l	4.76	47.6	68	40-140	15		20
2,4,5-Trichlorophenol	35.3		µg/l	4.76	47.6	74	30-130	17		20
2,4,6-Trichlorophenol	36.9		µg/l	4.76	47.6	77	30-130	16		20
Pentachloronitrobenzene	41.6		µg/l	4.76	47.6	87	40-140	14		20
1,2,4,5-Tetrachlorobenzene	33.6		µg/l	4.76	47.6	71	40-140	19		20
Surrogate: 2-Fluorobiphenyl	28.3		µg/l		47.6	59	30-130			
Surrogate: 2-Fluorophenol	19.3		µg/l		47.6	40	15-110			
Surrogate: Nitrobenzene-d5	30.8		µg/l		47.6	65	30-130			
Surrogate: Phenol-d5	16.9		µg/l		47.6	35	15-110			
Surrogate: Terphenyl-d14	29.9		µg/l		47.6	63	30-130			
Surrogate: 2,4,6-Tribromophenol	37.8		µg/l		47.6	79	15-110			
<b><u>SW846 8270D TICS</u></b>										
Batch 1808368 - SW846 3510C										
<u>Blank (1808368-BLK1)</u>										
<u>Prepared: 18-Jun-18 Analyzed: 21-Jun-18</u>										
5-Eicosene, (E)-	16	J N	µg/l							
n-Hexadecanoic Acid	15	J N	µg/l							

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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>										
Batch 1808547 - SW846 3005A										
<u>Blank (1808547-BLK1)</u>										
Potassium	< 0.500	U	mg/l	0.500						
Sodium	< 0.750	U	mg/l	0.750						
Vanadium	< 0.0050	U	mg/l	0.0050						
Zinc	< 0.0250	U	mg/l	0.0250						
Thallium	< 0.0050	U	mg/l	0.0050						
Selenium	< 0.0150	U	mg/l	0.0150						
Antimony	< 0.0060	U	mg/l	0.0060						
Nickel	< 0.0050	U	mg/l	0.0050						
Magnesium	< 0.0200	U	mg/l	0.0200						
Chromium	< 0.0050	U	mg/l	0.0050						
Cobalt	< 0.0050	U	mg/l	0.0050						
Cadmium	< 0.0025	U	mg/l	0.0025						
Beryllium	< 0.0020	U	mg/l	0.0020						
Barium	< 0.0050	U	mg/l	0.0050						
Copper	< 0.0050	U	mg/l	0.0050						
Arsenic	< 0.00400	U	mg/l	0.00400						
Aluminum	< 0.0250	U	mg/l	0.0250						
Silver	< 0.0050	U	mg/l	0.0050						
<u>Blank (1808547-BLK2)</u>										
Iron	< 0.125	U	mg/l	0.125						
Lead	< 0.0075	U	mg/l	0.0075						
Calcium	< 0.100	U	mg/l	0.100						
<u>Blank (1808547-BLK3)</u>										
Manganese	< 0.125	U	mg/l	0.125						
<u>LCS (1808547-BS1)</u>										
Potassium	<b>12.5</b>		mg/l	0.500	12.5		100	85-115		
Sodium	<b>6.14</b>		mg/l	0.750	6.25		98	85-115		
Beryllium	<b>1.40</b>		mg/l	0.0020	1.25		112	85-115		
Silver	<b>1.28</b>		mg/l	0.0050	1.25		103	85-115		
Aluminum	<b>1.29</b>		mg/l	0.0250	1.25		103	85-115		
Cadmium	<b>1.32</b>		mg/l	0.0025	1.25		106	85-115		
Cobalt	<b>1.28</b>		mg/l	0.0050	1.25		102	85-115		
Chromium	<b>1.28</b>		mg/l	0.0050	1.25		102	85-115		
Barium	<b>1.32</b>		mg/l	0.0050	1.25		106	85-115		
Copper	<b>1.36</b>		mg/l	0.0050	1.25		109	85-115		
Arsenic	<b>1.307</b>		mg/l	0.00400	1.25		105	85-115		
Magnesium	<b>1.30</b>		mg/l	0.0200	1.25		104	85-115		
Nickel	<b>1.31</b>		mg/l	0.0050	1.25		105	85-115		
Antimony	<b>1.31</b>		mg/l	0.0060	1.25		105	85-115		
Selenium	<b>1.35</b>		mg/l	0.0150	1.25		108	85-115		
Thallium	<b>1.33</b>		mg/l	0.0050	1.25		107	85-115		
Vanadium	<b>1.21</b>		mg/l	0.0050	1.25		97	85-115		
Zinc	<b>1.28</b>		mg/l	0.0250	1.25		103	85-115		
<u>LCS (1808547-BS2)</u>										
Iron	<b>1.32</b>		mg/l	0.125	1.25		106	85-115		
Lead	<b>1.35</b>		mg/l	0.0075	1.25		108	85-115		
Calcium	<b>6.27</b>		mg/l	0.100	6.25		100	85-115		
<u>LCS (1808547-BS3)</u>										
Manganese	<b>1.26</b>		mg/l	0.125	1.25		101	85-115		
<u>LCS Dup (1808547-BS1)</u>										
<i>This laboratory report is not valid without an authorized signature on the cover page.</i>										

**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>										
Batch 1808547 - SW846 3005A										
<u>LCS Dup (1808547-BSD1)</u>										
Potassium	12.8		mg/l	0.500	12.5	102	85-115	3	20	
Sodium	6.29		mg/l	0.750	6.25	101	85-115	2	20	
Magnesium	1.33		mg/l	0.0200	1.25	106	85-115	2	20	
Aluminum	1.30		mg/l	0.0250	1.25	104	85-115	0.7	20	
Arsenic	1.326		mg/l	0.00400	1.25	106	85-115	1	20	
Vanadium	1.25		mg/l	0.0050	1.25	100	85-115	3	20	
Thallium	1.37		mg/l	0.0050	1.25	109	85-115	2	20	
Selenium	1.37		mg/l	0.0150	1.25	110	85-115	1	20	
Antimony	1.32		mg/l	0.0060	1.25	106	85-115	1	20	
Barium	1.35		mg/l	0.0050	1.25	108	85-115	2	20	
Nickel	1.34		mg/l	0.0050	1.25	108	85-115	2	20	
Silver	1.32		mg/l	0.0050	1.25	106	85-115	3	20	
Copper	1.39		mg/l	0.0050	1.25	111	85-115	2	20	
Chromium	1.32		mg/l	0.0050	1.25	106	85-115	3	20	
Cobalt	1.31		mg/l	0.0050	1.25	105	85-115	2	20	
Cadmium	1.36		mg/l	0.0025	1.25	109	85-115	3	20	
Beryllium	1.45	QC2	mg/l	0.0020	1.25	116	85-115	3	20	
Zinc	1.33		mg/l	0.0250	1.25	107	85-115	4	20	
<u>LCS Dup (1808547-BSD2)</u>										
Iron	1.37		mg/l	0.125	1.25	109	85-115	3	20	
Calcium	6.48		mg/l	0.100	6.25	104	85-115	3	20	
Lead	1.40		mg/l	0.0075	1.25	112	85-115	4	20	
<u>LCS Dup (1808547-BSD3)</u>										
Manganese	1.31		mg/l	0.125	1.25	105	85-115	4	20	
<u>Duplicate (1808547-DUP1)</u>										
Potassium	9.48		mg/l	0.500		9.38		1	20	
Arsenic	0.0038	J	mg/l	0.00400		0.0046		17	20	
Zinc	0.0294		mg/l	0.0250		0.0329		11	20	
Vanadium	0.0075		mg/l	0.0050		0.0070		7	20	
Selenium	< 0.0150	U	mg/l	0.0150		BRL			20	
Antimony	0.0016	J	mg/l	0.0060		0.0024			20	
Nickel	0.0037	J	mg/l	0.0050		0.0040		8	20	
Magnesium	24.8		mg/l	0.0200		25.2		1	20	
Copper	0.0120		mg/l	0.0050		0.0124		3	20	
Chromium	0.0057		mg/l	0.0050		0.0055		4	20	
Cobalt	0.0022	J	mg/l	0.0050		0.0023		4	20	
Cadmium	0.0005	J	mg/l	0.0025		0.0005		2	20	
Barium	0.339		mg/l	0.0050		0.342		1	20	
Aluminum	3.69		mg/l	0.0250		3.31		11	20	
Silver	< 0.0050	U	mg/l	0.0050		BRL			20	
Beryllium	< 0.0020	U	mg/l	0.0020		BRL			20	
<u>Duplicate (1808547-DUP2)</u>										
Iron	3.30		mg/l	0.125		3.13		5	20	
Sodium	1710	D	mg/l	15.0		1660		3	20	
Calcium	188		mg/l	0.100		181		4	20	
Lead	0.0093		mg/l	0.0075		0.0092		0.5	20	
<u>Duplicate (1808547-DUP3)</u>										
Manganese	0.107	R05, R06, J, D	mg/l	0.625		0.108		0.7	20	
Thallium	0.0105	J, D	mg/l	0.0250		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>SW846 6010C</b>										
Batch 1808547 - SW846 3005A										
<u>Matrix Spike (1808547-MS1)</u>										
Sodium	148		mg/l	0.750	6.25	141	112	75-125		
Potassium	19.9		mg/l	0.500	12.5	5.88	112	75-125		
Zinc	1.29		mg/l	0.0250	1.25	0.0033	103	75-125		
Vanadium	1.26		mg/l	0.0050	1.25	BRL	101	70-130		
Thallium	1.35		mg/l	0.0050	1.25	BRL	108	75-125		
Selenium	1.49		mg/l	0.0150	1.25	BRL	119	75-125		
Antimony	1.44		mg/l	0.0060	1.25	BRL	115	75-125		
Magnesium	44.9		mg/l	0.0200	1.25	43.4	121	75-125		
Aluminum	1.45		mg/l	0.0250	1.25	BRL	116	75-125		
Nickel	1.28		mg/l	0.0050	1.25	BRL	102	75-125		
Silver	1.45		mg/l	0.0050	1.25	BRL	116	75-125		
Copper	1.47		mg/l	0.0050	1.25	BRL	118	75-125		
Arsenic	1.486		mg/l	0.00400	1.25	0.0150	118	75-125		
Barium	3.26		mg/l	0.0050	1.25	1.87	111	75-125		
Beryllium	1.47		mg/l	0.0020	1.25	BRL	117	75-125		
Cadmium	1.33		mg/l	0.0025	1.25	BRL	107	75-125		
Cobalt	1.26		mg/l	0.0050	1.25	BRL	101	75-125		
Chromium	1.29		mg/l	0.0050	1.25	BRL	103	75-125		
<u>Matrix Spike (1808547-MS2)</u>										
Manganese	1.74	D	mg/l	0.625	1.25	0.441	104	75-125		
Iron	2.97		mg/l	0.125	1.25	1.66	105	75-125		
Lead	1.31		mg/l	0.0075	1.25	0.0168	104	75-125		
Calcium	273	QM2, D	mg/l	0.500	6.25	262	168	75-125		
<u>Matrix Spike Dup (1808547-MSD1)</u>										
Potassium	20.3		mg/l	0.500	12.5	5.88	115	75-125	2	20
Sodium	152	QM2	mg/l	0.750	6.25	141	178	75-125	3	20
Selenium	1.52		mg/l	0.0150	1.25	BRL	122	75-125	3	20
Cadmium	1.37		mg/l	0.0025	1.25	BRL	110	75-125	3	20
Zinc	1.33		mg/l	0.0250	1.25	0.0033	106	75-125	3	20
Vanadium	1.30		mg/l	0.0050	1.25	BRL	104	70-130	3	20
Thallium	1.38		mg/l	0.0050	1.25	BRL	110	75-125	2	20
Antimony	1.47		mg/l	0.0060	1.25	BRL	118	75-125	2	20
Magnesium	45.7	QM2	mg/l	0.0200	1.25	43.4	188	75-125	2	20
Copper	1.50		mg/l	0.0050	1.25	BRL	120	75-125	2	20
Nickel	1.32		mg/l	0.0050	1.25	BRL	105	75-125	3	20
Cobalt	1.30		mg/l	0.0050	1.25	BRL	104	75-125	3	20
Beryllium	1.50		mg/l	0.0020	1.25	BRL	120	75-125	2	20
Barium	3.33		mg/l	0.0050	1.25	1.87	117	75-125	2	20
Arsenic	1.525		mg/l	0.00400	1.25	0.0150	121	75-125	3	20
Aluminum	1.49		mg/l	0.0250	1.25	BRL	119	75-125	3	20
Silver	1.48		mg/l	0.0050	1.25	BRL	118	75-125	2	20
Chromium	1.33		mg/l	0.0050	1.25	BRL	106	75-125	3	20
<u>Matrix Spike Dup (1808547-MSD2)</u>										
Iron	2.77		mg/l	0.125	1.25	1.66	89	75-125	7	20
Manganese	1.73	D	mg/l	0.625	1.25	0.441	103	75-125	0.3	20
Lead	1.24		mg/l	0.0075	1.25	0.0168	98	75-125	6	20
Calcium	275	QM2, D	mg/l	0.500	6.25	262	204	75-125	0.8	20

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### 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>EPA 245.1/7470A</b>										
Batch 1808550 - EPA200/SW7000 Series										
<u>Blank (1808550-BLK1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020						
<u>LCS (1808550-BS1)</u>										
Mercury	<b>0.00454</b>		mg/l	0.00020	0.00500	91	85-115			
<u>Duplicate (1808550-DUP1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020		BRL				20
<u>Matrix Spike (1808550-MS1)</u>										
Mercury	<b>0.00486</b>		mg/l	0.00020	0.00500	BRL	97	80-120		
<u>Matrix Spike Dup (1808550-MSD1)</u>										
Mercury	<b>0.00484</b>		mg/l	0.00020	0.00500	BRL	97	80-120	0.5	20
<u>Post Spike (1808550-PS1)</u>										
Mercury	<b>0.00503</b>		mg/l	0.00020	0.00500	BRL	101	85-115		

## 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
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).
J N	(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.
NonTRG TIC	Non-target concentration sufficient to be reported as one of the highest TICs.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall 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.
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.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R01	The Reporting Limit has been raised to account for matrix interference.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.
R06	MRL raised to correlate to batch QC reporting limits.
SBN	Base/Neutral surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
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.



**FedEx® Express Package US Airbill**

**1 From** Date 10/13/18 FedEx Tracking Number **8120 9570 7889**

Sender's Name Drew Brantner Phone 315 432-9400  
 Company AECC

Address 6308 Fly Road Dept./Floor/Suite/Room  
 City East Syracuse State NY ZIP 13057

**2 Your Internal Billing Reference** 18-051

**3 To** Recipient's Name Sample Receiving Phone 413 789-9018  
 Company Eurofins / Spectrum Analytical

Address 11 Almgren Dr Dept./Floor/Suite/Room  
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address Use this line for the HOLD location address or for continuation of your shipping address.  
 City Agawam State MA ZIP 01001

**Hold Weekday**  
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

**Hold Saturday**  
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

**Barcode**  
 8120 9570 7889

**Form ID No.** **0200** *1424/14* **Recipient's Copy**

**4 Express Package Service** \* To most locations. **Packages up to 150 lbs.**  
 For packages over 150 lbs., use the FedEx Express Freight US Airbill.

**Next Business Day**

FedEx First Overnight  
Earliest next business morning delivery to select location. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Priority Overnight  
Next business morning.\* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Standard Overnight  
Next business afternoon.\* Saturday Delivery NOT available.

**2 or 3 Business Days**

FedEx 2Day A.M.  
Second business morning.\* Saturday Delivery NOT available.

FedEx 2Day  
Second business afternoon.\* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.

FedEx Express Saver  
Third business day.\* Saturday Delivery NOT available.

**5 Packaging** \* Declared value limit \$500.

FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other

**6 Special Handling and Delivery Signature Options** Fees may apply. See the FedEx Service Guide.

Saturday Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required  
Package may be left without obtaining a signature for delivery.

Direct Signature  
Someone at recipient's address may sign for delivery. If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

**Does this shipment contain dangerous goods?**  
One box must be checked.

No  Yes As per attached Shipper's Declaration.  Yes Shipper's Declaration not required.  Dry Ice Dry Icc, 9, UN 1845  Cargo Aircraft Only

Restrictions apply for dangerous goods — see the current FedEx Service Guide.

**7 Payment Bill to:** Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Sender Acct. No. in Section I will be billed  Recipient  Third Party  Credit Card  Cash/Check

Total Packages **1** Total Weight **95** lbs. Credit Card Auth. **b44**

\*Our liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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## Batch Summary

### 1808348

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

SC47714-01 (MW-5 (2018-06-13))  
SC47714-02 (MW-7 (2018-06-13))  
SC47714-03 (MW-8 (2018-06-13))  
SC47714-04 (MW-9 (2018-06-13))  
SC47714-06 (MW-D (2018-06-13))

SC47714-02 (MW-7 (2018-06-13))  
SC47714-03 (MW-8 (2018-06-13))  
SC47714-04 (MW-9 (2018-06-13))  
SC47714-06 (MW-D (2018-06-13))

### 1808368

#### Semivolatile Organic Compounds by GCMS

1808368-BLK1  
1808368-BS1  
1808368-BSD1  
SC47714-01 (MW-5 (2018-06-13))  
SC47714-02 (MW-7 (2018-06-13))  
SC47714-03 (MW-8 (2018-06-13))  
SC47714-04 (MW-9 (2018-06-13))  
SC47714-06 (MW-D (2018-06-13))

### 1808550

#### Total Metals by EPA 200 Series Methods

1808550-BLK1  
1808550-BS1  
1808550-DUP1  
1808550-MS1  
1808550-MSD1  
1808550-PS1  
SC47714-01 (MW-5 (2018-06-13))  
SC47714-02 (MW-7 (2018-06-13))  
SC47714-03 (MW-8 (2018-06-13))  
SC47714-04 (MW-9 (2018-06-13))  
SC47714-06 (MW-D (2018-06-13))

### 1808472

#### Volatile Organic Compounds

1808472-BLK1  
1808472-BS1  
1808472-BSD1  
1808472-MS1  
1808472-MSD1  
SC47714-01 (MW-5 (2018-06-13))  
SC47714-02 (MW-7 (2018-06-13))  
SC47714-03 (MW-8 (2018-06-13))  
SC47714-04 (MW-9 (2018-06-13))  
SC47714-05 (Trip Blank (2018-06))  
SC47714-06 (MW-D (2018-06-13))

### 1808627

#### Volatile Organic Compounds

1808627-BLK1  
1808627-BS1  
1808627-BSD1  
1808627-MS1  
1808627-MSD1  
SC47714-06RE1 (MW-D (2018-06-13))

### S818863

#### Semivolatile Organic Compounds by GCMS

S818863-CAL1  
S818863-CAL2  
S818863-CAL3  
S818863-CAL4  
S818863-CAL5  
S818863-CAL6  
S818863-CAL7  
S818863-CAL8  
S818863-CAL9  
S818863-CALA  
S818863-ICV1  
S818863-LCV1  
S818863-LCV2  
S818863-TUN1

### 1808547

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

1808547-BLK1  
1808547-BLK2  
1808547-BLK3  
1808547-BS1  
1808547-BS2  
1808547-BS3  
1808547-BSD1  
1808547-BSD2  
1808547-BSD3  
1808547-DUP1  
1808547-DUP2  
1808547-DUP3  
1808547-MS1  
1808547-MS2  
1808547-MSD1  
1808547-MSD2  
SC47714-01 (MW-5 (2018-06-13))

**S819667***Volatile Organic Compounds*

S819667-CAL1  
S819667-CAL2  
S819667-CAL3  
S819667-CAL4  
S819667-CAL5  
S819667-CAL6  
S819667-CAL7  
S819667-CAL8  
S819667-CAL9  
S819667-ICV1  
S819667-LCV1  
S819667-LCV2  
S819667-TUN1

**S820051***Volatile Organic Compounds*

S820051-CAL1  
S820051-CAL2  
S820051-CAL3  
S820051-CAL4  
S820051-CAL5  
S820051-CAL6  
S820051-CAL7  
S820051-CAL8  
S820051-CAL9  
S820051-ICV1  
S820051-LCV1  
S820051-LCV2  
S820051-TUN1  
S820051-TUN2

**S820210***Volatile Organic Compounds*

S820210-CCV1  
S820210-TUN1

**S820269***Volatile Organic Compounds*

S820269-CCV1  
S820269-TUN1

**S820321***Semivolatile Organic Compounds by GCMS*

S820321-CCV1  
S820321-TUN1

**S820397***Semivolatile Organic Compounds by GCMS*

S820397-CCV1  
S820397-TUN1

Report Date:  
25-Sep-18 17:34**Laboratory Report**  
**SC50148**

AECC Environmental Consulting  
6308 Fly Road  
East Syracuse, NY 13057  
Attn: Rich McKenna

Project: 700 Out Parcel - Syracuse, NY

Project #: 18-051

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

A handwritten signature in black ink that reads "Dawn E. Wojcik".

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 84 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.

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*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:** SC50148  
**Project:** 700 Out Parcel - Syracuse, NY  
**Project Number:** 18-051

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SC50148-01	MW-05	Ground Water	06-Sep-18 12:20	08-Sep-18 11:00
SC50148-02	MW-07	Ground Water	06-Sep-18 10:53	08-Sep-18 11:00
SC50148-03	MW-08	Ground Water	07-Sep-18 12:58	08-Sep-18 11:00
SC50148-04	MW-09	Ground Water	07-Sep-18 12:30	08-Sep-18 11:00
SC50148-05	MW-D	Ground Water	07-Sep-18 00:00	08-Sep-18 11:00
SC50148-06	Trip Blank	Aqueous	07-Sep-18 00:00	08-Sep-18 11:00

## 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 2.1 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.**

## **SW846 6010C**

### **Laboratory Control Samples:**

1812528 BS/BSD

---

Beryllium percent recoveries (117/109) are outside individual acceptance criteria (85-115), but within overall method allowances.

All reported results of the following samples are considered to have a potentially high bias:

MW-05  
MW-07  
MW-08  
MW-09  
MW-D

### **Spikes:**

1812528-MS2              *Source: SC50148-03*

---

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.

Calcium  
Magnesium

1812528-MSD2              *Source: SC50148-03*

---

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.

Calcium  
Magnesium  
Sodium

1812528-PS2              *Source: SC50148-03*

---

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  
Sodium

1812528-PS3              *Source: SC50148-03*

---

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.

Iron

### **Duplicates:**

## **SW846 6010C**

### **Duplicates:**

1812528-DUP1      *Source: SC50148-03*

---

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.

Arsenic

1812528-DUP2      *Source: SC50148-03*

---

MRL raised to correlate to batch QC reporting limits.

Magnesium

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

Calcium

Sodium

1812528-DUP3      *Source: SC50148-03*

---

MRL raised to correlate to batch QC reporting limits.

Iron

### **Samples:**

SC50148-01      *MW-05*

---

MRL raised to correlate to batch QC reporting limits.

Iron

Magnesium

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

Sodium

SC50148-02      *MW-07*

---

MRL raised to correlate to batch QC reporting limits.

Iron

Magnesium

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

Calcium

Magnesium

Sodium

SC50148-03      *MW-08*

---

MRL raised to correlate to batch QC reporting limits.

Iron

Magnesium

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

Calcium

Sodium

SC50148-04      *MW-09*

---

MRL raised to correlate to batch QC reporting limits.

Iron

Magnesium

## **SW846 6010C**

### **Samples:**

SC50148-04                  *MW-09*

---

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

Sodium

SC50148-05                  *MW-D*

---

MRL raised to correlate to batch QC reporting limits.

Iron

Magnesium

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

Sodium

## **SW846 8260C**

### **Calibration:**

1807003

---

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene

1,2,4-Trichlorobenzene

1,2-Dibromo-3-chloropropane

1,3,5-Trichlorobenzene

1,3,5-Trimethylbenzene

2-Hexanone (MBK)

Bromoform

Carbon disulfide

Carbon tetrachloride

cis-1,3-Dichloropropene

Dibromochloromethane

Naphthalene

n-Butylbenzene

trans-1,3-Dichloropropene

trans-1,4-Dichloro-2-butene

Vinyl chloride

This affected the following samples:

1812693-BLK1

1812693-BS1

1812693-BSD1

1812693-MS1

1812693-MSD1

1812696-BLK1

1812696-BS1

1812696-BSD1

MW-05

MW-07

MW-08

MW-09

MW-D

S820548-ICV1

S822171-CCV1

S822172-CCV1

Trip Blank

### **Laboratory Control Samples:**

---

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## **SW846 8260C**

### **Laboratory Control Samples:**

#### 1812693 BS/BSD

1,1-Dichloroethene percent recoveries (149/110) 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:

MW-05  
MW-07  
MW-08

Acetone percent recoveries (139/127) 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:

MW-05  
MW-07  
MW-08

Bromomethane percent recoveries (186/171) 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:

MW-05  
MW-07  
MW-08

Chloroethane percent recoveries (136/138) 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:

MW-05  
MW-07  
MW-08

Vinyl chloride percent recoveries (194/177) 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:

MW-05  
MW-07  
MW-08

#### 1812693 BSD

1,1-Dichloroethene RPD 30% (20%) is outside individual acceptance criteria.

#### 1812696 BS/BSD

1,1-Dichloroethene percent recoveries (108/149) 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:

MW-09  
MW-D  
Trip Blank

Bromomethane percent recoveries (125/137) 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:

MW-09  
MW-D  
Trip Blank

Chloroethane percent recoveries (133/133) 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:

MW-09  
MW-D  
Trip Blank

## **SW846 8260C**

### **Laboratory Control Samples:**

#### **1812696 BS/BSD**

Vinyl chloride percent recoveries (207/188) 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:

MW-09

MW-D

Trip Blank

#### **1812696 BSD**

1,1-Dichloroethene RPD 32% (20%) is outside individual acceptance criteria.

### **Spikes:**

#### **1812693-MS1      Source: SC50148-03**

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

1,2,3-Trichlorobenzene

1,2,4-Trichlorobenzene

1,2,4-Trimethylbenzene

1,3,5-Trichlorobenzene

4-Chlorotoluene

Dichlorodifluoromethane (Freon12)

m,p-Xylene

Naphthalene

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.

1,2,4-Trimethylbenzene

#### **1812693-MSD1      Source: SC50148-03**

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

1,2,3-Trichlorobenzene

1,2,4-Trichlorobenzene

1,2,4-Trimethylbenzene

1,3,5-Trichlorobenzene

Dichlorodifluoromethane (Freon12)

Naphthalene

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.

1,2,4-Trimethylbenzene

### **Samples:**

#### **S822171-CCV1**

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

Chloroethane (30.0%)

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

Bromomethane (84.0%)

Ethanol (20.6%)

Vinyl chloride (79.7%)

## **SW846 8260C**

### **Samples:**

S822171-CCV1

---

This affected the following samples:

1812693-BLK1  
1812693-BS1  
1812693-BSD1  
1812693-MS1  
1812693-MSD1  
MW-05  
MW-07  
MW-08

S822172-CCV1

---

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

1,1,2,2-Tetrachloroethane (23.1%)  
1,1-Dichloroethene (45.6%)  
Chloroethane (35.0%)  
Chloromethane (24.0%)

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

Ethanol (30.5%)  
Vinyl chloride (55.5%)

This affected the following samples:

1812696-BLK1  
1812696-BS1  
1812696-BSD1  
MW-09  
MW-D  
Trip Blank

SC50148-03                  MW-08

---

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

## **SW846 8260C TICs**

### **Samples:**

SC50148-01                  MW-05

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Phenyl-1-Butene  
Benzene, 1-ethyl-2,4-dimethyl-  
Butane, 2,3-dimethyl-  
Butane, 2-methyl-  
Cyclopentane, 1,1-dimethyl-  
Cyclopentane, methyl-  
Cyclopentene, 1,5-dimethyl-  
Isopropylcyclobutane  
Pentane, 2-methyl-  
Pentane, 3-methyl-

SC50148-03                  MW-08

---

## **SW846 8260C TICs**

### **Samples:**

SC50148-03                  *MW-08*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Phenyl-1-Butene  
Benzene, 1-ethyl-2,4-dimethyl-  
Benzene, 1-ethyl-2-methyl-  
Benzene, 1-ethyl-4-methyl-  
Butane, 2-methyl-  
Cyclopentane, methyl-  
Indan, 1-methyl-  
Indane  
Pentane, 2-methyl-

SC50148-04                  *MW-09*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Phenyl-1-Butene  
Benzene, 1,3-diethyl-  
Butane, 2,3-dimethyl-  
Cyclohexane, 1,2-dimethyl-  
Isopropylcyclobutane

SC50148-05                  *MW-D*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Phenyl-1-Butene  
Benzene, 1,2,4,5-tetramethyl-  
Benzene, 1,3-diethyl-  
Butane, 2,3-dimethyl-  
Cyclohexane, 1,1-dimethyl-  
Cyclohexane, 1,3-dimethyl-...  
Cyclopentane, 1,1-dimethyl-  
Cyclopentane, 1,2-dimethyl-  
Cyclopentene, 1,2,3-trimethyl-

## **SW846 8270D**

### **Calibration:**

1808015

---

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol  
3-Nitroaniline  
4,6-Dinitro-2-methylphenol  
Aniline  
Benzidine  
Benzoic acid  
Carbazole  
Hexachlorocyclopentadiene

## **SW846 8270D**

### **Calibration:**

1808015

---

This affected the following samples:

1812395-BLK1  
1812395-BS1  
1812395-BSD1  
1812441-BLK1  
1812441-BS1  
1812441-BSD1  
1812441-MS1  
1812441-MSD1  
MW-05  
MW-07  
MW-08  
MW-09  
MW-D  
S821565-ICV1  
S822130-CCV1  
S822148-CCV1  
S822214-CCV1

### **Laboratory Control Samples:**

1812395 BS/BSD

---

Benzidine percent recoveries (193/183) are outside individual acceptance criteria (40-140), but within overall method allowances.  
All reported results of the following samples are considered to have a potentially high bias:

MW-05  
MW-07

Benzoic acid percent recoveries (28/29) are outside individual acceptance criteria (30-130), but within overall method allowances.  
All reported results of the following samples are considered to have a potentially low bias:

MW-05  
MW-07

Benzyl alcohol percent recoveries (31/53) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-05  
MW-07

Phenol percent recoveries (28/28) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-05  
MW-07

Pyridine percent recoveries (48/38) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-05  
MW-07

1812395 BSD

---

4,6-Dinitro-2-methylphenol RPD 24% (20%) is outside individual acceptance criteria.

Azobenzene/Diphenyldiazene RPD 21% (20%) is outside individual acceptance criteria.

## **SW846 8270D**

### **Laboratory Control Samples:**

1812395 BSD

---

Benzyl alcohol RPD 52% (20%) is outside individual acceptance criteria.

Dimethyl phthalate RPD 21% (20%) is outside individual acceptance criteria.

Fluoranthene RPD 22% (20%) is outside individual acceptance criteria.

N-Nitrosodiphenylamine RPD 24% (20%) is outside individual acceptance criteria.

Pentachlorophenol RPD 24% (20%) is outside individual acceptance criteria.

Pyridine RPD 24% (20%) is outside individual acceptance criteria.

1812395-BS1

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Benzoic acid

Benzyl alcohol

Phenol

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.

Benzidine

1812395-BSD1

---

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Benzoic acid

Phenol

Pyridine

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

4,6-Dinitro-2-methylphenol

Azobenzene/Diphenyldiazene

Benzyl alcohol

Dimethyl phthalate

Fluoranthene

N-Nitrosodiphenylamine

Pentachlorophenol

Pyridine

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.

Benzidine

1812441 BS/BSD

---

1,2-Dichlorobenzene percent recoveries (36/31) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08

MW-09

MW-D

## **SW846 8270D**

### **Laboratory Control Samples:**

1812441 BS/BSD

---

1,3-Dichlorobenzene percent recoveries (28/25) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

1,4-Dichlorobenzene percent recoveries (31/27) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

4-Nitrophenol percent recoveries (27/24) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Aniline percent recoveries (32/29) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Benzidine percent recoveries (184/162) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-08  
MW-09  
MW-D

Benzoic acid percent recoveries (20/16) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Benzyl alcohol percent recoveries (23/17) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Bis(2-chloroethoxy)methane percent recoveries (43/36) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Bis(2-chloroethyl)ether percent recoveries (35/31) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

## **SW846 8270D**

### **Laboratory Control Samples:**

1812441 BS/BSD

---

Bis(2-chloroisopropyl)ether percent recoveries (44/38) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Hexachlorobutadiene percent recoveries (41/36) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Hexachloroethane percent recoveries (33/29) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

N-Nitrosodimethylamine percent recoveries (15/13) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Pentachlorophenol percent recoveries (31/26) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Phenol percent recoveries (22/19) are outside individual acceptance criteria (30-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

Pyridine percent recoveries (11/10) are outside individual acceptance criteria (40-140), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-08  
MW-09  
MW-D

1812441 BSD

---

Benzoic acid RPD 22% (20%) is outside individual acceptance criteria.

Benzyl alcohol RPD 28% (20%) is outside individual acceptance criteria.

1812441-BS1

---

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.

Benzidine

## **SW846 8270D**

### **Laboratory Control Samples:**

1812441-BSD1

---

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.

Benzidine

### **Spikes:**

1812441-MS1                  *Source: SC50148-03*

---

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

4-Nitrophenol  
Aniline  
Benzidine  
N-Nitrosodimethylamine  
Phenol

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

2,4-Dinitrophenol  
4,6-Dinitro-2-methylphenol  
4-Chloroaniline  
Hexachlorocyclopentadiene

1812441-MSD1                  *Source: SC50148-03*

---

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

4-Nitrophenol  
Aniline  
Benzidine  
Benzoic acid  
Hexachlorocyclopentadiene  
N-Nitrosodimethylamine  
Phenol

RPD out of acceptance range.

Benzoic acid

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Hexachloroethane

### **Samples:**

S822130-CCV1

---

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

Benzo (b) fluoranthene (25.7%)  
Benzyl alcohol (-40.5%)  
Bis(2-chloroethyl)ether (28.9%)  
Bis(2-chloroisopropyl)ether (25.4%)

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

Benzidine (22.1%)

## **SW846 8270D**

### **Samples:**

S822130-CCV1

---

This affected the following samples:

1812441-BLK1  
1812441-BS1  
1812441-BSD1

S822148-CCV1

---

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

Benzo (b) fluoranthene (25.7%)  
Benzyl alcohol (-40.5%)  
Bis(2-chloroethyl)ether (28.9%)  
Bis(2-chloroisopropyl)ether (25.4%)

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

Benzidine (22.1%)

This affected the following samples:

1812395-BLK1  
1812395-BS1  
1812395-BSD1  
MW-05  
MW-07

S822214-CCV1

---

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

Aniline (27.5%)

This affected the following samples:

1812441-MS1  
1812441-MSD1  
MW-08  
MW-09  
MW-D

## **SW846 8270D TICS**

### **Samples:**

SC50148-01                  MW-05

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Docosene  
Benzene, 1,2,4,5-tetramethyl-  
Benzene, 2-ethenyl-1,4-dime...

SC50148-03                  MW-08

---

## **SW846 8270D TICS**

### **Samples:**

SC50148-03                  *MW-08*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1H-Indene, 2,3-dihydro-4,7-...  
1H-Indene, 2,3-dihydro-5-me...  
Benzene, 1,2,3,4-tetramethyl-  
Benzene, 1,2,3-trimethyl- (02)  
Benzene, 1,2,4,5-tetramethyl-  
Benzene, 1,2,4-trimethyl-  
Benzene, 1,3-dimethyl-  
Benzene, 1-ethyl-2-methyl-  
Benzene, 1-methyl-4-propyl-  
Benzene, 2-ethenyl-1,4-dime...  
Benzene, 4-ethyl-1,2-dimethyl- (02)  
Benzoic acid, 2,4-dichloro-  
Cyclic octaatomic sulfur  
Cyclobutane, (1-methylethyl...  
Ethylbenzene  
Indane  
o-Xylene

SC50148-04                  *MW-09*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

1-Heptadecanol  
Benzene, 1,3-diethyl-  
Benzoic acid, 2,4-dichloro-

SC50148-05                  *MW-D*

---

(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.

Benzene, 1,3-diethyl-  
E-14-Hexadecenal

## Sample Acceptance Check Form

Client: AECC Environmental Consulting  
Project: 700 Out Parcel - Syracuse, NY / 18-051  
Work Order: SC50148  
Sample(s) received on: 9/8/2018

***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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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:** SC50148-01

**Client ID:** MW-05

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.866		0.0250	mg/l	SW846 6010C
Arsenic	0.00250	J	0.00400	mg/l	SW846 6010C
Barium	0.616		0.0050	mg/l	SW846 6010C
Calcium	188		0.100	mg/l	SW846 6010C
Chromium	0.0021	J	0.0050	mg/l	SW846 6010C
Cobalt	0.0015	J	0.0050	mg/l	SW846 6010C
Copper	0.0068		0.0050	mg/l	SW846 6010C
Iron	2.11	R06	1.00	mg/l	SW846 6010C
Magnesium	21.5	R06	5.00	mg/l	SW846 6010C
Manganese	0.180		0.0040	mg/l	SW846 6010C
Nickel	0.0027	J	0.0050	mg/l	SW846 6010C
Potassium	12.1		0.500	mg/l	SW846 6010C
Sodium	2180		GS1, D15.0	mg/l	SW846 6010C
Vanadium	0.0037	J	0.0050	mg/l	SW846 6010C
Zinc	0.0136	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	0.95	J	1.00	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	0.62	J	1.00	µg/l	SW846 8260C
4-Isopropyltoluene	0.72	J	1.00	µg/l	SW846 8260C
Isopropylbenzene	4.64		1.00	µg/l	SW846 8260C
m,p-Xylene	1.08	J	2.00	µg/l	SW846 8260C
n-Butylbenzene	2.27		1.00	µg/l	SW846 8260C
n-Propylbenzene	8.93		1.00	µg/l	SW846 8260C
sec-Butylbenzene	1.87		1.00	µg/l	SW846 8260C
tert-Butylbenzene	0.33	J	1.00	µg/l	SW846 8260C
Toluene	0.66	J	1.00	µg/l	SW846 8260C
Di-n-octyl phthalate	5.45		4.95	µg/l	SW846 8270D

**Lab ID:** SC50148-02

**Client ID:** MW-07

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.506		0.0250	mg/l	SW846 6010C
Arsenic	0.01460		0.00400	mg/l	SW846 6010C
Barium	0.234		0.0050	mg/l	SW846 6010C
Calcium	337		GS1, D1.00	mg/l	SW846 6010C
Chromium	0.0014	J	0.0050	mg/l	SW846 6010C
Cobalt	0.0010	J	0.0050	mg/l	SW846 6010C
Iron	3.57	R06	1.00	mg/l	SW846 6010C
Magnesium	71.9		GS1, R50.0	mg/l	SW846 6010C
Manganese	0.0773		0.0040	mg/l	SW846 6010C
Nickel	0.0020	J	0.0050	mg/l	SW846 6010C
Potassium	5.55		0.500	mg/l	SW846 6010C
Sodium	1350		GS1, D7.50	mg/l	SW846 6010C
Zinc	0.0106	J	0.0250	mg/l	SW846 6010C

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Lab ID: SC50148-03

Client ID: MW-08

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.0150	J	0.0250	mg/l	SW846 6010C
Arsenic	0.00375	J	0.00400	mg/l	SW846 6010C
Barium	0.800		0.0050	mg/l	SW846 6010C
Calcium	256		GS1, D0.500	mg/l	SW846 6010C
Iron	5.04	R06	1.00	mg/l	SW846 6010C
Lead	0.0122		0.0075	mg/l	SW846 6010C
Magnesium	33.4	R06	5.00	mg/l	SW846 6010C
Manganese	0.591		0.0040	mg/l	SW846 6010C
Potassium	9.14		0.500	mg/l	SW846 6010C
Sodium	371		GS1, D3.75	mg/l	SW846 6010C
Zinc	0.0032	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	922	D	10.0	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	195	D	10.0	µg/l	SW846 8260C
4-Isopropyltoluene	10.3	D	10.0	µg/l	SW846 8260C
Benzene	34.2	D	10.0	µg/l	SW846 8260C
Ethylbenzene	352	D	10.0	µg/l	SW846 8260C
Isopropylbenzene	41.2	D	10.0	µg/l	SW846 8260C
m,p-Xylene	629	D	20.0	µg/l	SW846 8260C
Naphthalene	164	D	20.0	µg/l	SW846 8260C
n-Butylbenzene	24.6	D	10.0	µg/l	SW846 8260C
n-Propylbenzene	74.9	D	10.0	µg/l	SW846 8260C
o-Xylene	84.6	D	10.0	µg/l	SW846 8260C
sec-Butylbenzene	8.10	J, D	10.0	µg/l	SW846 8260C
Toluene	49.4	D	10.0	µg/l	SW846 8260C
1-Methylnaphthalene	15.0		4.76	µg/l	SW846 8270D
2-Methylnaphthalene	11.2		4.76	µg/l	SW846 8270D
Bis(2-ethylhexyl)phthalate	2.67	J	4.76	µg/l	SW846 8270D
Naphthalene	38.1		4.76	µg/l	SW846 8270D

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Lab ID: SC50148-04

Client ID: MW-09

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.870		0.0250	mg/l	SW846 6010C
Arsenic	0.00300	J	0.00400	mg/l	SW846 6010C
Barium	0.604		0.0050	mg/l	SW846 6010C
Cadmium	0.0004	J	0.0025	mg/l	SW846 6010C
Calcium	182		0.100	mg/l	SW846 6010C
Chromium	0.0022	J	0.0050	mg/l	SW846 6010C
Cobalt	0.0008	J	0.0050	mg/l	SW846 6010C
Copper	0.0029	J	0.0050	mg/l	SW846 6010C
Iron	5.50	R06	1.00	mg/l	SW846 6010C
Magnesium	25.4	R06	5.00	mg/l	SW846 6010C
Manganese	0.337		0.0040	mg/l	SW846 6010C
Nickel	0.0018	J	0.0050	mg/l	SW846 6010C
Potassium	10.9		0.500	mg/l	SW846 6010C
Sodium	557	GS1, D3.75		mg/l	SW846 6010C
Vanadium	0.0028	J	0.0050	mg/l	SW846 6010C
Zinc	0.0071	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	0.69	J	1.00	µg/l	SW846 8260C
4-Isopropyltoluene	0.82	J	1.00	µg/l	SW846 8260C
Acetone	5.01	J	10.0	µg/l	SW846 8260C
Isopropylbenzene	1.13		1.00	µg/l	SW846 8260C
n-Butylbenzene	1.62		1.00	µg/l	SW846 8260C
n-Propylbenzene	1.43		1.00	µg/l	SW846 8260C
sec-Butylbenzene	0.75	J	1.00	µg/l	SW846 8260C
tert-Butylbenzene	0.61	J	1.00	µg/l	SW846 8260C
Bis(2-ethylhexyl)phthalate	4.21	J	4.72	µg/l	SW846 8270D

Lab ID: SC50148-05

Client ID: MW-D

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Aluminum	0.742		0.0250	mg/l	SW846 6010C
Barium	0.544		0.0050	mg/l	SW846 6010C
Calcium	187		0.100	mg/l	SW846 6010C
Chromium	0.0020	J	0.0050	mg/l	SW846 6010C
Cobalt	0.0008	J	0.0050	mg/l	SW846 6010C
Copper	0.0028	J	0.0050	mg/l	SW846 6010C
Iron	5.52	R06	1.00	mg/l	SW846 6010C
Magnesium	26.4	R06	5.00	mg/l	SW846 6010C
Manganese	0.302		0.0040	mg/l	SW846 6010C
Nickel	0.0014	J	0.0050	mg/l	SW846 6010C
Potassium	9.78		0.500	mg/l	SW846 6010C
Sodium	581		GS1, D3.75	mg/l	SW846 6010C
Vanadium	0.0022	J	0.0050	mg/l	SW846 6010C
Zinc	0.0077	J	0.0250	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	0.68	J	1.00	µg/l	SW846 8260C
4-Isopropyltoluene	0.81	J	1.00	µg/l	SW846 8260C
Chloromethane	0.50	J	2.00	µg/l	SW846 8260C
Isopropylbenzene	1.56		1.00	µg/l	SW846 8260C
n-Butylbenzene	1.82		1.00	µg/l	SW846 8260C
n-Propylbenzene	2.04		1.00	µg/l	SW846 8260C
sec-Butylbenzene	1.12		1.00	µg/l	SW846 8260C
tert-Butylbenzene	0.60	J	1.00	µg/l	SW846 8260C
Bis(2-ethylhexyl)phthalate	2.67	J	4.72	µg/l	SW846 8270D

Lab ID: SC50148-06

Client ID: Trip Blank

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Chloromethane	0.70	J	2.00	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

MW-05

SC50148-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 12:20

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	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	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	2.27		µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	1.87		µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	0.33	J	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-05

SC50148-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 12:20

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	4.64		µg/l	1.00	0.30	1	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X
99-87-6	4-Isopropyltoluene	0.72	J	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	8.93		µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	0.66	J	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	0.95	J	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	0.62	J	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	1.08	J	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	89			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	96			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	96			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
824-90-8	1-Phenyl-1-Butene	12	J N	µg/l			1	SW846 8260C TICs	"	"	MP	"	
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	18	J N	µg/l			1	"	"	"	"	"	

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Sample Identification**MW-05**

SC50148-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 12:20

Received

08-Sep-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>Tentatively Identified Compounds by GC/MS</u>													
79-29-8	Butane, 2,3-dimethyl-	35	J N	µg/l			1	SW846 8260C TICs	19-Sep-18	19-Sep-18	MP	1812693	
78-78-4	Butane, 2-methyl-	31	J N	µg/l			1	"	"	"	"	"	
001638-26-2	Cyclopentane, 1,1-dimethyl-	14	J N	µg/l			1	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	19	J N	µg/l			1	"	"	"	"	"	
016491-15-9	Cyclopentene, 1,5-dimethyl-	13	J N	µg/l			1	"	"	"	"	"	
872-56-0	Isopropylcyclobutane	23	J N	µg/l			1	"	"	"	"	"	
107-83-5	Pentane, 2-methyl-	42	J N	µg/l			1	"	"	"	"	"	
96-14-0	Pentane, 3-methyl-	32	J N	µg/l			1	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.95	U	µg/l	4.95	1.08	1	SW846 8270D	12-Sep-18	17-Sep-18	MSL	1812395	X
208-96-8	Acenaphthylene	< 4.95	U	µg/l	4.95	1.14	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.95	U	µg/l	4.95	0.489	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.95	U	µg/l	4.95	1.16	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.95	U	µg/l	4.95	0.957	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.90	U	µg/l	9.90	4.52	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.95	U	µg/l	4.95	0.860	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.95	U	µg/l	4.95	0.711	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.95	U	µg/l	4.95	0.662	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.95	U	µg/l	4.95	0.693	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.95	U	µg/l	4.95	0.972	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.95	U	µg/l	4.95	1.72	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.95	U	µg/l	4.95	1.04	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.95	U	µg/l	4.95	0.865	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.95	U	µg/l	4.95	1.10	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.95	U	µg/l	4.95	1.00	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.95	U	µg/l	4.95	0.717	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.95	U	µg/l	4.95	0.928	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.95	U	µg/l	4.95	0.462	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.95	U	µg/l	4.95	1.54	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.95	U	µg/l	4.95	0.825	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.95	U	µg/l	4.95	1.16	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.95	U	µg/l	4.95	1.34	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.95	U	µg/l	4.95	1.10	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.95	U	µg/l	4.95	0.493	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.95	U	µg/l	4.95	0.927	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.95	U	µg/l	4.95	0.671	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.95	U	µg/l	4.95	1.21	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.95	U	µg/l	4.95	1.68	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.95	U	µg/l	4.95	1.56	1	"	"	"	"	"	X

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Sample Identification

MW-05

SC50148-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 12:20

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
106-46-7	1,4-Dichlorobenzene	< 4.95	U	µg/l	4.95	1.50	1	SW846 8270D	12-Sep-18	17-Sep-18	MSL	1812395	X
91-94-1	3,3'-Dichlorobenzidine	< 4.95	U	µg/l	4.95	0.839	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.95	U	µg/l	4.95	0.931	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.95	U	µg/l	4.95	1.79	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.95	U	µg/l	4.95	1.72	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.95	U	µg/l	4.95	1.05	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.95	U	µg/l	4.95	0.615	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.95	U	µg/l	4.95	1.07	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.95	U	µg/l	4.95	1.20	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.95	U	µg/l	4.95	1.18	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.95	U	µg/l	4.95	1.24	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	5.45		µg/l	4.95	1.25	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.95	U	µg/l	4.95	1.01	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.95	U	µg/l	4.95	0.963	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.95	U	µg/l	4.95	1.33	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.95	U	µg/l	4.95	1.50	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.95	U	µg/l	4.95	1.24	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.95	U	µg/l	4.95	1.65	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.95	U	µg/l	4.95	0.575	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.95	U	µg/l	4.95	0.809	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.95	U	µg/l	4.95	1.63	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.95	U	µg/l	4.95	1.05	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.90	U	µg/l	9.90	1.12	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.95	U	µg/l	4.95	1.35	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.95	U	µg/l	4.95	0.497	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.95	U	µg/l	4.95	0.630	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.95	U	µg/l	4.95	0.623	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.95	U	µg/l	4.95	1.28	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.95	U	µg/l	4.95	0.710	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 19.8	U	µg/l	19.8	0.771	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.95	U	µg/l	4.95	0.593	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.95	U	µg/l	4.95	1.02	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.95	U	µg/l	4.95	1.00	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.8	U	µg/l	19.8	0.769	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.95	U	µg/l	4.95	1.16	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.95	U	µg/l	4.95	1.24	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.95	U	µg/l	4.95	0.978	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.95	U	µg/l	4.95	0.403	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.95	U	µg/l	4.95	1.55	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.95	U	µg/l	4.95	1.17	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 4.95	U	µg/l	4.95	0.773	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.95	U	µg/l	4.95	0.692	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.95	U	µg/l	4.95	0.795	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.95	U	µg/l	4.95	1.09	1	"	"	"	"	"	X

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Sample Identification**MW-05**

SC50148-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 12:20

Received

08-Sep-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>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	59			30-130 %			SW846 8270D	12-Sep-18	17-Sep-18	MSL	1812395	
367-12-4	2-Fluorophenol	48			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	63			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	34			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-dl4	94			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	64			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
001599-67-3	1-Docosene	5.6	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
95-93-2	Benzene, 1,2,4,5-tetramethyl-	4.0	J N	µg/l			1	"	"	"	"	"	
002039-89-6	Benzene, 2-ethenyl-1,4-dime...	4.9	J N	µg/l			1	"	"	"	"	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	10-Sep-18		KT	1812341	
<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	17-Sep-18	19-Sep-18	SC/ED	1812528	X
7429-90-5	Aluminum	0.866		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	0.616		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	188		mg/l	0.100	0.0071	1	"	"	21-Sep-18	"	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	19-Sep-18	"	"	X
7440-48-4	Cobalt	0.0015	J	mg/l	0.0050	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	0.0021	J	mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0068		mg/l	0.0050	0.0023	1	"	"	25-Sep-18	"	"	X
7439-89-6	Iron	2.11	R06	mg/l	1.00	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	12.1		mg/l	0.500	0.0600	1	"	"	19-Sep-18	"	"	X
7439-95-4	Magnesium	21.5	R06	mg/l	5.00	0.0044	1	"	"	21-Sep-18	"	"	X
7439-96-5	Manganese	0.180		mg/l	0.0040	0.0019	1	"	"	19-Sep-18	"	"	X
7440-23-5	Sodium	2,180	GS1, D	mg/l	15.0	0.785	20	"	"	21-Sep-18	"	"	X
7440-02-0	Nickel	0.0027	J	mg/l	0.0050	0.0009	1	"	"	19-Sep-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	0.0037	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0136	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	17-Sep-18	18-Sep-18	ABW	1812530	X

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Sample Identification

MW-07

SC50148-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 10:53

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-07

SC50148-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 10:53

Received

08-Sep-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>															
<b>Volatile Organic Compounds by SW846 8260</b>															
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.30	1	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X		
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X		
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X		
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X		
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X		
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X		
103-65-1	n-Propylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X		
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X		
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X		
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X		
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X		
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X		
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"			
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X		
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X		
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X		
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X		
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X		
95-63-6	1,2,4-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.62	1	"	"	"	"	"	X		
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X		
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X		
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X		
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X		
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"			
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X		
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X		
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X		
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X		
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X		
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X		
<i>Surrogate recoveries:</i>															
460-00-4	4-Bromofluorobenzene	91			70-130 %			"	"	"	"	"			
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"			
17060-07-0	1,2-Dichloroethane-d4	95			70-130 %			"	"	"	"	"			
1868-53-7	Dibromofluoromethane	96			70-130 %			"	"	"	"	"			
<b>Tentatively Identified Compounds by GC/MS</b>															
Tentatively Identified Compounds		None found		µg/l			1	SW846 8260C TICs	"	"	MP	"			
<b>Semivolatile Organic Compounds by GCMS</b>															
<b>Semivolatile Organic Compounds</b>															

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Sample Identification

MW-07

SC50148-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 10:53

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<b>Prepared by method SW846 3510C</b>													
83-32-9	Acenaphthene	< 4.67	U	µg/l	4.67	1.02	1	SW846 8270D	12-Sep-18	17-Sep-18	MSL	1812395	X
208-96-8	Acenaphthylene	< 4.67	U	µg/l	4.67	1.07	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.67	U	µg/l	4.67	0.462	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.67	U	µg/l	4.67	1.09	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.67	U	µg/l	4.67	0.904	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.35	U	µg/l	9.35	4.27	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.67	U	µg/l	4.67	0.812	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.67	U	µg/l	4.67	0.671	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.67	U	µg/l	4.67	0.625	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.67	U	µg/l	4.67	0.654	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.67	U	µg/l	4.67	0.918	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.67	U	µg/l	4.67	1.63	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.67	U	µg/l	4.67	0.981	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.67	U	µg/l	4.67	0.817	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.67	U	µg/l	4.67	1.04	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.67	U	µg/l	4.67	0.944	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.67	U	µg/l	4.67	0.677	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.876	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.67	U	µg/l	4.67	0.436	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.67	U	µg/l	4.67	1.46	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.67	U	µg/l	4.67	0.779	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.67	U	µg/l	4.67	1.09	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.67	U	µg/l	4.67	1.26	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.67	U	µg/l	4.67	1.04	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.67	U	µg/l	4.67	0.465	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.67	U	µg/l	4.67	0.875	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.67	U	µg/l	4.67	0.634	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.67	U	µg/l	4.67	1.14	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.67	U	µg/l	4.67	1.59	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.67	U	µg/l	4.67	1.48	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.67	U	µg/l	4.67	1.41	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.67	U	µg/l	4.67	0.792	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.67	U	µg/l	4.67	0.879	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.67	U	µg/l	4.67	1.69	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.67	U	µg/l	4.67	1.63	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.67	U	µg/l	4.67	0.991	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.67	U	µg/l	4.67	0.580	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.67	U	µg/l	4.67	1.01	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.67	U	µg/l	4.67	1.13	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.67	U	µg/l	4.67	1.11	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.67	U	µg/l	4.67	1.17	1	"	"	"	"	"	X

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Sample Identification

MW-07

SC50148-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 10:53

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
117-84-0	Di-n-octyl phthalate	< 4.67	U	µg/l	4.67	1.18	1	SW846 8270D	12-Sep-18	17-Sep-18	MSL	1812395	X
206-44-0	Fluoranthene	< 4.67	U	µg/l	4.67	0.953	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.67	U	µg/l	4.67	0.909	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.67	U	µg/l	4.67	1.25	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.67	U	µg/l	4.67	1.42	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.67	U	µg/l	4.67	1.17	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.67	U	µg/l	4.67	1.56	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.67	U	µg/l	4.67	0.543	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.67	U	µg/l	4.67	0.764	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.67	U	µg/l	4.67	1.54	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.67	U	µg/l	4.67	0.991	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.35	U	µg/l	9.35	1.06	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.67	U	µg/l	4.67	1.27	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.67	U	µg/l	4.67	0.469	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.67	U	µg/l	4.67	0.594	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.67	U	µg/l	4.67	0.588	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.67	U	µg/l	4.67	1.21	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.67	U	µg/l	4.67	0.670	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.7	U	µg/l	18.7	0.728	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.67	U	µg/l	4.67	0.560	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.67	U	µg/l	4.67	0.963	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.67	U	µg/l	4.67	0.944	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.7	U	µg/l	18.7	0.726	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.67	U	µg/l	4.67	1.09	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.67	U	µg/l	4.67	1.17	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.67	U	µg/l	4.67	0.923	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.67	U	µg/l	4.67	0.380	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.67	U	µg/l	4.67	1.47	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.67	U	µg/l	4.67	1.10	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.67	U	µg/l	4.67	0.730	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.67	U	µg/l	4.67	0.653	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.67	U	µg/l	4.67	0.750	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.67	U	µg/l	4.67	1.03	1	"	"	"	"	"	X
<b>Surrogate recoveries:</b>													
321-60-8	2-Fluorobiphenyl	54			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	45			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	61			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	30			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	86			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	57			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
Tentatively Identified Compounds				0.0	U	µg/l		1	SW846 8270D TICS	"	"	MSL	"
<b>Total Metals by EPA 200/6000 Series Methods</b>													

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Sample Identification

MW-07

SC50148-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

06-Sep-18 10:53

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	10-Sep-18		KT	1812341	
<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	17-Sep-18	19-Sep-18	SC/ED	1812528	X
7429-90-5	Aluminum	<b>0.506</b>		mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	<b>0.01460</b>		mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	<b>0.234</b>		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	<b>337</b>	GS1, D	mg/l	1.00	0.0710	10	"	"	21-Sep-18	"	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	19-Sep-18	"	"	X
7440-48-4	Cobalt	<b>0.0010</b>	J	mg/l	0.0050	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	<b>0.0014</b>	J	mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050	U	mg/l	0.0050	0.0023	1	"	"	25-Sep-18	"	"	X
7439-89-6	Iron	<b>3.57</b>	R06	mg/l	1.00	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	<b>5.55</b>		mg/l	0.500	0.0600	1	"	"	19-Sep-18	"	"	X
7439-95-4	Magnesium	<b>71.9</b>	GS1, R06, D	mg/l	50.0	0.0442	10	"	"	21-Sep-18	"	"	X
7439-96-5	Manganese	<b>0.0773</b>		mg/l	0.0040	0.0019	1	"	"	19-Sep-18	"	"	X
7440-23-5	Sodium	<b>1,350</b>	GS1, D	mg/l	7.50	0.392	10	"	"	21-Sep-18	"	"	X
7440-02-0	Nickel	<b>0.0020</b>	J	mg/l	0.0050	0.0009	1	"	"	19-Sep-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	<b>0.0106</b>	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	17-Sep-18	18-Sep-18	ABW	1812530	X

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Sample Identification**MW-08**

SC50148-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:58

Received

08-Sep-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)	< 10.0	U, D	µg/l	10.0	5.81	10	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X
67-64-1	Acetone	< 100	U, D	µg/l	100	37.6	10	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 5.00	U, D	µg/l	5.00	4.75	10	"	"	"	"	"	X
71-43-2	Benzene	<b>34.2</b>	D	µg/l	10.0	3.39	10	"	"	"	"	"	X
108-86-1	Bromobenzene	< 10.0	U, D	µg/l	10.0	2.79	10	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 10.0	U, D	µg/l	10.0	3.39	10	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 5.00	U, D	µg/l	5.00	2.91	10	"	"	"	"	"	X
75-25-2	Bromoform	< 10.0	U, D	µg/l	10.0	2.42	10	"	"	"	"	"	X
74-83-9	Bromomethane	< 20.0	U, D	µg/l	20.0	4.46	10	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 20.0	U, D	µg/l	20.0	7.03	10	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>24.6</b>	D	µg/l	10.0	4.68	10	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>8.10</b>	J, D	µg/l	10.0	3.11	10	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 10.0	U, D	µg/l	10.0	2.96	10	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 20.0	U, D	µg/l	20.0	7.00	10	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 10.0	U, D	µg/l	10.0	3.92	10	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 10.0	U, D	µg/l	10.0	3.00	10	"	"	"	"	"	X
75-00-3	Chloroethane	< 20.0	U, D	µg/l	20.0	4.03	10	"	"	"	"	"	X
67-66-3	Chloroform	< 10.0	U, D	µg/l	10.0	2.86	10	"	"	"	"	"	X
74-87-3	Chloromethane	< 20.0	U, D	µg/l	20.0	3.60	10	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 10.0	U, D	µg/l	10.0	3.13	10	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 20.0	U, D	µg/l	20.0	4.71	10	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 5.00	U, D	µg/l	5.00	2.91	10	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 5.00	U, D	µg/l	5.00	3.01	10	"	"	"	"	"	X
74-95-3	Dibromomethane	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.45	10	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	3.00	10	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 10.0	U, D	µg/l	10.0	2.72	10	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 20.0	U, D	µg/l	20.0	3.45	10	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 10.0	U, D	µg/l	10.0	1.81	10	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.14	10	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.97	10	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 10.0	U, D	µg/l	10.0	3.80	10	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.89	10	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 10.0	U, D	µg/l	10.0	4.45	10	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 10.0	U, D	µg/l	10.0	3.34	10	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.28	10	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 5.00	U, D	µg/l	5.00	3.06	10	"	"	"	"	"	X
100-41-4	Ethylbenzene	<b>352</b>	D	µg/l	10.0	3.17	10	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 5.00	U, D	µg/l	5.00	2.58	10	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 20.0	U, D	µg/l	20.0	6.34	10	"	"	"	"	"	X

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Sample Identification

MW-08

SC50148-03

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
GS1													
98-82-8	Isopropylbenzene	41.2	D	µg/l	10.0	3.02	10	SW846 8260C	19-Sep-18	19-Sep-18	MP	1812693	X
99-87-6	4-Isopropyltoluene	10.3	D	µg/l	10.0	4.20	10	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.95	10	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 20.0	U, D	µg/l	20.0	3.54	10	"	"	"	"	"	X
75-09-2	Methylene chloride	< 20.0	U, D	µg/l	20.0	3.85	10	"	"	"	"	"	X
91-20-3	Naphthalene	164	D	µg/l	20.0	13.9	10	"	"	"	"	"	X
103-65-1	n-Propylbenzene	74.9	D	µg/l	10.0	3.20	10	"	"	"	"	"	X
100-42-5	Styrene	< 10.0	U, D	µg/l	10.0	3.28	10	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 10.0	U, D	µg/l	10.0	3.17	10	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 5.00	U, D	µg/l	5.00	2.57	10	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.0	U, D	µg/l	10.0	3.11	10	"	"	"	"	"	X
108-88-3	Toluene	49.4	D	µg/l	10.0	2.90	10	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.81	10	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.23	10	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 10.0	U, D	µg/l	10.0	3.90	10	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 10.0	U, D	µg/l	10.0	2.45	10	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 10.0	U, D	µg/l	10.0	3.09	10	"	"	"	"	"	X
79-01-6	Trichloroethene	< 10.0	U, D	µg/l	10.0	3.55	10	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 10.0	U, D	µg/l	10.0	2.76	10	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 10.0	U, D	µg/l	10.0	2.60	10	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	922	D	µg/l	10.0	6.20	10	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	195	D	µg/l	10.0	5.40	10	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 10.0	U, D	µg/l	10.0	4.02	10	"	"	"	"	"	X
179601-23-1	m,p-Xylene	629	D	µg/l	20.0	4.74	10	"	"	"	"	"	X
95-47-6	o-Xylene	84.6	D	µg/l	10.0	4.10	10	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 20.0	U, D	µg/l	20.0	4.98	10	"	"	"	"	"	
60-29-7	Ethyl ether	< 10.0	U, D	µg/l	10.0	2.92	10	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 10.0	U, D	µg/l	10.0	2.98	10	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 10.0	U, D	µg/l	10.0	2.90	10	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 10.0	U, D	µg/l	10.0	2.94	10	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 100	U, D	µg/l	100	31.3	10	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 200	U, D	µg/l	200	58.1	10	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 50.0	U, D	µg/l	50.0	6.13	10	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	U, D	µg/l	2000	132	10	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	92			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	95			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	96			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
824-90-8	1-Phenyl-1-Butene	120	J N, D	µg/l			10	SW846 8260C TICs	"	"	MP	"	
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	130	J N, D	µg/l			10	"	"	"	"	"	

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<b>Volatile Organic Compounds</b>													
<u>Tentatively Identified Compounds by GC/MS</u>													
611-14-3	Benzene, 1-ethyl-2-methyl-	220	J N, D	µg/l			10	SW846 8260C TICs	19-Sep-18	19-Sep-18	MP	1812693	
622-96-8	Benzene, 1-ethyl-4-methyl-	210	J N, D	µg/l			10	"	"	"	"	"	
78-78-4	Butane, 2-methyl-	180	J N, D	µg/l			10	"	"	"	"	"	
96-37-7	Cyclopentane, methyl-	250	J N, D	µg/l			10	"	"	"	"	"	
000767-58-8	Indan, 1-methyl-	99	J N, D	µg/l			10	"	"	"	"	"	
496-11-7	Indane	220	J N, D	µg/l			10	"	"	"	"	"	
107-83-5	Pentane, 2-methyl-	100	J N, D	µg/l			10	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.76	U	µg/l	4.76	1.04	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
208-96-8	Acenaphthylene	< 4.76	U	µg/l	4.76	1.10	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.76	U	µg/l	4.76	0.470	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.76	U	µg/l	4.76	1.11	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.76	U	µg/l	4.76	0.921	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.52	U	µg/l	9.52	4.35	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.76	U	µg/l	4.76	0.828	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.76	U	µg/l	4.76	0.684	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.76	U	µg/l	4.76	0.637	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.76	U	µg/l	4.76	0.667	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.76	U	µg/l	4.76	0.935	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.76	U	µg/l	4.76	1.66	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.76	U	µg/l	4.76	1.00	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.76	U	µg/l	4.76	0.832	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.76	U	µg/l	4.76	1.06	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.76	U	µg/l	4.76	0.962	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	2.67	J	µg/l	4.76	0.690	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.76	U	µg/l	4.76	0.892	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.76	U	µg/l	4.76	0.445	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.76	U	µg/l	4.76	1.49	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.76	U	µg/l	4.76	0.793	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.76	U	µg/l	4.76	1.11	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.76	U	µg/l	4.76	1.29	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.76	U	µg/l	4.76	1.06	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.76	U	µg/l	4.76	0.474	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.76	U	µg/l	4.76	0.891	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.76	U	µg/l	4.76	0.646	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.76	U	µg/l	4.76	1.16	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.76	U	µg/l	4.76	1.62	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.76	U	µg/l	4.76	1.50	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.76	U	µg/l	4.76	1.44	1	"	"	"	"	"	X

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<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
91-94-1	3,3'-Dichlorobenzidine	< 4.76	U	µg/l	4.76	0.807	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
120-83-2	2,4-Dichlorophenol	< 4.76	U	µg/l	4.76	0.895	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.76	U	µg/l	4.76	1.72	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.76	U	µg/l	4.76	1.66	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.76	U	µg/l	4.76	1.01	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.76	U	µg/l	4.76	0.591	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.76	U	µg/l	4.76	1.03	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.76	U	µg/l	4.76	1.15	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.76	U	µg/l	4.76	1.13	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.76	U	µg/l	4.76	1.19	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 4.76	U	µg/l	4.76	1.20	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.76	U	µg/l	4.76	0.971	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.76	U	µg/l	4.76	0.927	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.76	U	µg/l	4.76	1.28	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.76	U	µg/l	4.76	1.45	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.76	U	µg/l	4.76	1.19	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.76	U	µg/l	4.76	1.59	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.76	U	µg/l	4.76	0.553	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.76	U	µg/l	4.76	0.778	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	<b>11.2</b>		µg/l	4.76	1.57	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.76	U	µg/l	4.76	1.01	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.52	U	µg/l	9.52	1.08	1	"	"	"	"	"	X
91-20-3	Naphthalene	<b>38.1</b>		µg/l	4.76	1.30	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.76	U	µg/l	4.76	0.478	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.76	U	µg/l	4.76	0.606	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.76	U	µg/l	4.76	0.599	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.76	U	µg/l	4.76	1.23	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.76	U	µg/l	4.76	0.683	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 19.0	U	µg/l	19.0	0.742	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.76	U	µg/l	4.76	0.570	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.76	U	µg/l	4.76	0.981	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.76	U	µg/l	4.76	0.962	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 19.0	U	µg/l	19.0	0.740	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.76	U	µg/l	4.76	1.11	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.76	U	µg/l	4.76	1.19	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.76	U	µg/l	4.76	0.941	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.76	U	µg/l	4.76	0.388	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.76	U	µg/l	4.76	1.50	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	<b>15.0</b>		µg/l	4.76	1.12	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 4.76	U	µg/l	4.76	0.744	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.76	U	µg/l	4.76	0.666	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.76	U	µg/l	4.76	0.765	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.76	U	µg/l	4.76	1.05	1	"	"	"	"	"	X

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Sample Identification**MW-08**

SC50148-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:58

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	52			30-130 %			SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	
367-12-4	2-Fluorophenol	41			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	61			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	24			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-dl4	82			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	62			15-110 %			"	"	"	"	"	
<b>Tentatively Identified Compounds</b>													
	1H-Indene, 2,3-dihydro-4,7-...	13	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
	1H-Indene, 2,3-dihydro-5-me...	29	J N	µg/l			1	"	"	"	"	"	
488-23-3	Benzene, 1,2,3,4-tetramethyl-	22	J N	µg/l			1	"	"	"	"	"	
000526-73-8	Benzene, 1,2,3-trimethyl- (O2)	270	J N	µg/l			1	"	"	"	"	"	
95-93-2	Benzene, 1,2,4,5-tetramethyl-	25	J N	µg/l			1	"	"	"	"	"	
95-63-6	Benzene, 1,2,4-trimethyl-	140	J N	µg/l			1	"	"	"	"	"	
108-38-3	Benzene, 1,3-dimethyl-	180	J N	µg/l			1	"	"	"	"	"	
611-14-3	Benzene, 1-ethyl-2-methyl-	110	J N	µg/l			1	"	"	"	"	"	
001074-55-1	Benzene, 1-methyl-4-propyl-	14	J N	µg/l			1	"	"	"	"	"	
002039-89-6	Benzene, 2-ethenyl-1,4-dime...	56	J N	µg/l			1	"	"	"	"	"	
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl- (O2)	72	J N	µg/l			1	"	"	"	"	"	
000050-84-0	Benzoic acid, 2,4-dichloro-	11	J N	µg/l			1	"	"	"	"	"	
010544-50-0	Cyclic octaatomic sulfur	39	J N	µg/l			1	"	"	"	"	"	
001528-22-9	Cyclobutane, (1-methylethyl...)	13	J N	µg/l			1	"	"	"	"	"	
100-41-4	Ethylbenzene	18	J N	µg/l			1	"	"	"	"	"	
496-11-7	Indane	90	J N	µg/l			1	"	"	"	"	"	
95-47-6	o-Xylene	34	J N	µg/l			1	"	"	"	"	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<b>Prepared by method General Prep-Metal</b>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	10-Sep-18		KT	1812341	
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
<b>Prepared by method SW846 3005A</b>													
7440-22-4	Silver	< 0.0050	U	mg/l	0.0050	0.0006	1	SW846 6010C	17-Sep-18	19-Sep-18	SC/ED	1812528	X
7429-90-5	Aluminum	0.0150	J	mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	0.00375	J	mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	0.800		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	256	GS1, D	mg/l	0.500	0.0355	5	"	"	21-Sep-18	"	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	19-Sep-18	"	"	X

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Sample Identification**MW-08**

SC50148-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:58

Received

08-Sep-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>Total Metals by EPA 6000/7000 Series Methods</b>													
7440-48-4	Cobalt	< 0.0050	U	mg/l	0.0050	0.0008	1	SW846 6010C	17-Sep-18	19-Sep-18	SC/ED	1812528	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	"	"	25-Sep-18	"	"	X
7439-89-6	Iron	<b>5.04</b>	R06	mg/l	1.00	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	<b>9.14</b>		mg/l	0.500	0.0600	1	"	"	19-Sep-18	"	"	X
7439-95-4	Magnesium	<b>33.4</b>	R06	mg/l	5.00	0.0044	1	"	"	21-Sep-18	"	"	X
7439-96-5	Manganese	<b>0.591</b>		mg/l	0.0040	0.0019	1	"	"	19-Sep-18	"	"	X
7440-23-5	Sodium	<b>371</b>	GS1, D	mg/l	3.75	0.196	5	"	"	21-Sep-18	"	"	X
7440-02-0	Nickel	< 0.0050	U	mg/l	0.0050	0.0009	1	"	"	19-Sep-18	"	"	X
7439-92-1	Lead	<b>0.0122</b>		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	<b>0.0032</b>	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	17-Sep-18	18-Sep-18	ABW	1812530	X

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Sample Identification

MW-09

SC50148-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:30

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
67-64-1	Acetone	<b>5.01</b>	J	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>1.62</b>		µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>0.75</b>	J	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	<b>0.61</b>	J	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00	U	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-09

SC50148-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:30

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	1.13		µg/l	1.00	0.30	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
99-87-6	4-Isopropyltoluene	0.82	J	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	1.43		µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	0.69	J	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	94			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	97			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	95			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
824-90-8	1-Phenyl-1-Butene	12	J N	µg/l			1	SW846 8260C TICs	"	"	MP	"	
141-93-5	Benzene, 1,3-diethyl-	7.4	J N	µg/l			1	"	"	"	"	"	
79-29-8	Butane, 2,3-dimethyl-	9.4	J N	µg/l			1	"	"	"	"	"	

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Sample Identification

MW-09

SC50148-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:30

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Tentatively Identified Compounds by GC/MS</u>													
872-56-0	Cyclohexane, 1,2-dimethyl-	9.9	J N	µg/l			1	SW846 8260C TICs	19-Sep-18	20-Sep-18	MP	1812696	
	Isopropylcyclobutane	15	J N	µg/l			1	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.72	U	µg/l	4.72	1.03	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
208-96-8	Acenaphthylene	< 4.72	U	µg/l	4.72	1.08	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.72	U	µg/l	4.72	0.466	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.72	U	µg/l	4.72	0.912	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.43	U	µg/l	9.43	4.31	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.72	U	µg/l	4.72	0.820	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.72	U	µg/l	4.72	0.677	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.72	U	µg/l	4.72	0.631	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.72	U	µg/l	4.72	0.660	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.72	U	µg/l	4.72	0.926	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.72	U	µg/l	4.72	1.64	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.72	U	µg/l	4.72	0.991	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.72	U	µg/l	4.72	0.825	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.72	U	µg/l	4.72	1.05	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.72	U	µg/l	4.72	0.953	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	4.21	J	µg/l	4.72	0.683	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.72	U	µg/l	4.72	0.884	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.72	U	µg/l	4.72	0.441	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.72	U	µg/l	4.72	1.47	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.72	U	µg/l	4.72	0.786	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.72	U	µg/l	4.72	1.27	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.72	U	µg/l	4.72	1.05	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.72	U	µg/l	4.72	0.470	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.72	U	µg/l	4.72	0.883	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.72	U	µg/l	4.72	0.640	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.72	U	µg/l	4.72	1.15	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.60	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.49	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.42	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.72	U	µg/l	4.72	0.799	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.72	U	µg/l	4.72	0.887	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.72	U	µg/l	4.72	1.71	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.72	U	µg/l	4.72	1.64	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.72	U	µg/l	4.72	1.00	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.72	U	µg/l	4.72	0.586	1	"	"	"	"	"	X

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Sample Identification**MW-09**

SC50148-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:30

Received

08-Sep-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>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
534-52-1	4,6-Dinitro-2-methylphenol	< 4.72	U	µg/l	4.72	1.02	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
51-28-5	2,4-Dinitrophenol	< 4.72	U	µg/l	4.72	1.14	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.72	U	µg/l	4.72	1.12	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 4.72	U	µg/l	4.72	1.19	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.72	U	µg/l	4.72	0.962	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.72	U	µg/l	4.72	0.918	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.72	U	µg/l	4.72	1.26	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.72	U	µg/l	4.72	1.43	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.72	U	µg/l	4.72	1.58	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.72	U	µg/l	4.72	0.548	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.72	U	µg/l	4.72	0.771	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.72	U	µg/l	4.72	1.56	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.72	U	µg/l	4.72	1.00	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.43	U	µg/l	9.43	1.07	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.72	U	µg/l	4.72	1.28	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.72	U	µg/l	4.72	0.474	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.72	U	µg/l	4.72	0.600	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.72	U	µg/l	4.72	0.593	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.72	U	µg/l	4.72	1.22	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.72	U	µg/l	4.72	0.676	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.9	U	µg/l	18.9	0.735	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.72	U	µg/l	4.72	0.565	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.72	U	µg/l	4.72	0.972	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.72	U	µg/l	4.72	0.953	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.9	U	µg/l	18.9	0.733	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.72	U	µg/l	4.72	0.932	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.72	U	µg/l	4.72	0.384	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.72	U	µg/l	4.72	1.48	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.72	U	µg/l	4.72	1.11	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 4.72	U	µg/l	4.72	0.737	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.72	U	µg/l	4.72	0.659	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.72	U	µg/l	4.72	0.758	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.72	U	µg/l	4.72	1.04	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	58			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	43			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	62			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	28			15-110 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	97			30-130 %			"	"	"	"	"	

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Sample Identification**MW-09**

SC50148-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 12:30

Received

08-Sep-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>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
118-79-6	2,4,6-Tribromophenol	66			15-110 %			SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	
<b>Tentatively Identified Compounds</b>													
001454-85-9	1-Heptadecanol	6.3	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
141-93-5	Benzene, 1,3-diethyl-	5.5	J N	µg/l			1	"	"	"	"	"	
000050-84-0	Benzoic acid, 2,4-dichloro-	8.2	J N	µg/l			1	"	"	"	"	"	
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<b>Prepared by method General Prep-Metal</b>													
	Preservation		Field Preserved; pH<2 confirmed	N/A			1	EPA 200/6000 methods	10-Sep-18		KT	1812341	
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
<b>Prepared by method SW846 3005A</b>													
7440-22-4	Silver	< 0.0050	U	mg/l	0.0050	0.0006	1	SW846 6010C	17-Sep-18	19-Sep-18	SC/ED	1812528	X
7429-90-5	Aluminum	0.870		mg/l	0.0250	0.0103	1	"	"	"	"	"	X
7440-38-2	Arsenic	0.00300	J	mg/l	0.00400	0.00138	1	"	"	"	"	"	X
7440-39-3	Barium	0.604		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	182		mg/l	0.100	0.0071	1	"	"	22-Sep-18	"	"	X
7440-43-9	Cadmium	0.0004	J	mg/l	0.0025	0.0004	1	"	"	19-Sep-18	"	"	X
7440-48-4	Cobalt	0.0008	J	mg/l	0.0050	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	0.0022	J	mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0029	J	mg/l	0.0050	0.0023	1	"	"	25-Sep-18	"	"	X
7439-89-6	Iron	5.50	R06	mg/l	1.00	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	10.9		mg/l	0.500	0.0600	1	"	"	19-Sep-18	"	"	X
7439-95-4	Magnesium	25.4	R06	mg/l	5.00	0.0044	1	"	"	22-Sep-18	"	"	X
7439-96-5	Manganese	0.337		mg/l	0.0040	0.0019	1	"	"	19-Sep-18	"	"	X
7440-23-5	Sodium	557	GS1, D	mg/l	3.75	0.196	5	"	"	22-Sep-18	"	"	X
7440-02-0	Nickel	0.0018	J	mg/l	0.0050	0.0009	1	"	"	19-Sep-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	0.0028	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0071	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	17-Sep-18	18-Sep-18	ABW	1812530	X

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Sample Identification

MW-D

SC50148-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 00:00

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds by SW846 8260</b>													
<b>Prepared by method SW846 5030 Water MS</b>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00	U	µg/l	1.00	0.58	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	<b>1.82</b>		µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	<b>1.12</b>		µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	<b>0.60</b>	J	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	<b>0.50</b>	J	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

MW-D

SC50148-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 00:00

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	<b>1.56</b>		µg/l	1.00	0.30	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
99-87-6	4-Isopropyltoluene	<b>0.81</b>	J	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	<b>2.04</b>		µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	<b>0.68</b>	J	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	95			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	100			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	92			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
824-90-8	1-Phenyl-1-Butene	<b>13</b>	J N	µg/l			1	SW846 8260C TICs	"	"	MP	"	
95-93-2	Benzene, 1,2,4,5-tetramethyl-	<b>6.6</b>	J N	µg/l			1	"	"	"	"	"	

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Sample Identification

MW-D

SC50148-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

07-Sep-18 00:00

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Tentatively Identified Compounds by GC/MS</u>													
141-93-5	Benzene, 1,3-diethyl-	8.2	J N	µg/l			1	SW846 8260C TICs	19-Sep-18	20-Sep-18	MP	1812696	
79-29-8	Butane, 2,3-dimethyl-	9.9	J N	µg/l			1	"	"	"	"	"	
	Cyclohexane, 1,1-dimethyl-	7.8	J N	µg/l			1	"	"	"	"	"	
000638-04-0	Cyclohexane, 1,3-dimethyl-,...	11	J N	µg/l			1	"	"	"	"	"	
001638-26-2	Cyclopentane, 1,1-dimethyl-	7.3	J N	µg/l			1	"	"	"	"	"	
1192-18-3	Cyclopentane, 1,2-dimethyl-	16	J N	µg/l			1	"	"	"	"	"	
473-91-6	Cyclopentene, 1,2,3-trimethyl-	16	J N	µg/l			1	"	"	"	"	"	
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3510C</u>													
83-32-9	Acenaphthene	< 4.72	U	µg/l	4.72	1.03	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
208-96-8	Acenaphthylene	< 4.72	U	µg/l	4.72	1.08	1	"	"	"	"	"	X
62-53-3	Aniline	< 4.72	U	µg/l	4.72	0.466	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 4.72	U	µg/l	4.72	0.912	1	"	"	"	"	"	
92-87-5	Benzidine	< 9.43	U	µg/l	9.43	4.31	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.72	U	µg/l	4.72	0.820	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.72	U	µg/l	4.72	0.677	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.72	U	µg/l	4.72	0.631	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perlylene	< 4.72	U	µg/l	4.72	0.660	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.72	U	µg/l	4.72	0.926	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 4.72	U	µg/l	4.72	1.64	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 4.72	U	µg/l	4.72	0.991	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.72	U	µg/l	4.72	0.825	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.72	U	µg/l	4.72	1.05	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.72	U	µg/l	4.72	0.953	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	2.67	J	µg/l	4.72	0.683	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.72	U	µg/l	4.72	0.884	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.72	U	µg/l	4.72	0.441	1	"	"	"	"	"	X
86-74-8	Carbazole	< 4.72	U	µg/l	4.72	1.47	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.72	U	µg/l	4.72	0.786	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.72	U	µg/l	4.72	1.27	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.72	U	µg/l	4.72	1.05	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.72	U	µg/l	4.72	0.470	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.72	U	µg/l	4.72	0.883	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.72	U	µg/l	4.72	0.640	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 4.72	U	µg/l	4.72	1.15	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.60	1	"	"	"	"	"	X

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Sample Identification

MW-D

SC50148-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

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Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
541-73-1	1,3-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.49	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
106-46-7	1,4-Dichlorobenzene	< 4.72	U	µg/l	4.72	1.42	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 4.72	U	µg/l	4.72	0.799	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 4.72	U	µg/l	4.72	0.887	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.72	U	µg/l	4.72	1.71	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.72	U	µg/l	4.72	1.64	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.72	U	µg/l	4.72	1.00	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.72	U	µg/l	4.72	0.586	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.72	U	µg/l	4.72	1.02	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.72	U	µg/l	4.72	1.14	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.72	U	µg/l	4.72	1.12	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 4.72	U	µg/l	4.72	1.19	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.72	U	µg/l	4.72	0.962	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.72	U	µg/l	4.72	0.918	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.72	U	µg/l	4.72	1.26	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.72	U	µg/l	4.72	1.43	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.72	U	µg/l	4.72	1.58	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.72	U	µg/l	4.72	0.548	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.72	U	µg/l	4.72	0.771	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 4.72	U	µg/l	4.72	1.56	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 4.72	U	µg/l	4.72	1.00	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.43	U	µg/l	9.43	1.07	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.72	U	µg/l	4.72	1.28	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 4.72	U	µg/l	4.72	0.474	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 4.72	U	µg/l	4.72	0.600	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 4.72	U	µg/l	4.72	0.593	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.72	U	µg/l	4.72	1.22	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.72	U	µg/l	4.72	0.676	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 18.9	U	µg/l	18.9	0.735	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.72	U	µg/l	4.72	0.565	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.72	U	µg/l	4.72	0.972	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.72	U	µg/l	4.72	0.953	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 18.9	U	µg/l	18.9	0.733	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.72	U	µg/l	4.72	1.10	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.72	U	µg/l	4.72	1.18	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.72	U	µg/l	4.72	0.932	1	"	"	"	"	"	X
110-86-1	Pyridine	< 4.72	U	µg/l	4.72	0.384	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.72	U	µg/l	4.72	1.48	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 4.72	U	µg/l	4.72	1.11	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.72	U	µg/l	4.72	0.737	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.72	U	µg/l	4.72	0.659	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 4.72	U	µg/l	4.72	0.758	1	"	"	"	"	"	X

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Sample Identification

MW-D

SC50148-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

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08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds</b>													
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.72	U	µg/l	4.72	1.04	1	SW846 8270D	13-Sep-18	20-Sep-18	MSL	1812441	X
<i>Surrogate recoveries:</i>													
321-60-8	2-Fluorobiphenyl	44			30-130 %			"	"	"	"	"	"
367-12-4	2-Fluorophenol	34			15-110 %			"	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	50			30-130 %			"	"	"	"	"	"
4165-62-2	Phenol-d5	22			15-110 %			"	"	"	"	"	"
1718-51-0	Terphenyl-d14	75			30-130 %			"	"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	47			15-110 %			"	"	"	"	"	"
<b>Tentatively Identified Compounds</b>													
141-93-5	Benzene, 1,3-diethyl-	4.6	J N	µg/l			1	SW846 8270D TICS	"	"	MSL	"	
330207-53-9	E-14-Hexadecenal	5.1	J N	µg/l			1	"	"	"	"	"	"
<b>Total Metals by EPA 200/6000 Series Methods</b>													
<u>Prepared by method General Prep-Metal</u>													
	Preservation	Field Preserved; pH<2 confirmed		N/A			1	EPA 200/6000 methods	10-Sep-18		KT	1812341	
<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	17-Sep-18	19-Sep-18	SC/ED	1812528	X
7429-90-5	Aluminum	0.742		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	0.544		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	187		mg/l	0.100	0.0071	1	"	"	22-Sep-18	"	"	X
7440-43-9	Cadmium	< 0.0025	U	mg/l	0.0025	0.0004	1	"	"	19-Sep-18	"	"	X
7440-48-4	Cobalt	0.0008	J	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	0.0028	J	mg/l	0.0050	0.0023	1	"	"	25-Sep-18	"	"	X
7439-89-6	Iron	5.52	R06	mg/l	1.00	0.0045	1	"	"	"	"	"	X
7440-09-7	Potassium	9.78		mg/l	0.500	0.0600	1	"	"	19-Sep-18	"	"	X
7439-95-4	Magnesium	26.4	R06	mg/l	5.00	0.0044	1	"	"	22-Sep-18	"	"	X
7439-96-5	Manganese	0.302		mg/l	0.0040	0.0019	1	"	"	19-Sep-18	"	"	X
7440-23-5	Sodium	581	GS1, D	mg/l	3.75	0.196	5	"	"	22-Sep-18	"	"	X
7440-02-0	Nickel	0.0014	J	mg/l	0.0050	0.0009	1	"	"	19-Sep-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	0.0022	J	mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0077	J	mg/l	0.0250	0.0016	1	"	"	"	"	"	X
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020	U	mg/l	0.00020	0.00014	1	EPA 245.1/7470A	17-Sep-18	18-Sep-18	ABW	1812530	X

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Sample Identification

Trip Blank

SC50148-06

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

07-Sep-18 00:00

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<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	0.58	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
67-64-1	Acetone	< 10.0	U	µg/l	10.0	3.76	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50	U	µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00	U	µg/l	1.00	0.34	1	"	"	"	"	"	X
75-27-4	Bromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00	U	µg/l	2.00	0.45	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00	U	µg/l	1.00	0.47	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00	U	µg/l	2.00	0.70	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00	U	µg/l	2.00	0.40	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
74-87-3	Chloromethane	0.70	J	µg/l	2.00	0.36	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50	U	µg/l	0.50	0.29	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50	U	µg/l	0.50	0.30	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00	U	µg/l	1.00	0.27	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00	U	µg/l	1.00	0.30	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	0.34	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00	U	µg/l	1.00	0.18	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00	U	µg/l	1.00	0.40	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	0.29	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00	U	µg/l	1.00	0.44	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.33	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50	U	µg/l	0.50	0.31	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 2.00	U	µg/l	2.00	0.63	1	"	"	"	"	"	X

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Sample Identification

Trip Blank

SC50148-06

Client Project #

18-051

Matrix

Aqueous

Collection Date/Time

07-Sep-18 00:00

Received

08-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Volatile Organic Compounds</b>													
<u>Volatile Organic Compounds by SW846 8260</u>													
98-82-8	Isopropylbenzene	< 1.00	U	µg/l	1.00	0.30	1	SW846 8260C	19-Sep-18	20-Sep-18	MP	1812696	X
99-87-6	4-Isopropyltoluene	< 1.00	U	µg/l	1.00	0.42	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00	U	µg/l	2.00	0.35	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00	U	µg/l	2.00	0.38	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 2.00	U	µg/l	2.00	1.39	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00	U	µg/l	1.00	0.33	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00	U	µg/l	1.00	0.32	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50	U	µg/l	0.50	0.26	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00	U	µg/l	1.00	0.29	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	0.32	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00	U	µg/l	1.00	0.39	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00	U	µg/l	1.00	0.24	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00	U	µg/l	1.00	0.31	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00	U	µg/l	1.00	0.36	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00	U	µg/l	1.00	0.28	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00	U	µg/l	1.00	0.26	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.62	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00	U	µg/l	1.00	0.54	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00	U	µg/l	1.00	0.40	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00	U	µg/l	2.00	0.47	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00	U	µg/l	1.00	0.41	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00	U	µg/l	2.00	0.50	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00	U	µg/l	1.00	0.29	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00	U	µg/l	1.00	0.30	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00	U	µg/l	1.00	0.29	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	3.13	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0	U	µg/l	20.0	5.81	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00	U	µg/l	5.00	0.61	1	"	"	"	"	"	X
64-17-5	Ethanol	< 200	U	µg/l	200	13.2	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	92			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	97			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"	
<u>Tentatively Identified Compounds by GC/MS</u>													
	Tentatively Identified Compounds	<b>None found</b>		µg/l			1	SW846 8260C TICs	"	"	MP	"	

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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>										
Batch 1812693 - SW846 5030 Water MS										
<u>Blank (1812693-BLK1)</u>										
<u>Prepared &amp; Analyzed: 19-Sep-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	< 2.00	U	µg/l	2.00						
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>										
Batch 1812693 - SW846 5030 Water MS										
<u>Blank (1812693-BLK1)</u>										
<u>Prepared &amp; Analyzed: 19-Sep-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						
Trichloroethylene	< 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						
Surrogate: 4-Bromofluorobenzene	44.9		µg/l	50.0		90	70-130			
Surrogate: Toluene-d8	50.0		µg/l	50.0		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	51.7		µg/l	50.0		103	70-130			
Surrogate: Dibromofluoromethane	49.9		µg/l	50.0		100	70-130			
<u>LCS (1812693-BS1)</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.9		µg/l	20.0		114	70-130			
Acetone	27.8		µg/l	20.0		139	70-130			
Acrylonitrile	22.4		µg/l	20.0		112	70-130			
Benzene	24.0		µg/l	20.0		120	70-130			
Bromobenzene	20.9		µg/l	20.0		104	70-130			
Bromoform	21.5		µg/l	20.0		107	70-130			
Bromochloromethane	23.8		µg/l	20.0		119	70-130			
Bromodichloromethane	19.4		µg/l	20.0		97	70-130			
Bromomethane	37.3	QC2	µg/l	20.0		186	70-130			
2-Butanone (MEK)	16.0		µg/l	20.0		80	70-130			
n-Butylbenzene	25.1		µg/l	20.0		126	70-130			
sec-Butylbenzene	24.7		µg/l	20.0		123	70-130			
tert-Butylbenzene	23.0		µg/l	20.0		115	70-130			
Carbon disulfide	24.4		µg/l	20.0		122	70-130			
Carbon tetrachloride	19.0		µg/l	20.0		95	70-130			
Chlorobenzene	22.1		µg/l	20.0		110	70-130			
Chloroethane	27.2	QC2	µg/l	20.0		136	70-130			
Chloroform	20.0		µg/l	20.0		100	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>										
Batch 1812693 - SW846 5030 Water MS										
<u>LCS (1812693-BS1)</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
Chloromethane	19.8		µg/l		20.0	99	70-130			
2-Chlorotoluene	22.1		µg/l		20.0	111	70-130			
4-Chlorotoluene	23.6		µg/l		20.0	118	70-130			
1,2-Dibromo-3-chloropropane	21.5		µg/l		20.0	107	70-130			
Dibromochloromethane	20.9		µg/l		20.0	105	70-130			
1,2-Dibromoethane (EDB)	22.3		µg/l		20.0	111	70-130			
Dibromomethane	22.5		µg/l		20.0	113	70-130			
1,2-Dichlorobenzene	23.1		µg/l		20.0	115	70-130			
1,3-Dichlorobenzene	22.3		µg/l		20.0	112	70-130			
1,4-Dichlorobenzene	22.4		µg/l		20.0	112	70-130			
Dichlorodifluoromethane (Freon12)	23.8		µg/l		20.0	119	70-130			
1,1-Dichloroethane	23.6		µg/l		20.0	118	70-130			
1,2-Dichloroethane	20.8		µg/l		20.0	104	70-130			
1,1-Dichloroethene	29.7	QM9	µg/l		20.0	149	70-130			
cis-1,2-Dichloroethene	22.7		µg/l		20.0	113	70-130			
trans-1,2-Dichloroethene	22.0		µg/l		20.0	110	70-130			
1,2-Dichloropropane	23.8		µg/l		20.0	119	70-130			
1,3-Dichloropropane	22.9		µg/l		20.0	115	70-130			
2,2-Dichloropropane	22.9		µg/l		20.0	114	70-130			
1,1-Dichloropropene	23.2		µg/l		20.0	116	70-130			
cis-1,3-Dichloropropene	21.0		µg/l		20.0	105	70-130			
trans-1,3-Dichloropropene	21.4		µg/l		20.0	107	70-130			
Ethylbenzene	23.0		µg/l		20.0	115	70-130			
Hexachlorobutadiene	23.7		µg/l		20.0	119	70-130			
2-Hexanone (MBK)	20.4		µg/l		20.0	102	70-130			
Isopropylbenzene	23.0		µg/l		20.0	115	70-130			
4-Isopropyltoluene	22.8		µg/l		20.0	114	70-130			
Methyl tert-butyl ether	20.9		µg/l		20.0	104	70-130			
4-Methyl-2-pentanone (MIBK)	22.3		µg/l		20.0	111	70-130			
Methylene chloride	22.0		µg/l		20.0	110	70-130			
Naphthalene	19.4		µg/l		20.0	97	70-130			
n-Propylbenzene	24.3		µg/l		20.0	122	70-130			
Styrene	24.3		µg/l		20.0	122	70-130			
1,1,1,2-Tetrachloroethane	21.8		µg/l		20.0	109	70-130			
1,1,2,2-Tetrachloroethane	24.9		µg/l		20.0	124	70-130			
Tetrachloroethene	20.8		µg/l		20.0	104	70-130			
Toluene	22.6		µg/l		20.0	113	70-130			
1,2,3-Trichlorobenzene	21.2		µg/l		20.0	106	70-130			
1,2,4-Trichlorobenzene	20.7		µg/l		20.0	103	70-130			
1,3,5-Trichlorobenzene	21.5		µg/l		20.0	107	70-130			
1,1,1-Trichloroethane	22.2		µg/l		20.0	111	70-130			
1,1,2-Trichloroethane	23.2		µg/l		20.0	116	70-130			
Trichloroethene	21.9		µg/l		20.0	110	70-130			
Trichlorofluoromethane (Freon 11)	25.0		µg/l		20.0	125	70-130			
1,2,3-Trichloropropane	22.7		µg/l		20.0	113	70-130			
1,2,4-Trimethylbenzene	23.1		µg/l		20.0	115	70-130			
1,3,5-Trimethylbenzene	22.3		µg/l		20.0	111	70-130			
Vinyl chloride	38.7	QC1	µg/l		20.0	194	70-130			
m,p-Xylene	23.6		µg/l		20.0	118	70-130			
o-Xylene	23.3		µg/l		20.0	117	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>										
Batch 1812693 - SW846 5030 Water MS										
<u>LCS (1812693-BS1)</u>										
Tetrahydrofuran	22.4		µg/l		20.0	112	70-130			
Ethyl ether	24.2		µg/l		20.0	121	70-130			
Tert-amyl methyl ether	20.9		µg/l		20.0	104	70-130			
Ethyl tert-butyl ether	21.7		µg/l		20.0	108	70-130			
Di-isopropyl ether	23.3		µg/l		20.0	116	70-130			
Tert-Butanol / butyl alcohol	199		µg/l		200	99	70-130			
1,4-Dioxane	164		µg/l		200	82	70-130			
trans-1,4-Dichloro-2-butene	19.7		µg/l		20.0	99	70-130			
Ethanol	458		µg/l		400	114	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
Surrogate: Toluene-d8	47.4		µg/l		50.0	95	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.2		µg/l		50.0	96	70-130			
Surrogate: Dibromofluoromethane	48.0		µg/l		50.0	96	70-130			
<u>LCS Dup (1812693-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.3		µg/l		20.0	116	70-130	2	20	
Acetone	25.5		µg/l		20.0	127	70-130	9	20	
Acrylonitrile	21.0		µg/l		20.0	105	70-130	7	20	
Benzene	23.7		µg/l		20.0	118	70-130	1	20	
Bromobenzene	20.4		µg/l		20.0	102	70-130	3	20	
Bromochloromethane	19.9		µg/l		20.0	100	70-130	8	20	
Bromodichloromethane	22.9		µg/l		20.0	114	70-130	4	20	
Bromoform	19.2		µg/l		20.0	96	70-130	0.9	20	
Bromomethane	34.1	QC2	µg/l		20.0	171	70-130	9	20	
2-Butanone (MEK)	18.3		µg/l		20.0	92	70-130	13	20	
n-Butylbenzene	24.6		µg/l		20.0	123	70-130	2	20	
sec-Butylbenzene	24.9		µg/l		20.0	125	70-130	1	20	
tert-Butylbenzene	23.2		µg/l		20.0	116	70-130	0.9	20	
Carbon disulfide	24.9		µg/l		20.0	124	70-130	2	20	
Carbon tetrachloride	19.8		µg/l		20.0	99	70-130	4	20	
Chlorobenzene	21.4		µg/l		20.0	107	70-130	3	20	
Chloroethane	27.6	QC2	µg/l		20.0	138	70-130	2	20	
Chloroform	19.8		µg/l		20.0	99	70-130	0.7	20	
Chloromethane	21.4		µg/l		20.0	107	70-130	8	20	
2-Chlorotoluene	22.4		µg/l		20.0	112	70-130	1	20	
4-Chlorotoluene	23.1		µg/l		20.0	115	70-130	2	20	
1,2-Dibromo-3-chloropropane	19.8		µg/l		20.0	99	70-130	8	20	
Dibromochloromethane	20.0		µg/l		20.0	100	70-130	5	20	
1,2-Dibromoethane (EDB)	20.8		µg/l		20.0	104	70-130	7	20	
Dibromomethane	21.9		µg/l		20.0	110	70-130	3	20	
1,2-Dichlorobenzene	22.5		µg/l		20.0	112	70-130	3	20	
1,3-Dichlorobenzene	21.6		µg/l		20.0	108	70-130	3	20	
1,4-Dichlorobenzene	21.8		µg/l		20.0	109	70-130	2	20	
Dichlorodifluoromethane (Freon12)	23.7		µg/l		20.0	118	70-130	0.4	20	
1,1-Dichloroethane	22.7		µg/l		20.0	114	70-130	4	20	
1,2-Dichloroethane	19.4		µg/l		20.0	97	70-130	7	20	
1,1-Dichloroethene	22.0	QR2	µg/l		20.0	110	70-130	30	20	
cis-1,2-Dichloroethene	22.0		µg/l		20.0	110	70-130	3	20	
trans-1,2-Dichloroethene	22.3		µg/l		20.0	112	70-130	2	20	
1,2-Dichloropropane	23.1		µg/l		20.0	115	70-130	3	20	
1,3-Dichloropropane	22.3		µg/l		20.0	111	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>										
Batch 1812693 - SW846 5030 Water MS										
<u>LCS Dup (1812693-BSD1)</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
2,2-Dichloropropane	23.5		µg/l		20.0	117	70-130	3	20	
1,1-Dichloropropene	23.0		µg/l		20.0	115	70-130	1	20	
cis-1,3-Dichloropropene	20.2		µg/l		20.0	101	70-130	4	20	
trans-1,3-Dichloropropene	20.2		µg/l		20.0	101	70-130	6	20	
Ethylbenzene	22.8		µg/l		20.0	114	70-130	0.7	20	
Hexachlorobutadiene	23.6		µg/l		20.0	118	70-130	0.5	20	
2-Hexanone (MBK)	18.3		µg/l		20.0	92	70-130	11	20	
Isopropylbenzene	23.3		µg/l		20.0	117	70-130	1	20	
4-Isopropyltoluene	22.6		µg/l		20.0	113	70-130	0.7	20	
Methyl tert-butyl ether	20.1		µg/l		20.0	100	70-130	4	20	
4-Methyl-2-pentanone (MIBK)	21.0		µg/l		20.0	105	70-130	6	20	
Methylene chloride	20.8		µg/l		20.0	104	70-130	6	20	
Naphthalene	18.9		µg/l		20.0	94	70-130	3	20	
n-Propylbenzene	24.7		µg/l		20.0	124	70-130	2	20	
Styrene	23.9		µg/l		20.0	120	70-130	2	20	
1,1,1,2-Tetrachloroethane	22.0		µg/l		20.0	110	70-130	0.9	20	
1,1,2,2-Tetrachloroethane	24.2		µg/l		20.0	121	70-130	3	20	
Tetrachloroethene	20.0		µg/l		20.0	100	70-130	3	20	
Toluene	22.1		µg/l		20.0	110	70-130	2	20	
1,2,3-Trichlorobenzene	19.7		µg/l		20.0	99	70-130	7	20	
1,2,4-Trichlorobenzene	20.6		µg/l		20.0	103	70-130	0.3	20	
1,3,5-Trichlorobenzene	22.0		µg/l		20.0	110	70-130	2	20	
1,1,1-Trichloroethane	22.3		µg/l		20.0	111	70-130	0.2	20	
1,1,2-Trichloroethane	22.2		µg/l		20.0	111	70-130	4	20	
Trichloroethene	21.4		µg/l		20.0	107	70-130	3	20	
Trichlorofluoromethane (Freon 11)	24.4		µg/l		20.0	122	70-130	3	20	
1,2,3-Trichloropropane	22.2		µg/l		20.0	111	70-130	2	20	
1,2,4-Trimethylbenzene	22.7		µg/l		20.0	113	70-130	2	20	
1,3,5-Trimethylbenzene	22.5		µg/l		20.0	113	70-130	1	20	
Vinyl chloride	35.4	QC1	µg/l		20.0	177	70-130	9	20	
m,p-Xylene	22.9		µg/l		20.0	115	70-130	3	20	
o-Xylene	23.0		µg/l		20.0	115	70-130	2	20	
Tetrahydrofuran	20.0		µg/l		20.0	100	70-130	11	20	
Ethyl ether	22.4		µg/l		20.0	112	70-130	8	20	
Tert-amyl methyl ether	19.6		µg/l		20.0	98	70-130	6	20	
Ethyl tert-butyl ether	20.1		µg/l		20.0	101	70-130	8	20	
Di-isopropyl ether	22.5		µg/l		20.0	113	70-130	3	20	
Tert-Butanol / butyl alcohol	179		µg/l		200	89	70-130	11	20	
1,4-Dioxane	185		µg/l		200	92	70-130	12	20	
trans-1,4-Dichloro-2-butene	19.4		µg/l		20.0	97	70-130	1	20	
Ethanol	479		µg/l		400	120	70-130	5	20	
Surrogate: 4-Bromofluorobenzene	47.6		µg/l		50.0	95	70-130			
Surrogate: Toluene-d8	48.3		µg/l		50.0	97	70-130			
Surrogate: 1,2-Dichloroethane-d4	47.0		µg/l		50.0	94	70-130			
Surrogate: Dibromofluoromethane	48.2		µg/l		50.0	96	70-130			
<u>Matrix Spike (1812693-MS1)</u>										
<u>Source: SC50148-03</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.0	D	µg/l		20.0	0.00	95	70-130		
Acetone	24.9	D	µg/l		20.0	0.00	124	70-130		
Acrylonitrile	18.8	D	µg/l		20.0	0.00	94	70-130		
Benzene	25.3	D	µg/l		20.0	3.42	109	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>										
Batch 1812693 - SW846 5030 Water MS										
<u>Matrix Spike (1812693-MS1)</u>										
<u>Source: SC50148-03</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
Bromobenzene	19.1	D	µg/l		20.0	0.00	96	70-130		
Bromoform	18.8	D	µg/l		20.0	0.00	94	70-130		
Bromochloromethane	21.7	D	µg/l		20.0	0.00	108	70-130		
Bromodichloromethane	17.6	D	µg/l		20.0	0.00	88	70-130		
Bromomethane	16.4	D	µg/l		20.0	0.00	82	70-130		
2-Butanone (MEK)	19.6	D	µg/l		20.0	0.00	98	70-130		
n-Butylbenzene	27.3	D	µg/l		20.0	2.46	124	70-130		
sec-Butylbenzene	24.2	D	µg/l		20.0	0.81	117	70-130		
tert-Butylbenzene	21.8	D	µg/l		20.0	0.00	109	70-130		
Carbon disulfide	17.7	D	µg/l		20.0	0.00	88	70-130		
Carbon tetrachloride	17.8	D	µg/l		20.0	0.00	89	70-130		
Chlorobenzene	20.0	D	µg/l		20.0	0.00	100	70-130		
Chloroethane	20.8	D	µg/l		20.0	0.00	104	70-130		
Chloroform	18.2	D	µg/l		20.0	0.00	91	70-130		
Chloromethane	14.8	D	µg/l		20.0	0.00	74	70-130		
2-Chlorotoluene	20.6	D	µg/l		20.0	0.00	103	70-130		
4-Chlorotoluene	26.2	QM7, D	µg/l		20.0	0.00	131	70-130		
1,2-Dibromo-3-chloropropane	20.0	D	µg/l		20.0	0.00	100	70-130		
Dibromochloromethane	18.6	D	µg/l		20.0	0.00	93	70-130		
1,2-Dibromoethane (EDB)	20.9	D	µg/l		20.0	0.00	104	70-130		
Dibromomethane	20.8	D	µg/l		20.0	0.00	104	70-130		
1,2-Dichlorobenzene	21.5	D	µg/l		20.0	0.00	108	70-130		
1,3-Dichlorobenzene	20.0	D	µg/l		20.0	0.00	100	70-130		
1,4-Dichlorobenzene	20.7	D	µg/l		20.0	0.00	104	70-130		
Dichlorodifluoromethane (Freon12)	5.93	QM7, D	µg/l		20.0	0.00	30	70-130		
1,1-Dichloroethane	21.0	D	µg/l		20.0	0.00	105	70-130		
1,2-Dichloroethane	18.1	D	µg/l		20.0	0.00	90	70-130		
1,1-Dichloroethene	26.0	D	µg/l		20.0	0.00	130	70-130		
cis-1,2-Dichloroethene	20.5	D	µg/l		20.0	0.00	103	70-130		
trans-1,2-Dichloroethene	20.0	D	µg/l		20.0	0.00	100	70-130		
1,2-Dichloropropane	22.0	D	µg/l		20.0	0.00	110	70-130		
1,3-Dichloropropane	20.9	D	µg/l		20.0	0.00	104	70-130		
2,2-Dichloropropane	20.3	D	µg/l		20.0	0.00	101	70-130		
1,1-Dichloropropene	20.6	D	µg/l		20.0	0.00	103	70-130		
cis-1,3-Dichloropropene	19.7	D	µg/l		20.0	0.00	98	70-130		
trans-1,3-Dichloropropene	19.2	D	µg/l		20.0	0.00	96	70-130		
Ethylbenzene	59.8	D	µg/l		20.0	35.2	123	70-130		
Hexachlorobutadiene	23.1	D	µg/l		20.0	0.00	116	70-130		
2-Hexanone (MBK)	18.3	D	µg/l		20.0	0.00	91	70-130		
Isopropylbenzene	26.0	D	µg/l		20.0	4.12	109	70-130		
4-Isopropyltoluene	22.2	D	µg/l		20.0	1.03	106	70-130		
Methyl tert-butyl ether	18.6	D	µg/l		20.0	0.00	93	70-130		
4-Methyl-2-pentanone (MIBK)	20.6	D	µg/l		20.0	0.00	103	70-130		
Methylene chloride	19.7	D	µg/l		20.0	0.00	98	70-130		
Naphthalene	43.9	QM7, D	µg/l		20.0	16.4	138	70-130		
n-Propylbenzene	32.0	D	µg/l		20.0	7.49	122	70-130		
Styrene	22.6	D	µg/l		20.0	0.00	113	70-130		
1,1,1,2-Tetrachloroethane	20.3	D	µg/l		20.0	0.00	101	70-130		
1,1,2,2-Tetrachloroethane	22.0	D	µg/l		20.0	0.00	110	70-130		
Tetrachloroethene	19.1	D	µg/l		20.0	0.00	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>										
Batch 1812693 - SW846 5030 Water MS										
<b>Matrix Spike (1812693-MS1)</b>										
<u>Source: SC50148-03</u> <u>Prepared &amp; Analyzed: 19-Sep-18</u>										
Toluene	25.8	D	µg/l		20.0	4.94	104	70-130		
1,2,3-Trichlorobenzene	31.4	QM7, D	µg/l		20.0	0.00	157	70-130		
1,2,4-Trichlorobenzene	30.7	QM7, D	µg/l		20.0	0.00	153	70-130		
1,3,5-Trichlorobenzene	29.3	QM7, D	µg/l		20.0	0.00	146	70-130		
1,1,1-Trichloroethane	19.4	D	µg/l		20.0	0.00	97	70-130		
1,1,2-Trichloroethane	21.3	D	µg/l		20.0	0.00	107	70-130		
Trichloroethylene	20.4	D	µg/l		20.0	0.00	102	70-130		
Trichlorofluoromethane (Freon 11)	19.8	D	µg/l		20.0	0.00	99	70-130		
1,2,3-Trichloropropane	20.0	D	µg/l		20.0	0.00	100	70-130		
1,2,4-Trimethylbenzene	121	QM7, D, E	µg/l		20.0	92.2	145	70-130		
1,3,5-Trimethylbenzene	42.2	D	µg/l		20.0	19.5	114	70-130		
Vinyl chloride	16.9	D	µg/l		20.0	0.00	84	70-130		
m,p-Xylene	89.2	QM7, D	µg/l		20.0	62.9	132	70-130		
o-Xylene	30.6	D	µg/l		20.0	8.46	111	70-130		
Tetrahydrofuran	17.2	D	µg/l		20.0	0.00	86	70-130		
Ethyl ether	21.3	D	µg/l		20.0	0.00	106	70-130		
Tert-amyl methyl ether	18.8	D	µg/l		20.0	0.00	94	70-130		
Ethyl tert-butyl ether	19.0	D	µg/l		20.0	0.00	95	70-130		
Di-isopropyl ether	20.8	D	µg/l		20.0	0.00	104	70-130		
Tert-Butanol / butyl alcohol	166	D	µg/l		200	0.00	83	70-130		
1,4-Dioxane	156	D	µg/l		200	0.00	78	70-130		
trans-1,4-Dichloro-2-butene	15.2	D	µg/l		20.0	0.00	76	70-130		
Ethanol	426	D	µg/l		400	0.00	107	70-130		
Surrogate: 4-Bromofluorobenzene	47.1		µg/l		50.0		94	70-130		
Surrogate: Toluene-d8	49.3		µg/l		50.0		99	70-130		
Surrogate: 1,2-Dichloroethane-d4	47.0		µg/l		50.0		94	70-130		
Surrogate: Dibromofluoromethane	47.9		µg/l		50.0		96	70-130		
<b>Matrix Spike Dup (1812693-MSD1)</b>										
<u>Source: SC50148-03</u> <u>Prepared &amp; Analyzed: 19-Sep-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.6	D	µg/l		20.0	0.00	98	70-130	3	20
Acetone	24.7	D	µg/l		20.0	0.00	124	70-130		20
Acrylonitrile	18.8	D	µg/l		20.0	0.00	94	70-130	0.05	20
Benzene	25.1	D	µg/l		20.0	3.42	108	70-130	0.7	20
Bromobenzene	18.8	D	µg/l		20.0	0.00	94	70-130	2	20
Bromoform	19.7	D	µg/l		20.0	0.00	99	70-130	5	20
Bromochloromethane	21.8	D	µg/l		20.0	0.00	109	70-130	0.6	20
Bromodichloromethane	17.0	D	µg/l		20.0	0.00	85	70-130	3	20
Bromoform	16.0	D	µg/l		20.0	0.00	80	70-130	2	20
2-Butanone (MEK)	19.4	D	µg/l		20.0	0.00	97	70-130	1	20
n-Butylbenzene	26.4	D	µg/l		20.0	2.46	120	70-130	3	20
sec-Butylbenzene	23.9	D	µg/l		20.0	0.81	116	70-130	1	20
tert-Butylbenzene	21.7	D	µg/l		20.0	0.00	108	70-130	0.4	20
Carbon disulfide	17.8	D	µg/l		20.0	0.00	89	70-130	0.7	20
Carbon tetrachloride	18.2	D	µg/l		20.0	0.00	91	70-130	2	20
Chlorobenzene	19.9	D	µg/l		20.0	0.00	99	70-130	0.7	20
Chloroethane	20.4	D	µg/l		20.0	0.00	102	70-130	2	20
Chloroform	18.2	D	µg/l		20.0	0.00	91	70-130	0.05	20
Chloromethane	16.6	D	µg/l		20.0	0.00	83	70-130	12	20
2-Chlorotoluene	20.1	D	µg/l		20.0	0.00	100	70-130	3	20
4-Chlorotoluene	25.7	D	µg/l		20.0	0.00	129	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>										
Batch 1812693 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1812693-MSD1)</u>										
<u>Source: SC50148-03</u>										
<u>Prepared &amp; Analyzed: 19-Sep-18</u>										
1,2-Dibromo-3-chloropropane	19.2	D	µg/l		20.0	0.00	96	70-130	4	20
Dibromochloromethane	18.4	D	µg/l		20.0	0.00	92	70-130	0.9	20
1,2-Dibromoethane (EDB)	20.1	D	µg/l		20.0	0.00	101	70-130	4	20
Dibromomethane	19.8	D	µg/l		20.0	0.00	99	70-130	5	20
1,2-Dichlorobenzene	21.2	D	µg/l		20.0	0.00	106	70-130	1	20
1,3-Dichlorobenzene	20.2	D	µg/l		20.0	0.00	101	70-130	0.8	20
1,4-Dichlorobenzene	20.1	D	µg/l		20.0	0.00	100	70-130	3	20
Dichlorodifluoromethane (Freon12)	6.06	QM7, D	µg/l		20.0	0.00	30	70-130	2	20
1,1-Dichloroethane	20.2	D	µg/l		20.0	0.00	101	70-130	4	20
1,2-Dichloroethane	18.4	D	µg/l		20.0	0.00	92	70-130	2	20
1,1-Dichloroethene	26.0	D	µg/l		20.0	0.00	130	70-130	0.2	20
cis-1,2-Dichloroethene	20.0	D	µg/l		20.0	0.00	100	70-130	3	20
trans-1,2-Dichloroethene	20.0	D	µg/l		20.0	0.00	100	70-130	0.2	20
1,2-Dichloropropane	21.3	D	µg/l		20.0	0.00	107	70-130	3	20
1,3-Dichloropropane	20.2	D	µg/l		20.0	0.00	101	70-130	3	20
2,2-Dichloropropane	19.9	D	µg/l		20.0	0.00	100	70-130	2	20
1,1-Dichloropropene	21.0	D	µg/l		20.0	0.00	105	70-130	2	20
cis-1,3-Dichloropropene	19.6	D	µg/l		20.0	0.00	98	70-130	0.7	20
trans-1,3-Dichloropropene	19.3	D	µg/l		20.0	0.00	96	70-130	0.4	20
Ethylbenzene	58.8	D	µg/l		20.0	35.2	118	70-130	2	20
Hexachlorobutadiene	23.5	D	µg/l		20.0	0.00	118	70-130	2	20
2-Hexanone (MBK)	18.6	D	µg/l		20.0	0.00	93	70-130	1	20
Isopropylbenzene	26.0	D	µg/l		20.0	4.12	109	70-130	0.2	20
4-Isopropyltoluene	21.9	D	µg/l		20.0	1.03	104	70-130	2	20
Methyl tert-butyl ether	18.6	D	µg/l		20.0	0.00	93	70-130	0.4	20
4-Methyl-2-pentanone (MIBK)	20.2	D	µg/l		20.0	0.00	101	70-130	2	20
Methylene chloride	19.4	D	µg/l		20.0	0.00	97	70-130	1	20
Naphthalene	43.6	QM7, D	µg/l		20.0	16.4	136	70-130	0.8	20
n-Propylbenzene	31.6	D	µg/l		20.0	7.49	121	70-130	1	20
Styrene	22.1	D	µg/l		20.0	0.00	111	70-130	2	20
1,1,1,2-Tetrachloroethane	20.3	D	µg/l		20.0	0.00	102	70-130	0.3	20
1,1,2,2-Tetrachloroethane	21.6	D	µg/l		20.0	0.00	108	70-130	2	20
Tetrachloroethene	19.5	D	µg/l		20.0	0.00	98	70-130	2	20
Toluene	26.9	D	µg/l		20.0	4.94	110	70-130	4	20
1,2,3-Trichlorobenzene	30.8	QM7, D	µg/l		20.0	0.00	154	70-130	2	20
1,2,4-Trichlorobenzene	31.5	QM7, D	µg/l		20.0	0.00	158	70-130	3	20
1,3,5-Trichlorobenzene	28.6	QM7, D	µg/l		20.0	0.00	143	70-130	2	20
1,1,1-Trichloroethane	19.6	D	µg/l		20.0	0.00	98	70-130	1	20
1,1,2-Trichloroethane	20.0	D	µg/l		20.0	0.00	100	70-130	6	20
Trichloroethene	19.9	D	µg/l		20.0	0.00	99	70-130	2	20
Trichlorofluoromethane (Freon 11)	20.3	D	µg/l		20.0	0.00	102	70-130	3	20
1,2,3-Trichloropropane	19.6	D	µg/l		20.0	0.00	98	70-130	3	20
1,2,4-Trimethylbenzene	120	QM7, D, E	µg/l		20.0	92.2	139	70-130	1	20
1,3,5-Trimethylbenzene	41.7	D	µg/l		20.0	19.5	111	70-130	1	20
Vinyl chloride	17.0	D	µg/l		20.0	0.00	85	70-130	0.5	20
m,p-Xylene	88.9	D	µg/l		20.0	62.9	130	70-130	0.3	20
o-Xylene	30.8	D	µg/l		20.0	8.46	112	70-130	0.5	20
Tetrahydrofuran	17.7	D	µg/l		20.0	0.00	89	70-130	3	20
Ethyl ether	20.6	D	µg/l		20.0	0.00	103	70-130	3	20
Tert-amyl methyl ether	18.9	D	µg/l		20.0	0.00	95	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																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Analyzed: 19-Sep-18</u>									Ethyl tert-butyl ether	19.1	D	µg/l	20.0	0.00	96	70-130	0.8	20	Di-isopropyl ether	20.8	D	µg/l	20.0	0.00	104	70-130	0.05	20	Tert-Butanol / butyl alcohol	171	D	µg/l	200	0.00	86	70-130	3	20	1,4-Dioxane	177	D	µg/l	200	0.00	89	70-130	13	20	trans-1,4-Dichloro-2-butene	14.5	D	µg/l	20.0	0.00	73	70-130	4	20	Ethanol	441	D	µg/l	400	0.00	110	70-130	3	20	<i>Surrogate: 4-Bromofluorobenzene</i>	47.6		µg/l	50.0		95	70-130			<i>Surrogate: Toluene-d8</i>	50.2		µg/l	50.0		100	70-130			<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.2		µg/l	50.0		96	70-130			<i>Surrogate: Dibromofluoromethane</i>	49.4		µg/l	50.0		99	70-130																																																																																																																																																																																																																																																																																																																																										
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0.50</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">0.50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bromoform</td> <td style="text-align: center;">&lt; 1.00</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">1.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bromomethane</td> <td style="text-align: center;">&lt; 2.00</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">2.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-Butanone (MEK)</td> <td style="text-align: center;">&lt; 2.00</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">2.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>n-Butylbenzene</td> <td style="text-align: center;">&lt; 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0.50</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">0.50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1,2-Dibromoethane (EDB)</td> <td style="text-align: center;">&lt; 0.50</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">0.50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dibromomethane</td> <td style="text-align: center;">&lt; 1.00</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">1.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1,2-Dichlorobenzene</td> <td style="text-align: center;">&lt; 1.00</td> <td style="text-align: center;">U</td> <td style="text-align: center;">µg/l</td> <td style="text-align: center;">1.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1,3-Dichlorobenzene</td> <td style="text-align: center;">&lt; 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*This laboratory report is not valid without an authorized signature on the cover page.*

# 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>										
Batch 1812696 - SW846 5030 Water MS										
<u>Blank (1812696-BLK1)</u>										
<u>Prepared: 19-Sep-18 Analyzed: 20-Sep-18</u>										
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	< 2.00	U	µg/l	2.00						
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						
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						
Surrogate: 4-Bromofluorobenzene	47.2		µg/l	50.0		94	70-130			
Surrogate: Toluene-d8	49.5		µg/l	50.0		99	70-130			
Surrogate: 1,2-Dichloroethane-d4	50.3		µg/l	50.0		101	70-130			
Surrogate: Dibromofluoromethane	49.8		µg/l	50.0		100	70-130			
<u>LCS (1812696-BS1)</u>										
<u>Prepared: 19-Sep-18 Analyzed: 20-Sep-18</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	<b>22.2</b>		µg/l	20.0		111	70-130			
Acetone	<b>24.9</b>		µg/l	20.0		124	70-130			
Acrylonitrile	<b>21.7</b>		µg/l	20.0		109	70-130			
Benzene	<b>22.7</b>		µg/l	20.0		113	70-130			
Bromobenzene	<b>19.6</b>		µg/l	20.0		98	70-130			
Bromo-chloromethane	<b>20.3</b>		µg/l	20.0		102	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>										
Batch 1812696 - SW846 5030 Water MS										
<u>LCS (1812696-BS1)</u>										
Bromodichloromethane	23.3		µg/l		20.0	117	70-130			
Bromoform	19.0		µg/l		20.0	95	70-130			
Bromomethane	25.0		µg/l		20.0	125	70-130			
2-Butanone (MEK)	23.8		µg/l		20.0	119	70-130			
n-Butylbenzene	22.9		µg/l		20.0	115	70-130			
sec-Butylbenzene	23.1		µg/l		20.0	116	70-130			
tert-Butylbenzene	21.5		µg/l		20.0	108	70-130			
Carbon disulfide	24.1		µg/l		20.0	121	70-130			
Carbon tetrachloride	19.6		µg/l		20.0	98	70-130			
Chlorobenzene	20.1		µg/l		20.0	101	70-130			
Chloroethane	26.7	QC2	µg/l		20.0	133	70-130			
Chloroform	18.9		µg/l		20.0	95	70-130			
Chloromethane	24.0		µg/l		20.0	120	70-130			
2-Chlorotoluene	20.8		µg/l		20.0	104	70-130			
4-Chlorotoluene	21.6		µg/l		20.0	108	70-130			
1,2-Dibromo-3-chloropropane	20.1		µg/l		20.0	100	70-130			
Dibromochloromethane	19.8		µg/l		20.0	99	70-130			
1,2-Dibromoethane (EDB)	20.8		µg/l		20.0	104	70-130			
Dibromomethane	21.7		µg/l		20.0	108	70-130			
1,2-Dichlorobenzene	20.7		µg/l		20.0	104	70-130			
1,3-Dichlorobenzene	20.3		µg/l		20.0	101	70-130			
1,4-Dichlorobenzene	20.8		µg/l		20.0	104	70-130			
Dichlorodifluoromethane (Freon12)	21.4		µg/l		20.0	107	70-130			
1,1-Dichloroethane	22.5		µg/l		20.0	112	70-130			
1,2-Dichloroethane	19.5		µg/l		20.0	98	70-130			
1,1-Dichloroethene	21.6		µg/l		20.0	108	70-130			
cis-1,2-Dichloroethene	21.7		µg/l		20.0	108	70-130			
trans-1,2-Dichloroethene	22.1		µg/l		20.0	111	70-130			
1,2-Dichloropropane	22.5		µg/l		20.0	112	70-130			
1,3-Dichloropropane	21.6		µg/l		20.0	108	70-130			
2,2-Dichloropropane	22.3		µg/l		20.0	112	70-130			
1,1-Dichloropropene	22.0		µg/l		20.0	110	70-130			
cis-1,3-Dichloropropene	20.6		µg/l		20.0	103	70-130			
trans-1,3-Dichloropropene	20.2		µg/l		20.0	101	70-130			
Ethylbenzene	21.4		µg/l		20.0	107	70-130			
Hexachlorobutadiene	22.0		µg/l		20.0	110	70-130			
2-Hexanone (MBK)	19.5		µg/l		20.0	98	70-130			
Isopropylbenzene	21.7		µg/l		20.0	108	70-130			
4-Isopropyltoluene	21.6		µg/l		20.0	108	70-130			
Methyl tert-butyl ether	19.7		µg/l		20.0	98	70-130			
4-Methyl-2-pentanone (MIBK)	21.8		µg/l		20.0	109	70-130			
Methylene chloride	20.3		µg/l		20.0	101	70-130			
Naphthalene	18.9		µg/l		20.0	95	70-130			
n-Propylbenzene	23.0		µg/l		20.0	115	70-130			
Styrene	22.6		µg/l		20.0	113	70-130			
1,1,1,2-Tetrachloroethane	20.5		µg/l		20.0	103	70-130			
1,1,2,2-Tetrachloroethane	22.8		µg/l		20.0	114	70-130			
Tetrachloroethene	19.8		µg/l		20.0	99	70-130			
Toluene	21.7		µg/l		20.0	108	70-130			
1,2,3-Trichlorobenzene	20.4		µg/l		20.0	102	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>										
Batch 1812696 - SW846 5030 Water MS										
<u>LCS (1812696-BS1)</u>										
Prepared: 19-Sep-18 Analyzed: 20-Sep-18										
1,2,4-Trichlorobenzene	20.5		µg/l		20.0	102	70-130			
1,3,5-Trichlorobenzene	20.6		µg/l		20.0	103	70-130			
1,1,1-Trichloroethane	21.2		µg/l		20.0	106	70-130			
1,1,2-Trichloroethane	21.1		µg/l		20.0	105	70-130			
Trichloroethylene	21.3		µg/l		20.0	106	70-130			
Trichlorofluoromethane (Freon 11)	25.1		µg/l		20.0	126	70-130			
1,2,3-Trichloropropane	21.6		µg/l		20.0	108	70-130			
1,2,4-Trimethylbenzene	21.1		µg/l		20.0	106	70-130			
1,3,5-Trimethylbenzene	20.7		µg/l		20.0	104	70-130			
Vinyl chloride	41.4	QC1	µg/l		20.0	207	70-130			
m,p-Xylene	22.1		µg/l		20.0	111	70-130			
o-Xylene	21.3		µg/l		20.0	106	70-130			
Tetrahydrofuran	21.2		µg/l		20.0	106	70-130			
Ethyl ether	23.2		µg/l		20.0	116	70-130			
Tert-amyl methyl ether	19.0		µg/l		20.0	95	70-130			
Ethyl tert-butyl ether	20.1		µg/l		20.0	100	70-130			
Di-isopropyl ether	22.5		µg/l		20.0	112	70-130			
Tert-Butanol / butyl alcohol	201		µg/l		200	100	70-130			
1,4-Dioxane	195		µg/l		200	98	70-130			
trans-1,4-Dichloro-2-butene	17.1		µg/l		20.0	85	70-130			
Ethanol	482		µg/l		400	120	70-130			
Surrogate: 4-Bromofluorobenzene	46.7		µg/l		50.0	93	70-130			
Surrogate: Toluene-d8	49.4		µg/l		50.0	99	70-130			
Surrogate: 1,2-Dichloroethane-d4	47.6		µg/l		50.0	95	70-130			
Surrogate: Dibromofluoromethane	49.7		µg/l		50.0	99	70-130			
<u>LCS Dup (1812696-BSD1)</u>										
Prepared: 19-Sep-18 Analyzed: 20-Sep-18										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.8		µg/l		20.0	109	70-130	2	20	
Acetone	24.8		µg/l		20.0	124	70-130	0.4	20	
Acrylonitrile	21.8		µg/l		20.0	109	70-130	0.1	20	
Benzene	22.1		µg/l		20.0	111	70-130	2	20	
Bromobenzene	20.0		µg/l		20.0	100	70-130	2	20	
Bromochloromethane	20.6		µg/l		20.0	103	70-130	1	20	
Bromodichloromethane	22.2		µg/l		20.0	111	70-130	5	20	
Bromoform	20.0		µg/l		20.0	100	70-130	5	20	
Bromomethane	27.5		µg/l		20.0	137	70-130	9	20	
2-Butanone (MEK)	25.6		µg/l		20.0	128	70-130	7	20	
n-Butylbenzene	23.0		µg/l		20.0	115	70-130	0.3	20	
sec-Butylbenzene	23.9		µg/l		20.0	119	70-130	3	20	
tert-Butylbenzene	22.3		µg/l		20.0	112	70-130	4	20	
Carbon disulfide	23.4		µg/l		20.0	117	70-130	3	20	
Carbon tetrachloride	19.1		µg/l		20.0	96	70-130	3	20	
Chlorobenzene	20.5		µg/l		20.0	103	70-130	2	20	
Chloroethane	26.5	QC2	µg/l		20.0	133	70-130	0.6	20	
Chloroform	18.8		µg/l		20.0	94	70-130	0.5	20	
Chloromethane	24.1		µg/l		20.0	120	70-130	0.1	20	
2-Chlorotoluene	21.4		µg/l		20.0	107	70-130	3	20	
4-Chlorotoluene	21.7		µg/l		20.0	108	70-130	0.3	20	
1,2-Dibromo-3-chloropropane	21.8		µg/l		20.0	109	70-130	8	20	
Dibromochloromethane	19.5		µg/l		20.0	97	70-130	1	20	
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0	105	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>										
Batch 1812696 - SW846 5030 Water MS										
<u>LCS Dup (1812696-BSD1)</u>										
<u>Prepared: 19-Sep-18 Analyzed: 20-Sep-18</u>										
Dibromomethane	21.2		µg/l		20.0	106	70-130	2	20	
1,2-Dichlorobenzene	20.5		µg/l		20.0	103	70-130	0.9	20	
1,3-Dichlorobenzene	20.9		µg/l		20.0	104	70-130	3	20	
1,4-Dichlorobenzene	20.6		µg/l		20.0	103	70-130	1	20	
Dichlorodifluoromethane (Freon12)	22.5		µg/l		20.0	113	70-130	5	20	
1,1-Dichloroethane	22.5		µg/l		20.0	112	70-130	0.04	20	
1,2-Dichloroethane	19.4		µg/l		20.0	97	70-130	0.6	20	
1,1-Dichloroethene	29.8	QM9	µg/l		20.0	149	70-130	32	20	
cis-1,2-Dichloroethene	21.8		µg/l		20.0	109	70-130	0.6	20	
trans-1,2-Dichloroethene	22.0		µg/l		20.0	110	70-130	0.5	20	
1,2-Dichloropropane	22.3		µg/l		20.0	112	70-130	0.7	20	
1,3-Dichloropropane	22.1		µg/l		20.0	110	70-130	2	20	
2,2-Dichloropropane	21.8		µg/l		20.0	109	70-130	2	20	
1,1-Dichloropropene	21.7		µg/l		20.0	109	70-130	1	20	
cis-1,3-Dichloropropene	20.6		µg/l		20.0	103	70-130	0.2	20	
trans-1,3-Dichloropropene	20.0		µg/l		20.0	100	70-130	1	20	
Ethylbenzene	22.1		µg/l		20.0	110	70-130	3	20	
Hexachlorobutadiene	23.7		µg/l		20.0	119	70-130	8	20	
2-Hexanone (MBK)	19.3		µg/l		20.0	97	70-130	0.9	20	
Isopropylbenzene	21.9		µg/l		20.0	110	70-130	1	20	
4-Isopropyltoluene	21.4		µg/l		20.0	107	70-130	1	20	
Methyl tert-butyl ether	20.4		µg/l		20.0	102	70-130	3	20	
4-Methyl-2-pentanone (MIBK)	22.2		µg/l		20.0	111	70-130	2	20	
Methylene chloride	20.2		µg/l		20.0	101	70-130	0.3	20	
Naphthalene	19.6		µg/l		20.0	98	70-130	3	20	
n-Propylbenzene	23.1		µg/l		20.0	116	70-130	0.5	20	
Styrene	23.3		µg/l		20.0	116	70-130	3	20	
1,1,1,2-Tetrachloroethane	22.1		µg/l		20.0	111	70-130	8	20	
1,1,2,2-Tetrachloroethane	23.9		µg/l		20.0	120	70-130	5	20	
Tetrachloroethene	19.6		µg/l		20.0	98	70-130	0.9	20	
Toluene	21.2		µg/l		20.0	106	70-130	2	20	
1,2,3-Trichlorobenzene	20.8		µg/l		20.0	104	70-130	2	20	
1,2,4-Trichlorobenzene	20.8		µg/l		20.0	104	70-130	2	20	
1,3,5-Trichlorobenzene	21.8		µg/l		20.0	109	70-130	6	20	
1,1,1-Trichloroethane	21.5		µg/l		20.0	107	70-130	1	20	
1,1,2-Trichloroethane	21.7		µg/l		20.0	108	70-130	3	20	
Trichloroethene	21.0		µg/l		20.0	105	70-130	1	20	
Trichlorofluoromethane (Freon 11)	24.9		µg/l		20.0	124	70-130	1	20	
1,2,3-Trichloropropane	21.9		µg/l		20.0	109	70-130	1	20	
1,2,4-Trimethylbenzene	21.7		µg/l		20.0	109	70-130	3	20	
1,3,5-Trimethylbenzene	22.2		µg/l		20.0	111	70-130	7	20	
Vinyl chloride	37.7	QC1	µg/l		20.0	188	70-130	9	20	
m,p-Xylene	22.6		µg/l		20.0	113	70-130	2	20	
o-Xylene	21.6		µg/l		20.0	108	70-130	1	20	
Tetrahydrofuran	21.1		µg/l		20.0	106	70-130	0.5	20	
Ethyl ether	24.0		µg/l		20.0	120	70-130	4	20	
Tert-amyl methyl ether	19.4		µg/l		20.0	97	70-130	2	20	
Ethyl tert-butyl ether	20.1		µg/l		20.0	100	70-130	0.1	20	
Di-isopropyl ether	21.9		µg/l		20.0	109	70-130	3	20	
Tert-Butanol / butyl alcohol	201		µg/l		200	100	70-130	0.1	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
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### SW846 8260C

Batch 1812696 - SW846 5030 Water MS

#### LCS Dup (1812696-BSD1)

1,4-Dioxane	183	µg/l	200		91	70-130	7	20
trans-1,4-Dichloro-2-butene	18.8	µg/l	20.0		94	70-130	10	20
Ethanol	459	µg/l	400		115	70-130	5	20
Surrogate: 4-Bromofluorobenzene	47.6	µg/l	50.0		95	70-130		
Surrogate: Toluene-d8	48.9	µg/l	50.0		98	70-130		
Surrogate: 1,2-Dichloroethane-d4	47.2	µg/l	50.0		94	70-130		
Surrogate: Dibromofluoromethane	49.3	µg/l	50.0		99	70-130		

### SW846 8260C TICs

Batch 1812693 - SW846 5030 Water MS

#### Blank (1812693-BLK1)

Tentatively Identified Compounds	<b>None found</b>	µg/l
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Batch 1812696 - SW846 5030 Water MS

#### Blank (1812696-BLK1)

Tentatively Identified Compounds	<b>None found</b>	µg/l
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Prepared: 19-Sep-18 Analyzed: 20-Sep-18

Prepared & Analyzed: 19-Sep-18

Prepared: 19-Sep-18 Analyzed: 20-Sep-18

# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812395 - SW846 3510C										
<u>Blank (1812395-BLK1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	< 5.00	U	µg/l	5.00						
Acenaphthylene	< 5.00	U	µg/l	5.00						
Aniline	< 5.00	U	µg/l	5.00						
Anthracene	< 5.00	U	µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00	U	µg/l	5.00						
Benzidine	< 10.0	U	µg/l	10.0						
Benzo (a) anthracene	< 5.00	U	µg/l	5.00						
Benzo (a) pyrene	< 5.00	U	µg/l	5.00						
Benzo (b) fluoranthene	< 5.00	U	µg/l	5.00						
Benzo (g,h,i) perlylene	< 5.00	U	µg/l	5.00						
Benzo (k) fluoranthene	< 5.00	U	µg/l	5.00						
Benzoic acid	< 5.00	U	µg/l	5.00						
Benzyl alcohol	< 5.00	U	µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00	U	µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00	U	µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00	U	µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Butyl benzyl phthalate	< 5.00	U	µg/l	5.00						
Carbazole	< 5.00	U	µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00	U	µg/l	5.00						
4-Chloroaniline	< 5.00	U	µg/l	5.00						
2-Chloronaphthalene	< 5.00	U	µg/l	5.00						
2-Chlorophenol	< 5.00	U	µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00	U	µg/l	5.00						
Chrysene	< 5.00	U	µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00	U	µg/l	5.00						
Dibenzofuran	< 5.00	U	µg/l	5.00						
1,2-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,3-Dichlorobenzene	< 5.00	U	µg/l	5.00						
1,4-Dichlorobenzene	< 5.00	U	µg/l	5.00						
3,3'-Dichlorobenzidine	< 5.00	U	µg/l	5.00						
2,4-Dichlorophenol	< 5.00	U	µg/l	5.00						
Diethyl phthalate	< 5.00	U	µg/l	5.00						
Dimethyl phthalate	< 5.00	U	µg/l	5.00						
2,4-Dimethylphenol	< 5.00	U	µg/l	5.00						
Di-n-butyl phthalate	< 5.00	U	µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrophenol	< 5.00	U	µg/l	5.00						
2,4-Dinitrotoluene	< 5.00	U	µg/l	5.00						
2,6-Dinitrotoluene	< 5.00	U	µg/l	5.00						
Di-n-octyl phthalate	< 5.00	U	µg/l	5.00						
Fluoranthene	< 5.00	U	µg/l	5.00						
Fluorene	< 5.00	U	µg/l	5.00						
Hexachlorobenzene	< 5.00	U	µg/l	5.00						
Hexachlorobutadiene	< 5.00	U	µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00	U	µg/l	5.00						
Hexachloroethane	< 5.00	U	µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00	U	µg/l	5.00						
Isophorone	< 5.00	U	µg/l	5.00						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW846 8270D</u></b>										
Batch 1812395 - SW846 3510C										
<u>Blank (1812395-BLK1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
2-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2-Methylphenol	< 5.00	U	µg/l	5.00						
3 & 4-Methylphenol	< 10.0	U	µg/l	10.0						
Naphthalene	< 5.00	U	µg/l	5.00						
2-Nitroaniline	< 5.00	U	µg/l	5.00						
3-Nitroaniline	< 5.00	U	µg/l	5.00						
4-Nitroaniline	< 5.00	U	µg/l	5.00						
Nitrobenzene	< 5.00	U	µg/l	5.00						
2-Nitrophenol	< 5.00	U	µg/l	5.00						
4-Nitrophenol	< 20.0	U	µg/l	20.0						
N-Nitrosodimethylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00	U	µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00	U	µg/l	5.00						
Pentachlorophenol	< 20.0	U	µg/l	20.0						
Phenanthrene	< 5.00	U	µg/l	5.00						
Phenol	< 5.00	U	µg/l	5.00						
Pyrene	< 5.00	U	µg/l	5.00						
Pyridine	< 5.00	U	µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00	U	µg/l	5.00						
1-Methylnaphthalene	< 5.00	U	µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00	U	µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00	U	µg/l	5.00						
Pentachloronitrobenzene	< 5.00	U	µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00	U	µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	24.8		µg/l		50.0		50	30-130		
Surrogate: 2-Fluorophenol	19.8		µg/l		50.0		40	15-110		
Surrogate: Nitrobenzene-d5	26.3		µg/l		50.0		53	30-130		
Surrogate: Phenol-d5	13.7		µg/l		50.0		27	15-110		
Surrogate: Terphenyl-d14	39.2		µg/l		50.0		78	30-130		
Surrogate: 2,4,6-Tribromophenol	22.2		µg/l		50.0		44	15-110		
<u>LCS (1812395-BS1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	<b>25.3</b>		µg/l	4.95	49.5		51	40-140		
Acenaphthylene	<b>25.9</b>		µg/l	4.95	49.5		52	40-140		
Aniline	<b>26.7</b>		µg/l	4.95	49.5		54	40-140		
Anthracene	<b>25.0</b>		µg/l	4.95	49.5		50	40-140		
Azobenzene/Diphenyldiazene	<b>27.4</b>		µg/l	4.95	49.5		55	40-140		
Benzidine	<b>95.5</b>	QC2, E	µg/l	9.90	49.5		193	40-140		
Benzo (a) anthracene	<b>35.7</b>		µg/l	4.95	49.5		72	40-140		
Benzo (a) pyrene	<b>38.9</b>		µg/l	4.95	49.5		79	40-140		
Benzo (b) fluoranthene	<b>36.5</b>		µg/l	4.95	49.5		74	40-140		
Benzo (g,h,i) perylene	<b>37.6</b>		µg/l	4.95	49.5		76	40-140		
Benzo (k) fluoranthene	<b>37.1</b>		µg/l	4.95	49.5		75	40-140		
Benzoic acid	<b>13.9</b>	QC6	µg/l	4.95	49.5		28	30-130		
Benzyl alcohol	<b>15.6</b>	QC6	µg/l	4.95	49.5		31	40-140		
Bis(2-chloroethoxy)methane	<b>21.0</b>		µg/l	4.95	49.5		42	40-140		
Bis(2-chloroethyl)ether	<b>22.9</b>		µg/l	4.95	49.5		46	40-140		
Bis(2-chloroisopropyl)ether	<b>24.9</b>		µg/l	4.95	49.5		50	40-140		
Bis(2-ethylhexyl)phthalate	<b>37.0</b>		µg/l	4.95	49.5		75	40-140		
4-Bromophenyl phenyl ether	<b>23.5</b>		µg/l	4.95	49.5		47	40-140		
Butyl benzyl phthalate	<b>34.3</b>		µg/l	4.95	49.5		69	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812395 - SW846 3510C										
<u>LCS (1812395-BS1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
Carbazole	55.8		µg/l	4.95	49.5	113	40-140			
4-Chloro-3-methylphenol	25.8		µg/l	4.95	49.5	52	30-130			
4-Chloroaniline	33.5		µg/l	4.95	49.5	68	40-140			
2-Chloronaphthalene	30.0		µg/l	4.95	49.5	61	40-140			
2-Chlorophenol	24.4		µg/l	4.95	49.5	49	30-130			
4-Chlorophenyl phenyl ether	24.3		µg/l	4.95	49.5	49	40-140			
Chrysene	37.1		µg/l	4.95	49.5	75	40-140			
Dibenzo (a,h) anthracene	38.6		µg/l	4.95	49.5	78	40-140			
Dibenzofuran	28.7		µg/l	4.95	49.5	58	40-140			
1,2-Dichlorobenzene	27.6		µg/l	4.95	49.5	56	40-140			
1,3-Dichlorobenzene	27.4		µg/l	4.95	49.5	55	40-140			
1,4-Dichlorobenzene	27.8		µg/l	4.95	49.5	56	40-140			
3,3'-Dichlorobenzidine	46.0		µg/l	4.95	49.5	93	40-140			
2,4-Dichlorophenol	23.2		µg/l	4.95	49.5	47	30-130			
Diethyl phthalate	25.5		µg/l	4.95	49.5	51	40-140			
Dimethyl phthalate	23.9		µg/l	4.95	49.5	48	40-140			
2,4-Dimethylphenol	24.6		µg/l	4.95	49.5	50	30-130			
Di-n-butyl phthalate	26.0		µg/l	4.95	49.5	53	40-140			
4,6-Dinitro-2-methylphenol	27.3		µg/l	4.95	49.5	55	30-130			
2,4-Dinitrophenol	19.7		µg/l	4.95	49.5	40	30-130			
2,4-Dinitrotoluene	34.3		µg/l	4.95	49.5	69	40-140			
2,6-Dinitrotoluene	33.3		µg/l	4.95	49.5	67	40-140			
Di-n-octyl phthalate	39.6		µg/l	4.95	49.5	80	40-140			
Fluoranthene	24.8		µg/l	4.95	49.5	50	40-140			
Fluorene	25.8		µg/l	4.95	49.5	52	40-140			
Hexachlorobenzene	32.2		µg/l	4.95	49.5	65	40-140			
Hexachlorobutadiene	24.0		µg/l	4.95	49.5	48	40-140			
Hexachlorocyclopentadiene	36.8		µg/l	4.95	49.5	74	40-140			
Hexachloroethane	29.1		µg/l	4.95	49.5	59	40-140			
Indeno (1,2,3-cd) pyrene	37.0		µg/l	4.95	49.5	75	40-140			
Isophorone	24.4		µg/l	4.95	49.5	49	40-140			
2-Methylnaphthalene	31.3		µg/l	4.95	49.5	63	40-140			
2-Methylphenol	27.1		µg/l	4.95	49.5	55	30-130			
3 & 4-Methylphenol	24.0		µg/l	9.90	49.5	48	30-130			
Naphthalene	23.7		µg/l	4.95	49.5	48	40-140			
2-Nitroaniline	28.1		µg/l	4.95	49.5	57	40-140			
3-Nitroaniline	49.6		µg/l	4.95	49.5	100	40-140			
4-Nitroaniline	41.7		µg/l	4.95	49.5	84	40-140			
Nitrobenzene	33.0		µg/l	4.95	49.5	67	40-140			
2-Nitrophenol	24.4		µg/l	4.95	49.5	49	30-130			
4-Nitrophenol	16.5	J	µg/l	19.8	49.5	33	30-130			
N-Nitrosodimethylamine	23.9		µg/l	4.95	49.5	48	40-140			
N-Nitrosodi-n-propylamine	28.1		µg/l	4.95	49.5	57	40-140			
N-Nitrosodiphenylamine	29.4		µg/l	4.95	49.5	59	40-140			
Pentachlorophenol	15.4	J	µg/l	19.8	49.5	31	30-130			
Phenanthrene	25.1		µg/l	4.95	49.5	51	40-140			
Phenol	13.7	QC6	µg/l	4.95	49.5	28	30-130			
Pyrene	33.9		µg/l	4.95	49.5	68	40-140			
Pyridine	24.0		µg/l	4.95	49.5	48	40-140			
1,2,4-Trichlorobenzene	26.6		µg/l	4.95	49.5	54	40-140			

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812395 - SW846 3510C										
<u>LCS (1812395-BS1)</u>										
1-Methylnaphthalene	23.9		µg/l	4.95	49.5		48	40-140		
2,4,5-Trichlorophenol	25.0		µg/l	4.95	49.5		51	30-130		
2,4,6-Trichlorophenol	23.3		µg/l	4.95	49.5		47	30-130		
Pentachloronitrobenzene	27.8		µg/l	4.95	49.5		56	40-140		
1,2,4,5-Tetrachlorobenzene	24.1		µg/l	4.95	49.5		49	40-140		
<u>Surrogate: 2-Fluorobiphenyl</u>										
<i>Surrogate: 2-Fluorophenol</i>	26.9		µg/l		49.5		54	30-130		
<i>Surrogate: Nitrobenzene-d5</i>	21.9		µg/l		49.5		44	15-110		
<i>Surrogate: Phenol-d5</i>	30.0		µg/l		49.5		61	30-130		
<i>Surrogate: Terphenyl-d14</i>	15.3		µg/l		49.5		31	15-110		
<i>Surrogate: 2,4,6-Tribromophenol</i>	42.2		µg/l		49.5		85	30-130		
<u>LCS Dup (1812395-BSD1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	28.1		µg/l	5.00	50.0		56	40-140	10	20
Acenaphthylene	30.8		µg/l	5.00	50.0		62	40-140	17	20
Aniline	26.2		µg/l	5.00	50.0		52	40-140	2	20
Anthracene	29.7		µg/l	5.00	50.0		59	40-140	17	20
Azobenzene/Diphenyldiazene	33.9	QR9	µg/l	5.00	50.0		68	40-140	21	20
Benzidine	91.6	QC2, E	µg/l	10.0	50.0		183	40-140	4	20
Benzo (a) anthracene	37.4		µg/l	5.00	50.0		75	40-140	5	20
Benzo (a) pyrene	40.2		µg/l	5.00	50.0		80	40-140	3	20
Benzo (b) fluoranthene	40.8		µg/l	5.00	50.0		82	40-140	11	20
Benzo (g,h,i) perylene	40.5		µg/l	5.00	50.0		81	40-140	7	20
Benzo (k) fluoranthene	38.6		µg/l	5.00	50.0		77	40-140	4	20
Benzoic acid	14.4	QC6	µg/l	5.00	50.0		29	30-130	3	20
Benzyl alcohol	26.6	QR9	µg/l	5.00	50.0		53	40-140	52	20
Bis(2-chloroethoxy)methane	22.7		µg/l	5.00	50.0		45	40-140	8	20
Bis(2-chloroethyl)ether	24.0		µg/l	5.00	50.0		48	40-140	4	20
Bis(2-chloroisopropyl)ether	26.2		µg/l	5.00	50.0		52	40-140	5	20
Bis(2-ethylhexyl)phthalate	40.0		µg/l	5.00	50.0		80	40-140	8	20
4-Bromophenyl phenyl ether	28.7		µg/l	5.00	50.0		57	40-140	20	20
Butyl benzyl phthalate	38.6		µg/l	5.00	50.0		77	40-140	12	20
Carbazole	67.6		µg/l	5.00	50.0		135	40-140	19	20
4-Chloro-3-methylphenol	28.4		µg/l	5.00	50.0		57	30-130	10	20
4-Chloroaniline	37.3		µg/l	5.00	50.0		75	40-140	11	20
2-Chloronaphthalene	32.7		µg/l	5.00	50.0		65	40-140	9	20
2-Chlorophenol	25.5		µg/l	5.00	50.0		51	30-130	5	20
4-Chlorophenyl phenyl ether	27.7		µg/l	5.00	50.0		55	40-140	13	20
Chrysene	38.6		µg/l	5.00	50.0		77	40-140	4	20
Dibenzo (a,h) anthracene	41.4		µg/l	5.00	50.0		83	40-140	7	20
Dibenzofuran	31.5		µg/l	5.00	50.0		63	40-140	9	20
1,2-Dichlorobenzene	29.7		µg/l	5.00	50.0		59	40-140	7	20
1,3-Dichlorobenzene	27.9		µg/l	5.00	50.0		56	40-140	2	20
1,4-Dichlorobenzene	30.4		µg/l	5.00	50.0		61	40-140	9	20
3,3'-Dichlorobenzidine	51.2		µg/l	5.00	50.0		102	40-140	11	20
2,4-Dichlorophenol	25.1		µg/l	5.00	50.0		50	30-130	8	20
Diethyl phthalate	29.6		µg/l	5.00	50.0		59	40-140	15	20
Dimethyl phthalate	29.6	QR9	µg/l	5.00	50.0		59	40-140	21	20
2,4-Dimethylphenol	25.7		µg/l	5.00	50.0		51	30-130	4	20
Di-n-butyl phthalate	31.4		µg/l	5.00	50.0		63	40-140	18	20
4,6-Dinitro-2-methylphenol	34.7	QR9	µg/l	5.00	50.0		69	30-130	24	20

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812395 - SW846 3510C										
<u>LCS Dup (1812395-BSD1)</u>										
<u>Prepared: 12-Sep-18 Analyzed: 17-Sep-18</u>										
2,4-Dinitrophenol	<b>20.8</b>		µg/l	5.00	50.0	42	30-130	6	20	
2,4-Dinitrotoluene	<b>38.4</b>		µg/l	5.00	50.0	77	40-140	11	20	
2,6-Dinitrotoluene	<b>38.5</b>		µg/l	5.00	50.0	77	40-140	14	20	
Di-n-octyl phthalate	<b>43.0</b>		µg/l	5.00	50.0	86	40-140	8	20	
Fluoranthene	<b>31.1</b>	QR9	µg/l	5.00	50.0	62	40-140	22	20	
Fluorene	<b>29.0</b>		µg/l	5.00	50.0	58	40-140	12	20	
Hexachlorobenzene	<b>36.4</b>		µg/l	5.00	50.0	73	40-140	12	20	
Hexachlorobutadiene	<b>24.9</b>		µg/l	5.00	50.0	50	40-140	4	20	
Hexachlorocyclopentadiene	<b>37.7</b>		µg/l	5.00	50.0	75	40-140	2	20	
Hexachloroethane	<b>30.5</b>		µg/l	5.00	50.0	61	40-140	5	20	
Indeno (1,2,3-cd) pyrene	<b>39.6</b>		µg/l	5.00	50.0	79	40-140	7	20	
Isophorone	<b>26.8</b>		µg/l	5.00	50.0	54	40-140	9	20	
2-Methylnaphthalene	<b>32.9</b>		µg/l	5.00	50.0	66	40-140	5	20	
2-Methylphenol	<b>28.8</b>		µg/l	5.00	50.0	58	30-130	6	20	
3 & 4-Methylphenol	<b>25.8</b>		µg/l	10.0	50.0	52	30-130	7	20	
Naphthalene	<b>25.7</b>		µg/l	5.00	50.0	51	40-140	8	20	
2-Nitroaniline	<b>31.4</b>		µg/l	5.00	50.0	63	40-140	11	20	
3-Nitroaniline	<b>53.6</b>		µg/l	5.00	50.0	107	40-140	8	20	
4-Nitroaniline	<b>47.3</b>		µg/l	5.00	50.0	95	40-140	13	20	
Nitrobenzene	<b>33.1</b>		µg/l	5.00	50.0	66	40-140	0.4	20	
2-Nitrophenol	<b>26.0</b>		µg/l	5.00	50.0	52	30-130	6	20	
4-Nitrophenol	<b>16.4</b>	J	µg/l	20.0	50.0	33	30-130	0.9	20	
N-Nitrosodimethylamine	<b>23.8</b>		µg/l	5.00	50.0	48	40-140	0.6	20	
N-Nitrosodi-n-propylamine	<b>30.8</b>		µg/l	5.00	50.0	62	40-140	9	20	
N-Nitrosodiphenylamine	<b>37.4</b>	QR9	µg/l	5.00	50.0	75	40-140	24	20	
Pentachlorophenol	<b>19.5</b>	QR9, J	µg/l	20.0	50.0	39	30-130	24	20	
Phenanthrene	<b>29.4</b>		µg/l	5.00	50.0	59	40-140	16	20	
Phenol	<b>13.8</b>	QC6	µg/l	5.00	50.0	28	30-130	0.6	20	
Pyrene	<b>37.1</b>		µg/l	5.00	50.0	74	40-140	9	20	
Pyridine	<b>18.8</b>	QC6, QR9	µg/l	5.00	50.0	38	40-140	24	20	
1,2,4-Trichlorobenzene	<b>28.7</b>		µg/l	5.00	50.0	57	40-140	8	20	
1-Methylnaphthalene	<b>27.9</b>		µg/l	5.00	50.0	56	40-140	16	20	
2,4,5-Trichlorophenol	<b>28.4</b>		µg/l	5.00	50.0	57	30-130	12	20	
2,4,6-Trichlorophenol	<b>26.3</b>		µg/l	5.00	50.0	53	30-130	12	20	
Pentachloronitrobenzene	<b>31.3</b>		µg/l	5.00	50.0	63	40-140	12	20	
1,2,4,5-Tetrachlorobenzene	<b>26.0</b>		µg/l	5.00	50.0	52	40-140	8	20	
<i>Surrogate: 2-Fluorobiphenyl</i>	<b>28.1</b>		µg/l		50.0	56	30-130			
<i>Surrogate: 2-Fluorophenol</i>	<b>22.5</b>		µg/l		50.0	45	15-110			
<i>Surrogate: Nitrobenzene-d5</i>	<b>31.0</b>		µg/l		50.0	62	30-130			
<i>Surrogate: Phenol-d5</i>	<b>15.4</b>		µg/l		50.0	31	15-110			
<i>Surrogate: Terphenyl-d14</i>	<b>42.7</b>		µg/l		50.0	85	30-130			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<b>35.6</b>		µg/l		50.0	71	15-110			
<b>Batch 1812441 - SW846 3510C</b>										
<u>Blank (1812441-BLK1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	< 5.05	U	µg/l	5.05						
Acenaphthylene	< 5.05	U	µg/l	5.05						
Aniline	< 5.05	U	µg/l	5.05						
Anthracene	< 5.05	U	µg/l	5.05						
Azobenzene/Diphenyldiazene	< 5.05	U	µg/l	5.05						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>Blank (1812441-BLK1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Benzidine	< 10.1	U	µg/l	10.1						
Benzo (a) anthracene	< 5.05	U	µg/l	5.05						
Benzo (a) pyrene	< 5.05	U	µg/l	5.05						
Benzo (b) fluoranthene	< 5.05	U	µg/l	5.05						
Benzo (g,h,i) perylene	< 5.05	U	µg/l	5.05						
Benzo (k) fluoranthene	< 5.05	U	µg/l	5.05						
Benzoic acid	< 5.05	U	µg/l	5.05						
Benzyl alcohol	< 5.05	U	µg/l	5.05						
Bis(2-chloroethoxy)methane	< 5.05	U	µg/l	5.05						
Bis(2-chloroethyl)ether	< 5.05	U	µg/l	5.05						
Bis(2-chloroisopropyl)ether	< 5.05	U	µg/l	5.05						
Bis(2-ethylhexyl)phthalate	< 5.05	U	µg/l	5.05						
4-Bromophenyl phenyl ether	< 5.05	U	µg/l	5.05						
Butyl benzyl phthalate	< 5.05	U	µg/l	5.05						
Carbazole	< 5.05	U	µg/l	5.05						
4-Chloro-3-methylphenol	< 5.05	U	µg/l	5.05						
4-Chloroaniline	< 5.05	U	µg/l	5.05						
2-Chloronaphthalene	< 5.05	U	µg/l	5.05						
2-Chlorophenol	< 5.05	U	µg/l	5.05						
4-Chlorophenyl phenyl ether	< 5.05	U	µg/l	5.05						
Chrysene	< 5.05	U	µg/l	5.05						
Dibenzo (a,h) anthracene	< 5.05	U	µg/l	5.05						
Dibenzofuran	< 5.05	U	µg/l	5.05						
1,2-Dichlorobenzene	< 5.05	U	µg/l	5.05						
1,3-Dichlorobenzene	< 5.05	U	µg/l	5.05						
1,4-Dichlorobenzene	< 5.05	U	µg/l	5.05						
3,3'-Dichlorobenzidine	< 5.05	U	µg/l	5.05						
2,4-Dichlorophenol	< 5.05	U	µg/l	5.05						
Diethyl phthalate	< 5.05	U	µg/l	5.05						
Dimethyl phthalate	< 5.05	U	µg/l	5.05						
2,4-Dimethylphenol	< 5.05	U	µg/l	5.05						
Di-n-butyl phthalate	< 5.05	U	µg/l	5.05						
4,6-Dinitro-2-methylphenol	< 5.05	U	µg/l	5.05						
2,4-Dinitrophenol	< 5.05	U	µg/l	5.05						
2,4-Dinitrotoluene	< 5.05	U	µg/l	5.05						
Di-n-octyl phthalate	< 5.05	U	µg/l	5.05						
Fluoranthene	< 5.05	U	µg/l	5.05						
Fluorene	< 5.05	U	µg/l	5.05						
Hexachlorobenzene	< 5.05	U	µg/l	5.05						
Hexachlorobutadiene	< 5.05	U	µg/l	5.05						
Hexachlorocyclopentadiene	< 5.05	U	µg/l	5.05						
Hexachloroethane	< 5.05	U	µg/l	5.05						
Indeno (1,2,3-cd) pyrene	< 5.05	U	µg/l	5.05						
Isophorone	< 5.05	U	µg/l	5.05						
2-Methylnaphthalene	< 5.05	U	µg/l	5.05						
2-Methylphenol	< 5.05	U	µg/l	5.05						
3 & 4-Methylphenol	< 10.1	U	µg/l	10.1						
Naphthalene	< 5.05	U	µg/l	5.05						
2-Nitroaniline	< 5.05	U	µg/l	5.05						

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>Blank (1812441-BLK1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
3-Nitroaniline	< 5.05	U	µg/l	5.05						
4-Nitroaniline	< 5.05	U	µg/l	5.05						
Nitrobenzene	< 5.05	U	µg/l	5.05						
2-Nitrophenol	< 5.05	U	µg/l	5.05						
4-Nitrophenol	< 20.2	U	µg/l	20.2						
N-Nitrosodimethylamine	< 5.05	U	µg/l	5.05						
N-Nitrosodi-n-propylamine	< 5.05	U	µg/l	5.05						
N-Nitrosodiphenylamine	< 5.05	U	µg/l	5.05						
Pentachlorophenol	< 20.2	U	µg/l	20.2						
Phenanthrene	< 5.05	U	µg/l	5.05						
Phenol	< 5.05	U	µg/l	5.05						
Pyrene	< 5.05	U	µg/l	5.05						
Pyridine	< 5.05	U	µg/l	5.05						
1,2,4-Trichlorobenzene	< 5.05	U	µg/l	5.05						
1-Methylnaphthalene	< 5.05	U	µg/l	5.05						
2,4,5-Trichlorophenol	< 5.05	U	µg/l	5.05						
2,4,6-Trichlorophenol	< 5.05	U	µg/l	5.05						
Pentachloronitrobenzene	< 5.05	U	µg/l	5.05						
1,2,4,5-Tetrachlorobenzene	< 5.05	U	µg/l	5.05						
<i>Surrogate: 2-Fluorobiphenyl</i>	20.7		µg/l	50.5		41	30-130			
<i>Surrogate: 2-Fluorophenol</i>	8.92		µg/l	50.5		18	15-110			
<i>Surrogate: Nitrobenzene-d5</i>	17.6		µg/l	50.5		35	30-130			
<i>Surrogate: Phenol-d5</i>	9.08		µg/l	50.5		18	15-110			
<i>Surrogate: Terphenyl-d14</i>	39.8		µg/l	50.5		79	30-130			
<i>Surrogate: 2,4,6-Tribromophenol</i>	25.5		µg/l	50.5		50	15-110			
<u>LCS (1812441-BS1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	<b>25.8</b>		µg/l	4.90	49.0	53	40-140			
Acenaphthylene	<b>27.4</b>		µg/l	4.90	49.0	56	40-140			
Aniline	<b>15.9</b>	QC2	µg/l	4.90	49.0	32	40-140			
Anthracene	<b>27.0</b>		µg/l	4.90	49.0	55	40-140			
Azobenzene/Diphenyldiazene	<b>29.5</b>		µg/l	4.90	49.0	60	40-140			
Benzidine	<b>90.4</b>	QC2, E	µg/l	9.80	49.0	184	40-140			
Benzo (a) anthracene	<b>33.7</b>		µg/l	4.90	49.0	69	40-140			
Benzo (a) pyrene	<b>37.0</b>		µg/l	4.90	49.0	75	40-140			
Benzo (b) fluoranthene	<b>33.5</b>		µg/l	4.90	49.0	68	40-140			
Benzo (g,h,i) perylene	<b>35.8</b>		µg/l	4.90	49.0	73	40-140			
Benzo (k) fluoranthene	<b>38.9</b>		µg/l	4.90	49.0	79	40-140			
Benzoic acid	<b>9.75</b>	QC2	µg/l	4.90	49.0	20	30-130			
Benzyl alcohol	<b>11.1</b>	QC2	µg/l	4.90	49.0	23	40-140			
Bis(2-chloroethoxy)methane	<b>20.9</b>		µg/l	4.90	49.0	43	40-140			
Bis(2-chloroethyl)ether	<b>17.1</b>	QC2	µg/l	4.90	49.0	35	40-140			
Bis(2-chloroisopropyl)ether	<b>21.6</b>		µg/l	4.90	49.0	44	40-140			
Bis(2-ethylhexyl)phthalate	<b>33.9</b>		µg/l	4.90	49.0	69	40-140			
4-Bromophenyl phenyl ether	<b>25.2</b>		µg/l	4.90	49.0	52	40-140			
Butyl benzyl phthalate	<b>35.6</b>		µg/l	4.90	49.0	73	40-140			
Carbazole	<b>60.9</b>		µg/l	4.90	49.0	124	40-140			
4-Chloro-3-methylphenol	<b>28.4</b>		µg/l	4.90	49.0	58	30-130			
4-Chloroaniline	<b>24.9</b>		µg/l	4.90	49.0	51	40-140			
2-Chloronaphthalene	<b>31.2</b>		µg/l	4.90	49.0	64	40-140			
2-Chlorophenol	<b>20.5</b>		µg/l	4.90	49.0	42	30-130			

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>LCS (1812441-BS1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
4-Chlorophenyl phenyl ether	25.0		µg/l	4.90	49.0		51	40-140		
Chrysene	33.4		µg/l	4.90	49.0		68	40-140		
Dibenzo (a,h) anthracene	37.3		µg/l	4.90	49.0		76	40-140		
Dibenzofuran	29.2		µg/l	4.90	49.0		59	40-140		
1,2-Dichlorobenzene	17.6	QC2	µg/l	4.90	49.0		36	40-140		
1,3-Dichlorobenzene	13.9	QC2	µg/l	4.90	49.0		28	40-140		
1,4-Dichlorobenzene	15.3	QC2	µg/l	4.90	49.0		31	40-140		
3,3'-Dichlorobenzidine	46.9		µg/l	4.90	49.0		96	40-140		
2,4-Dichlorophenol	23.8		µg/l	4.90	49.0		49	30-130		
Diethyl phthalate	27.6		µg/l	4.90	49.0		56	40-140		
Dimethyl phthalate	26.5		µg/l	4.90	49.0		54	40-140		
2,4-Dimethylphenol	24.3		µg/l	4.90	49.0		50	30-130		
Di-n-butyl phthalate	27.3		µg/l	4.90	49.0		56	40-140		
4,6-Dinitro-2-methylphenol	30.8		µg/l	4.90	49.0		63	30-130		
2,4-Dinitrophenol	17.6		µg/l	4.90	49.0		36	30-130		
2,4-Dinitrotoluene	35.5		µg/l	4.90	49.0		72	40-140		
2,6-Dinitrotoluene	35.2		µg/l	4.90	49.0		72	40-140		
Di-n-octyl phthalate	37.3		µg/l	4.90	49.0		76	40-140		
Fluoranthene	28.2		µg/l	4.90	49.0		57	40-140		
Fluorene	27.0		µg/l	4.90	49.0		55	40-140		
Hexachlorobenzene	31.8		µg/l	4.90	49.0		65	40-140		
Hexachlorobutadiene	20.3		µg/l	4.90	49.0		41	40-140		
Hexachlorocyclopentadiene	34.7		µg/l	4.90	49.0		71	40-140		
Hexachloroethane	16.3	QC2	µg/l	4.90	49.0		33	40-140		
Indeno (1,2,3-cd) pyrene	35.1		µg/l	4.90	49.0		72	40-140		
Isophorone	25.2		µg/l	4.90	49.0		52	40-140		
2-Methylnaphthalene	35.3		µg/l	4.90	49.0		72	40-140		
2-Methylphenol	24.1		µg/l	4.90	49.0		49	30-130		
3 & 4-Methylphenol	21.8		µg/l	9.80	49.0		44	30-130		
Naphthalene	22.6		µg/l	4.90	49.0		46	40-140		
2-Nitroaniline	29.3		µg/l	4.90	49.0		60	40-140		
3-Nitroaniline	43.5		µg/l	4.90	49.0		89	40-140		
4-Nitroaniline	40.2		µg/l	4.90	49.0		82	40-140		
Nitrobenzene	29.8		µg/l	4.90	49.0		61	40-140		
2-Nitrophenol	23.5		µg/l	4.90	49.0		48	30-130		
4-Nitrophenol	13.3	QC2, J	µg/l	19.6	49.0		27	30-130		
N-Nitrosodimethylamine	7.47	QC2	µg/l	4.90	49.0		15	40-140		
N-Nitrosodi-n-propylamine	29.1		µg/l	4.90	49.0		59	40-140		
N-Nitrosodiphenylamine	33.0		µg/l	4.90	49.0		67	40-140		
Pentachlorophenol	15.4	J	µg/l	19.6	49.0		31	30-130		
Phenanthrene	26.3		µg/l	4.90	49.0		54	40-140		
Phenol	10.8	QC2	µg/l	4.90	49.0		22	30-130		
Pyrene	35.3		µg/l	4.90	49.0		72	40-140		
Pyridine	5.26	QC2	µg/l	4.90	49.0		11	40-140		
1,2,4-Trichlorobenzene	24.7		µg/l	4.90	49.0		50	40-140		
1-Methylnaphthalene	24.6		µg/l	4.90	49.0		50	40-140		
2,4,5-Trichlorophenol	26.6		µg/l	4.90	49.0		54	30-130		
2,4,6-Trichlorophenol	23.3		µg/l	4.90	49.0		48	30-130		
Pentachloronitrobenzene	29.3		µg/l	4.90	49.0		60	40-140		
1,2,4,5-Tetrachlorobenzene	23.0		µg/l	4.90	49.0		47	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>LCS (1812441-BS1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Surrogate: 2-Fluorobiphenyl	29.2		µg/l		49.0	60	30-130			
Surrogate: 2-Fluorophenol	14.9		µg/l		49.0	30	15-110			
Surrogate: Nitrobenzene-d5	28.6		µg/l		49.0	58	30-130			
Surrogate: Phenol-d5	12.4		µg/l		49.0	25	15-110			
Surrogate: Terphenyl-d14	41.5		µg/l		49.0	85	30-130			
Surrogate: 2,4,6-Tribromophenol	30.8		µg/l		49.0	63	15-110			
<u>LCS Dup (1812441-BSD1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Acenaphthene	24.0		µg/l	5.00	50.0	48	40-140	7	20	
Acenaphthylene	23.9		µg/l	5.00	50.0	48	40-140	14	20	
Aniline	14.4	QC2	µg/l	5.00	50.0	29	40-140	10	20	
Anthracene	25.5		µg/l	5.00	50.0	51	40-140	6	20	
Azobenzene/Diphenyldiazene	25.8		µg/l	5.00	50.0	52	40-140	13	20	
Benzidine	81.0	QC2, E	µg/l	10.0	50.0	162	40-140	11	20	
Benzo (a) anthracene	30.2		µg/l	5.00	50.0	60	40-140	11	20	
Benzo (a) pyrene	32.6		µg/l	5.00	50.0	65	40-140	13	20	
Benzo (b) fluoranthene	30.9		µg/l	5.00	50.0	62	40-140	8	20	
Benzo (g,h,i) perylene	32.3		µg/l	5.00	50.0	65	40-140	10	20	
Benzo (k) fluoranthene	35.2		µg/l	5.00	50.0	70	40-140	10	20	
Benzoic acid	7.78	QC2, QR5	µg/l	5.00	50.0	16	30-130	22	20	
Benzyl alcohol	8.40	QC2, QR5	µg/l	5.00	50.0	17	40-140	28	20	
Bis(2-chloroethoxy)methane	18.2	QC2	µg/l	5.00	50.0	36	40-140	14	20	
Bis(2-chloroethyl)ether	15.5	QC2	µg/l	5.00	50.0	31	40-140	10	20	
Bis(2-chloroisopropyl)ether	18.9	QC2	µg/l	5.00	50.0	38	40-140	13	20	
Bis(2-ethylhexyl)phthalate	32.6		µg/l	5.00	50.0	65	40-140	4	20	
4-Bromophenyl phenyl ether	24.3		µg/l	5.00	50.0	49	40-140	4	20	
Butyl benzyl phthalate	31.3		µg/l	5.00	50.0	63	40-140	13	20	
Carbazole	58.5		µg/l	5.00	50.0	117	40-140	4	20	
4-Chloro-3-methylphenol	24.6		µg/l	5.00	50.0	49	30-130	14	20	
4-Chloroaniline	22.1		µg/l	5.00	50.0	44	40-140	12	20	
2-Chloronaphthalene	26.0		µg/l	5.00	50.0	52	40-140	18	20	
2-Chlorophenol	18.0		µg/l	5.00	50.0	36	30-130	13	20	
4-Chlorophenyl phenyl ether	21.7		µg/l	5.00	50.0	43	40-140	14	20	
Chrysene	30.8		µg/l	5.00	50.0	62	40-140	8	20	
Dibenzo (a,h) anthracene	34.0		µg/l	5.00	50.0	68	40-140	9	20	
Dibenzofuran	27.0		µg/l	5.00	50.0	54	40-140	7	20	
1,2-Dichlorobenzene	15.7	QC2	µg/l	5.00	50.0	31	40-140	11	20	
1,3-Dichlorobenzene	12.4	QC2	µg/l	5.00	50.0	25	40-140	12	20	
1,4-Dichlorobenzene	13.6	QC2	µg/l	5.00	50.0	27	40-140	12	20	
3,3'-Dichlorobenzidine	43.1		µg/l	5.00	50.0	86	40-140	8	20	
2,4-Dichlorophenol	21.2		µg/l	5.00	50.0	42	30-130	11	20	
Diethyl phthalate	23.9		µg/l	5.00	50.0	48	40-140	15	20	
Dimethyl phthalate	22.9		µg/l	5.00	50.0	46	40-140	14	20	
2,4-Dimethylphenol	20.9		µg/l	5.00	50.0	42	30-130	15	20	
Di-n-butyl phthalate	26.5		µg/l	5.00	50.0	53	40-140	3	20	
4,6-Dinitro-2-methylphenol	27.6		µg/l	5.00	50.0	55	30-130	11	20	
2,4-Dinitrophenol	15.9		µg/l	5.00	50.0	32	30-130	10	20	
2,4-Dinitrotoluene	32.8		µg/l	5.00	50.0	66	40-140	8	20	
2,6-Dinitrotoluene	31.3		µg/l	5.00	50.0	63	40-140	12	20	
Di-n-octyl phthalate	35.2		µg/l	5.00	50.0	70	40-140	6	20	

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>LCS Dup (1812441-BSD1)</u>										
<u>Prepared: 13-Sep-18 Analyzed: 17-Sep-18</u>										
Fluoranthene	<b>25.8</b>		µg/l	5.00	50.0	52	40-140	9	20	
Fluorene	<b>23.4</b>		µg/l	5.00	50.0	47	40-140	14	20	
Hexachlorobenzene	<b>29.9</b>		µg/l	5.00	50.0	60	40-140	6	20	
Hexachlorobutadiene	<b>17.9</b>	QC2	µg/l	5.00	50.0	36	40-140	13	20	
Hexachlorocyclopentadiene	<b>30.3</b>		µg/l	5.00	50.0	61	40-140	14	20	
Hexachloroethane	<b>14.5</b>	QC2	µg/l	5.00	50.0	29	40-140	12	20	
Indeno (1,2,3-cd) pyrene	<b>32.6</b>		µg/l	5.00	50.0	65	40-140	7	20	
Isophorone	<b>22.3</b>		µg/l	5.00	50.0	45	40-140	12	20	
2-Methylnaphthalene	<b>30.6</b>		µg/l	5.00	50.0	61	40-140	14	20	
2-Methylphenol	<b>21.4</b>		µg/l	5.00	50.0	43	30-130	12	20	
3 & 4-Methylphenol	<b>19.0</b>		µg/l	10.0	50.0	38	30-130	13	20	
Naphthalene	<b>20.4</b>		µg/l	5.00	50.0	41	40-140	10	20	
2-Nitroaniline	<b>25.4</b>		µg/l	5.00	50.0	51	40-140	14	20	
3-Nitroaniline	<b>41.3</b>		µg/l	5.00	50.0	83	40-140	5	20	
4-Nitroaniline	<b>35.5</b>		µg/l	5.00	50.0	71	40-140	12	20	
Nitrobenzene	<b>26.6</b>		µg/l	5.00	50.0	53	40-140	11	20	
2-Nitrophenol	<b>20.6</b>		µg/l	5.00	50.0	41	30-130	13	20	
4-Nitrophenol	<b>12.1</b>	QC2, J	µg/l	20.0	50.0	24	30-130	9	20	
N-Nitrosodimethylamine	<b>6.51</b>	QC2	µg/l	5.00	50.0	13	40-140	14	20	
N-Nitrosodi-n-propylamine	<b>24.8</b>		µg/l	5.00	50.0	50	40-140	16	20	
N-Nitrosodiphenylamine	<b>29.9</b>		µg/l	5.00	50.0	60	40-140	10	20	
Pentachlorophenol	<b>13.0</b>	QC2, J	µg/l	20.0	50.0	26	30-130	17	20	
Phenanthrene	<b>24.6</b>		µg/l	5.00	50.0	49	40-140	6	20	
Phenol	<b>9.51</b>	QC2	µg/l	5.00	50.0	19	30-130	13	20	
Pyrene	<b>31.0</b>		µg/l	5.00	50.0	62	40-140	13	20	
Pyridine	<b>4.82</b>	QC2, J	µg/l	5.00	50.0	10	40-140	9	20	
1,2,4-Trichlorobenzene	<b>22.4</b>		µg/l	5.00	50.0	45	40-140	10	20	
1-Methylnaphthalene	<b>22.4</b>		µg/l	5.00	50.0	45	40-140	9	20	
2,4,5-Trichlorophenol	<b>23.0</b>		µg/l	5.00	50.0	46	30-130	14	20	
2,4,6-Trichlorophenol	<b>21.2</b>		µg/l	5.00	50.0	42	30-130	10	20	
Pentachloronitrobenzene	<b>26.5</b>		µg/l	5.00	50.0	53	40-140	10	20	
1,2,4,5-Tetrachlorobenzene	<b>20.7</b>		µg/l	5.00	50.0	41	40-140	10	20	
<i>Surrogate: 2-Fluorobiphenyl</i>	<b>25.3</b>		µg/l		50.0	51	30-130			
<i>Surrogate: 2-Fluorophenol</i>	<b>12.9</b>		µg/l		50.0	26	15-110			
<i>Surrogate: Nitrobenzene-d5</i>	<b>24.9</b>		µg/l		50.0	50	30-130			
<i>Surrogate: Phenol-d5</i>	<b>11.2</b>		µg/l		50.0	22	15-110			
<i>Surrogate: Terphenyl-d14</i>	<b>35.6</b>		µg/l		50.0	71	30-130			
<i>Surrogate: 2,4,6-Tribromophenol</i>	<b>28.1</b>		µg/l		50.0	56	15-110			
<u>Matrix Spike (1812441-MS1)</u>										
<u>Source: SC50148-03</u>										
<u>Prepared: 13-Sep-18 Analyzed: 20-Sep-18</u>										
Acenaphthene	<b>24.4</b>		µg/l	4.76	47.6	BRL	51	40-140		
Acenaphthylene	<b>24.7</b>		µg/l	4.76	47.6	BRL	52	40-140		
Aniline	<b>16.1</b>	QC2	µg/l	4.76	47.6	BRL	34	40-140		
Anthracene	<b>23.5</b>		µg/l	4.76	47.6	BRL	49	40-140		
Azobenzene/Diphenyldiazene	<b>23.0</b>		µg/l	4.76	47.6	BRL	48	40-140		
Benzidine	< 9.52	QC2, U	µg/l	9.52	47.6	BRL	<1	40-140		
Benzo (a) anthracene	<b>32.4</b>		µg/l	4.76	47.6	BRL	68	40-140		
Benzo (a) pyrene	<b>34.5</b>		µg/l	4.76	47.6	BRL	72	40-140		
Benzo (b) fluoranthene	<b>35.4</b>		µg/l	4.76	47.6	BRL	74	40-140		
Benzo (g,h,i) perylene	<b>27.8</b>		µg/l	4.76	47.6	BRL	58	40-140		
Benzo (k) fluoranthene	<b>35.2</b>		µg/l	4.76	47.6	BRL	74	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>Matrix Spike (1812441-MS1)</u>										
<u>Source: SC50148-03</u>										
<u>Prepared: 13-Sep-18 Analyzed: 20-Sep-18</u>										
Benzoic acid	15.8		µg/l	4.76	47.6	BRL	33	30-130		
Benzyl alcohol	22.1		µg/l	4.76	47.6	BRL	46	40-140		
Bis(2-chloroethoxy)methane	20.3		µg/l	4.76	47.6	BRL	43	40-140		
Bis(2-chloroethyl)ether	19.7		µg/l	4.76	47.6	BRL	41	40-140		
Bis(2-chloroisopropyl)ether	22.1		µg/l	4.76	47.6	BRL	46	40-140		
Bis(2-ethylhexyl)phthalate	35.4		µg/l	4.76	47.6	2.67	69	40-140		
4-Bromophenyl phenyl ether	21.9		µg/l	4.76	47.6	BRL	46	40-140		
Butyl benzyl phthalate	34.2		µg/l	4.76	47.6	BRL	72	40-140		
Carbazole	55.3		µg/l	4.76	47.6	BRL	116	40-140		
4-Chloro-3-methylphenol	23.3		µg/l	4.76	47.6	BRL	49	30-130		
4-Chloroaniline	16.8	QM7	µg/l	4.76	47.6	BRL	35	40-140		
2-Chloronaphthalene	27.5		µg/l	4.76	47.6	BRL	58	40-140		
2-Chlorophenol	23.4		µg/l	4.76	47.6	BRL	49	30-130		
4-Chlorophenyl phenyl ether	22.3		µg/l	4.76	47.6	BRL	47	40-140		
Chrysene	32.9		µg/l	4.76	47.6	BRL	69	40-140		
Dibenzo (a,h) anthracene	29.9		µg/l	4.76	47.6	BRL	63	40-140		
Dibenzofuran	27.0		µg/l	4.76	47.6	BRL	57	40-140		
1,2-Dichlorobenzene	29.4		µg/l	4.76	47.6	BRL	62	40-140		
1,3-Dichlorobenzene	27.6		µg/l	4.76	47.6	BRL	58	40-140		
1,4-Dichlorobenzene	28.3		µg/l	4.76	47.6	BRL	59	40-140		
3,3'-Dichlorobenzidine	20.8		µg/l	4.76	47.6	BRL	44	40-140		
2,4-Dichlorophenol	22.2		µg/l	4.76	47.6	BRL	47	30-130		
Diethyl phthalate	23.0		µg/l	4.76	47.6	BRL	48	40-140		
Dimethyl phthalate	23.9		µg/l	4.76	47.6	BRL	50	40-140		
2,4-Dimethylphenol	30.3		µg/l	4.76	47.6	BRL	64	30-130		
Di-n-butyl phthalate	23.6		µg/l	4.76	47.6	BRL	50	40-140		
4,6-Dinitro-2-methylphenol	13.5	QM7	µg/l	4.76	47.6	BRL	28	30-130		
2,4-Dinitrophenol	8.73	QM7	µg/l	4.76	47.6	BRL	18	30-130		
2,4-Dinitrotoluene	30.6		µg/l	4.76	47.6	BRL	64	40-140		
2,6-Dinitrotoluene	30.3		µg/l	4.76	47.6	BRL	64	40-140		
Di-n-octyl phthalate	41.2		µg/l	4.76	47.6	BRL	86	40-140		
Fluoranthene	23.1		µg/l	4.76	47.6	BRL	48	40-140		
Fluorene	23.4		µg/l	4.76	47.6	BRL	49	40-140		
Hexachlorobenzene	27.4		µg/l	4.76	47.6	BRL	58	40-140		
Hexachlorobutadiene	25.6		µg/l	4.76	47.6	BRL	54	40-140		
Hexachlorocyclopentadiene	18.6	QM7	µg/l	4.76	47.6	BRL	39	40-140		
Hexachloroethane	50.0		µg/l	4.76	47.6	BRL	105	40-140		
Indeno (1,2,3-cd) pyrene	27.9		µg/l	4.76	47.6	BRL	59	40-140		
Isophorone	23.0		µg/l	4.76	47.6	BRL	48	30-130		
2-Methylnaphthalene	38.8		µg/l	4.76	47.6	11.2	58	40-140		
2-Methylphenol	22.1		µg/l	4.76	47.6	BRL	46	30-130		
3 & 4-Methylphenol	20.5		µg/l	9.52	47.6	BRL	43	30-130		
Naphthalene	71.1		µg/l	4.76	47.6	38.1	69	40-140		
2-Nitroaniline	24.8		µg/l	4.76	47.6	BRL	52	40-140		
3-Nitroaniline	34.7		µg/l	4.76	47.6	BRL	73	40-140		
4-Nitroaniline	28.8		µg/l	4.76	47.6	BRL	61	40-140		
Nitrobenzene	50.2		µg/l	4.76	47.6	BRL	105	40-140		
2-Nitrophenol	22.6		µg/l	4.76	47.6	BRL	48	30-130		
4-Nitrophenol	10.8	QC2, J	µg/l	19.0	47.6	BRL	23	30-130		
N-Nitrosodimethylamine	15.1	QC2	µg/l	4.76	47.6	BRL	32	40-140		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<u>Matrix Spike (1812441-MS1)</u>										
Source: SC50148-03      Prepared: 13-Sep-18      Analyzed: 20-Sep-18										
N-Nitrosodi-n-propylamine	26.1		µg/l	4.76	47.6	BRL	55	40-140		
N-Nitrosodiphenylamine	27.7		µg/l	4.76	47.6	BRL	58	40-140		
Pentachlorophenol	19.1		µg/l	19.0	47.6	BRL	40	30-130		
Phenanthrene	23.7		µg/l	4.76	47.6	BRL	50	40-140		
Phenol	9.49	QC2	µg/l	4.76	47.6	BRL	20	30-130		
Pyrene	34.7		µg/l	4.76	47.6	BRL	73	40-140		
Pyridine	19.3		µg/l	4.76	47.6	BRL	41	40-140		
1,2,4-Trichlorobenzene	27.2		µg/l	4.76	47.6	BRL	57	40-140		
1-Methylnaphthalene	40.4		µg/l	4.76	47.6	15.0	53	40-140		
2,4,5-Trichlorophenol	23.3		µg/l	4.76	47.6	BRL	49	30-130		
2,4,6-Trichlorophenol	21.7		µg/l	4.76	47.6	BRL	46	30-130		
Pentachloronitrobenzene	25.7		µg/l	4.76	47.6	BRL	54	40-140		
1,2,4,5-Tetrachlorobenzene	22.6		µg/l	4.76	47.6	BRL	48	40-140		
Surrogate: 2-Fluorobiphenyl	25.7		µg/l		47.6		54	30-130		
Surrogate: 2-Fluorophenol	18.4		µg/l		47.6		39	15-110		
Surrogate: Nitrobenzene-d5	32.0		µg/l		47.6		67	30-130		
Surrogate: Phenol-d5	11.6		µg/l		47.6		24	15-110		
Surrogate: Terphenyl-d14	40.0		µg/l		47.6		84	30-130		
Surrogate: 2,4,6-Tribromophenol	30.3		µg/l		47.6		64	15-110		
<u>Matrix Spike Dup (1812441-MSD1)</u>										
Source: SC50148-03      Prepared: 13-Sep-18      Analyzed: 20-Sep-18										
Acenaphthene	23.5		µg/l	4.72	47.2	BRL	50	40-140	4	20
Acenaphthylene	24.1		µg/l	4.72	47.2	BRL	51	40-140	2	20
Aniline	15.4	QC2	µg/l	4.72	47.2	BRL	33	40-140	4	20
Anthracene	23.3		µg/l	4.72	47.2	BRL	49	40-140	0.9	20
Azobenzene/Diphenyldiazene	23.9		µg/l	4.72	47.2	BRL	51	40-140	4	20
Benzidine	< 9.43	QC2, U	µg/l	9.43	47.2	BRL	<1	40-140		20
Benzo (a) anthracene	32.9		µg/l	4.72	47.2	BRL	70	40-140	1	20
Benzo (a) pyrene	34.6		µg/l	4.72	47.2	BRL	73	40-140	0.5	20
Benzo (b) fluoranthene	36.4		µg/l	4.72	47.2	BRL	77	40-140	3	20
Benzo (g,h,i) perylene	27.5		µg/l	4.72	47.2	BRL	58	40-140	1	20
Benzo (k) fluoranthene	37.1		µg/l	4.72	47.2	BRL	79	40-140	5	20
Benzoic acid	10.2	QC2, QR5	µg/l	4.72	47.2	BRL	22	30-130	43	20
Benzyl alcohol	22.9		µg/l	4.72	47.2	BRL	48	40-140	3	20
Bis(2-chloroethoxy)methane	19.6		µg/l	4.72	47.2	BRL	42	40-140	4	20
Bis(2-chloroethyl)ether	19.0		µg/l	4.72	47.2	BRL	40	40-140	4	20
Bis(2-chloroisopropyl)ether	21.3		µg/l	4.72	47.2	BRL	45	40-140	4	20
Bis(2-ethylhexyl)phthalate	37.6		µg/l	4.72	47.2	2.67	74	40-140	6	20
4-Bromophenyl phenyl ether	22.0		µg/l	4.72	47.2	BRL	47	40-140	0.3	20
Butyl benzyl phthalate	35.3		µg/l	4.72	47.2	BRL	75	40-140	3	20
Carbazole	53.8		µg/l	4.72	47.2	BRL	114	40-140	3	20
4-Chloro-3-methylphenol	23.2		µg/l	4.72	47.2	BRL	49	30-130	0.4	20
4-Chloroaniline	19.4		µg/l	4.72	47.2	BRL	41	40-140	14	20
2-Chloronaphthalene	27.2		µg/l	4.72	47.2	BRL	58	40-140	1	20
2-Chlorophenol	22.4		µg/l	4.72	47.2	BRL	48	30-130	4	20
4-Chlorophenyl phenyl ether	21.6		µg/l	4.72	47.2	BRL	46	40-140	3	20
Chrysene	33.3		µg/l	4.72	47.2	BRL	71	40-140	1	20
Dibenzo (a,h) anthracene	30.4		µg/l	4.72	47.2	BRL	64	40-140	2	20
Dibenzofuran	25.9		µg/l	4.72	47.2	BRL	55	40-140	4	20
1,2-Dichlorobenzene	28.5		µg/l	4.72	47.2	BRL	61	40-140	3	20

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW846 8270D</b>										
Batch 1812441 - SW846 3510C										
<b>Matrix Spike Dup (1812441-MSD1)</b>										
					<b>Source: SC50148-03</b>		<b>Prepared: 13-Sep-18</b>	<b>Analyzed: 20-Sep-18</b>		
1,3-Dichlorobenzene	<b>26.6</b>		µg/l	4.72	47.2	BRL	56	40-140	4	20
1,4-Dichlorobenzene	<b>27.3</b>		µg/l	4.72	47.2	BRL	58	40-140	3	20
3,3'-Dichlorobenzidine	<b>20.4</b>		µg/l	4.72	47.2	BRL	43	40-140	2	20
2,4-Dichlorophenol	<b>21.4</b>		µg/l	4.72	47.2	BRL	45	30-130	4	20
Diethyl phthalate	<b>22.5</b>		µg/l	4.72	47.2	BRL	48	40-140	2	20
Dimethyl phthalate	<b>23.1</b>		µg/l	4.72	47.2	BRL	49	40-140	3	20
2,4-Dimethylphenol	<b>27.8</b>		µg/l	4.72	47.2	BRL	59	30-130	8	20
Di-n-butyl phthalate	<b>23.3</b>		µg/l	4.72	47.2	BRL	49	40-140	1	20
4,6-Dinitro-2-methylphenol	<b>14.4</b>		µg/l	4.72	47.2	BRL	31	30-130	7	20
2,4-Dinitrophenol	<b>8.64</b>		µg/l	4.72	47.2	BRL	18	30-130	1	20
2,4-Dinitrotoluene	<b>30.0</b>		µg/l	4.72	47.2	BRL	64	40-140	2	20
2,6-Dinitrotoluene	<b>29.6</b>		µg/l	4.72	47.2	BRL	63	40-140	2	20
Di-n-octyl phthalate	<b>43.3</b>		µg/l	4.72	47.2	BRL	92	40-140	5	20
Fluoranthene	<b>22.5</b>		µg/l	4.72	47.2	BRL	48	40-140	3	20
Fluorene	<b>22.7</b>		µg/l	4.72	47.2	BRL	48	40-140	3	20
Hexachlorobenzene	<b>28.0</b>		µg/l	4.72	47.2	BRL	59	40-140	2	20
Hexachlorobutadiene	<b>25.0</b>		µg/l	4.72	47.2	BRL	53	40-140	2	20
Hexachlorocyclopentadiene	<b>18.3</b>	QC2	µg/l	4.72	47.2	BRL	39	40-140	1	20
Hexachloroethane	<b>26.9</b>	QR9	µg/l	4.72	47.2	BRL	57	40-140	60	20
Indeno (1,2,3-cd) pyrene	<b>28.2</b>		µg/l	4.72	47.2	BRL	60	40-140	1	20
Isophorone	<b>22.5</b>		µg/l	4.72	47.2	BRL	48	30-130	3	20
2-Methylnaphthalene	<b>37.3</b>		µg/l	4.72	47.2	11.2	55	40-140	4	20
2-Methylphenol	<b>20.9</b>		µg/l	4.72	47.2	BRL	44	30-130	5	20
3 & 4-Methylphenol	<b>20.0</b>		µg/l	9.43	47.2	BRL	42	30-130	2	20
Naphthalene	<b>65.0</b>		µg/l	4.72	47.2	38.1	57	40-140	9	20
2-Nitroaniline	<b>24.7</b>		µg/l	4.72	47.2	BRL	52	40-140	0.5	20
3-Nitroaniline	<b>34.0</b>		µg/l	4.72	47.2	BRL	72	40-140	2	20
4-Nitroaniline	<b>29.3</b>		µg/l	4.72	47.2	BRL	62	40-140	1	20
Nitrobenzene	<b>47.8</b>		µg/l	4.72	47.2	BRL	101	40-140	5	20
2-Nitrophenol	<b>22.8</b>		µg/l	4.72	47.2	BRL	48	30-130	0.9	20
4-Nitrophenol	<b>11.1</b>	QC2, J	µg/l	18.9	47.2	BRL	23	30-130	3	20
N-Nitrosodimethylamine	<b>15.3</b>	QC2	µg/l	4.72	47.2	BRL	32	40-140	1	20
N-Nitrosodi-n-propylamine	<b>25.0</b>		µg/l	4.72	47.2	BRL	53	40-140	5	20
N-Nitrosodiphenylamine	<b>27.8</b>		µg/l	4.72	47.2	BRL	59	40-140	0.3	20
Pentachlorophenol	<b>18.6</b>	J	µg/l	18.9	47.2	BRL	39	30-130	2	20
Phenanthrene	<b>23.3</b>		µg/l	4.72	47.2	BRL	49	40-140	2	20
Phenol	<b>9.54</b>	QC2	µg/l	4.72	47.2	BRL	20	30-130	0.5	20
Pyrene	<b>35.6</b>		µg/l	4.72	47.2	BRL	76	40-140	3	20
Pyridine	<b>19.1</b>		µg/l	4.72	47.2	BRL	41	40-140	1	20
1,2,4-Trichlorobenzene	<b>26.3</b>		µg/l	4.72	47.2	BRL	56	40-140	3	20
1-Methylnaphthalene	<b>39.5</b>		µg/l	4.72	47.2	15.0	52	40-140	2	20
2,4,5-Trichlorophenol	<b>23.3</b>		µg/l	4.72	47.2	BRL	49	30-130	0.07	20
2,4,6-Trichlorophenol	<b>21.5</b>		µg/l	4.72	47.2	BRL	46	30-130	1	20
Pentachloronitrobenzene	<b>25.7</b>		µg/l	4.72	47.2	BRL	54	40-140	0.2	20
1,2,4,5-Tetrachlorobenzene	<b>22.5</b>		µg/l	4.72	47.2	BRL	48	40-140	0.4	20
<i>Surrogate: 2-Fluorobiphenyl</i>	<b>26.1</b>		µg/l		47.2		55	30-130		
<i>Surrogate: 2-Fluorophenol</i>	<b>18.1</b>		µg/l		47.2		38	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	<b>30.7</b>		µg/l		47.2		65	30-130		
<i>Surrogate: Phenol-d5</i>	<b>11.3</b>		µg/l		47.2		24	15-110		
<i>Surrogate: Terphenyl-d14</i>	<b>43.4</b>		µg/l		47.2		92	30-130		

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# Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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## SW846 8270D

Batch 1812441 - SW846 3510C

Matrix Spike Dup (1812441-MSD1)

Source: SC50148-03

Prepared: 13-Sep-18 Analyzed: 20-Sep-18

Surrogate: 2,4,6-Tribromophenol

30.8

µg/l

47.2

65

15-110

## SW846 8270D TICS

Batch 1812395 - SW846 3510C

Blank (1812395-BLK1)

Prepared: 12-Sep-18 Analyzed: 17-Sep-18

Tentatively Identified Compounds

0.0

U

µg/l

Batch 1812441 - SW846 3510C

Blank (1812441-BLK1)

Prepared: 13-Sep-18 Analyzed: 17-Sep-18

Tentatively Identified Compounds

None found

µg/l

**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>										
Batch 1812528 - SW846 3005A										
<u>Blank (1812528-BLK1)</u>										
Manganese	< 0.0040	U	mg/l	0.0040						
Potassium	< 0.500	U	mg/l	0.500						
Arsenic	< 0.00400	U	mg/l	0.00400						
Zinc	<b>0.0023</b>	J	mg/l	0.0250						
Vanadium	< 0.0050	U	mg/l	0.0050						
Thallium	< 0.0050	U	mg/l	0.0050						
Selenium	< 0.0150	U	mg/l	0.0150						
Antimony	< 0.0060	U	mg/l	0.0060						
Lead	< 0.0075	U	mg/l	0.0075						
Chromium	<b>0.0009</b>	J	mg/l	0.0050						
Cobalt	< 0.0050	U	mg/l	0.0050						
Cadmium	< 0.0025	U	mg/l	0.0025						
Barium	< 0.0050	U	mg/l	0.0050						
Aluminum	< 0.0250	U	mg/l	0.0250						
Silver	< 0.0050	U	mg/l	0.0050						
Beryllium	< 0.0020	U	mg/l	0.0020						
Nickel	< 0.0050	U	mg/l	0.0050						
<u>Blank (1812528-BLK2)</u>										
Sodium	<b>0.181</b>	J	mg/l	0.750						
Calcium	<b>0.0088</b>	J	mg/l	0.100						
Magnesium	< 5.00	U	mg/l	5.00						
<u>Blank (1812528-BLK3)</u>										
Iron	<b>0.0115</b>	J	mg/l	1.00						
Copper	< 0.0050	U	mg/l	0.0050						
<u>LCS (1812528-BS1)</u>										
Manganese	<b>1.38</b>		mg/l	0.0040	1.25	110	85-115			
Potassium	<b>12.6</b>		mg/l	0.500	12.5	100	85-115			
Vanadium	<b>1.35</b>		mg/l	0.0050	1.25	108	85-115			
Thallium	<b>1.32</b>		mg/l	0.0050	1.25	105	85-115			
Selenium	<b>1.41</b>		mg/l	0.0150	1.25	113	85-115			
Antimony	<b>1.37</b>		mg/l	0.0060	1.25	110	85-115			
Lead	<b>1.38</b>		mg/l	0.0075	1.25	111	85-115			
Nickel	<b>1.36</b>		mg/l	0.0050	1.25	109	85-115			
Zinc	<b>1.31</b>		mg/l	0.0250	1.25	105	85-115			
Cadmium	<b>1.33</b>		mg/l	0.0025	1.25	106	85-115			
Beryllium	<b>1.47</b>	QC2	mg/l	0.0020	1.25	117	85-115			
Barium	<b>1.40</b>		mg/l	0.0050	1.25	112	85-115			
Arsenic	<b>1.314</b>		mg/l	0.00400	1.25	105	85-115			
Aluminum	<b>1.38</b>		mg/l	0.0250	1.25	111	85-115			
Silver	<b>1.30</b>		mg/l	0.0050	1.25	104	85-115			
Cobalt	<b>1.34</b>		mg/l	0.0050	1.25	107	85-115			
Chromium	<b>1.34</b>		mg/l	0.0050	1.25	107	85-115			
<u>LCS (1812528-BS2)</u>										
Sodium	<b>6.60</b>		mg/l	0.750	6.25	106	85-115			
Calcium	<b>6.92</b>		mg/l	0.100	6.25	111	85-115			
Magnesium	<b>1.35</b>	J	mg/l	5.00	1.25	108	85-115			
<u>LCS (1812528-BS3)</u>										
Iron	<b>1.37</b>		mg/l	1.00	1.25	110	85-115			
Copper	<b>1.43</b>		mg/l	0.0050	1.25	115	85-115			
<u>LCS Dup (1812528-BSD1)</u>										
Prepared: 17-Sep-18 Analyzed: 19-Sep-18										

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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>										
Batch 1812528 - SW846 3005A										
<u>LCS Dup (1812528-BSD1)</u>										
Potassium	11.8		mg/l	0.500	12.5	94	85-115	7	20	
Manganese	1.29		mg/l	0.0040	1.25	103	85-115	7	20	
Antimony	1.27		mg/l	0.0060	1.25	101	85-115	8	20	
Barium	1.31		mg/l	0.0050	1.25	105	85-115	7	20	
Zinc	1.21		mg/l	0.0250	1.25	97	85-115	8	20	
Lead	1.29		mg/l	0.0075	1.25	103	85-115	7	20	
Vanadium	1.27		mg/l	0.0050	1.25	102	85-115	6	20	
Thallium	1.23		mg/l	0.0050	1.25	98	85-115	7	20	
Selenium	1.31		mg/l	0.0150	1.25	105	85-115	7	20	
Silver	1.21		mg/l	0.0050	1.25	97	85-115	7	20	
Arsenic	1.220		mg/l	0.00400	1.25	98	85-115	7	20	
Beryllium	1.36		mg/l	0.0020	1.25	109	85-115	7	20	
Cadmium	1.24		mg/l	0.0025	1.25	99	85-115	7	20	
Cobalt	1.23		mg/l	0.0050	1.25	98	85-115	8	20	
Chromium	1.22		mg/l	0.0050	1.25	98	85-115	9	20	
Nickel	1.25		mg/l	0.0050	1.25	100	85-115	9	20	
Aluminum	1.24		mg/l	0.0250	1.25	100	85-115	10	20	
<u>LCS Dup (1812528-BSD2)</u>										
Sodium	6.79		mg/l	0.750	6.25	109	85-115	3	20	
Calcium	7.06		mg/l	0.100	6.25	113	85-115	2	20	
Magnesium	1.36	J	mg/l	5.00	1.25	109	85-115	0.4	20	
<u>LCS Dup (1812528-BSD3)</u>										
Iron	1.40		mg/l	1.00	1.25	112	85-115	2	20	
Copper	1.38		mg/l	0.0050	1.25	111	85-115	4	20	
<u>Duplicate (1812528-DUP1)</u>										
Potassium	9.36		mg/l	0.500		9.14		2	20	
Manganese	0.616		mg/l	0.0040		0.591		4	20	
Lead	0.0118		mg/l	0.0075		0.0122		4	20	
Zinc	0.0027	J	mg/l	0.0250		0.0032		17	20	
Vanadium	< 0.0050	U	mg/l	0.0050		BRL		20		
Thallium	< 0.0050	U	mg/l	0.0050		BRL		20		
Antimony	< 0.0060	U	mg/l	0.0060		BRL		20		
Nickel	< 0.0050	U	mg/l	0.0050		BRL		20		
Chromium	< 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		
Beryllium	< 0.0020	U	mg/l	0.0020		BRL		20		
Barium	0.828		mg/l	0.0050		0.800		3	20	
Arsenic	0.0064	QR8	mg/l	0.00400		0.0038		52	20	
Aluminum	0.0139	J	mg/l	0.0250		0.0150		7	20	
Silver	< 0.0050	U	mg/l	0.0050		BRL		20		
Selenium	< 0.0150	U	mg/l	0.0150		BRL		20		
<u>Duplicate (1812528-DUP2)</u>										
Sodium	366	GS1, D	mg/l	3.75		371		1	20	
Magnesium	33.0	R06	mg/l	5.00		33.4		1	20	
Calcium	248	GS1, D	mg/l	0.500		256		3	20	
<u>Duplicate (1812528-DUP3)</u>										
Iron	4.87	R06	mg/l	1.00		5.04		3	20	
Copper	< 0.0050	U	mg/l	0.0050		BRL		20		
<u>Matrix Spike (1812528-MS1)</u>										
						<u>Source: SC50148-03</u>	<u>Prepared: 17-Sep-18 Analyzed: 19-Sep-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>SW846 6010C</b>										
Batch 1812528 - SW846 3005A										
<u>Matrix Spike (1812528-MS1)</u>										
Manganese	1.68		mg/l	0.0040	1.25	0.591	87	75-125		
Potassium	19.9		mg/l	0.500	12.5	9.14	86	75-125		
Cobalt	1.08		mg/l	0.0050	1.25	BRL	87	75-125		
Antimony	1.28		mg/l	0.0060	1.25	BRL	103	75-125		
Selenium	1.32		mg/l	0.0150	1.25	BRL	106	75-125		
Thallium	1.10		mg/l	0.0050	1.25	BRL	88	75-125		
Vanadium	1.18		mg/l	0.0050	1.25	BRL	95	70-130		
Zinc	1.07		mg/l	0.0250	1.25	0.0032	85	75-125		
Nickel	1.09		mg/l	0.0050	1.25	BRL	87	75-125		
Chromium	1.08		mg/l	0.0050	1.25	BRL	87	75-125		
Lead	1.17		mg/l	0.0075	1.25	0.0122	93	75-125		
Cadmium	1.12		mg/l	0.0025	1.25	BRL	90	75-125		
Silver	1.28		mg/l	0.0050	1.25	BRL	102	75-125		
Aluminum	1.33		mg/l	0.0250	1.25	0.0150	105	75-125		
Arsenic	1.216		mg/l	0.00400	1.25	0.0038	97	75-125		
Barium	1.90		mg/l	0.0050	1.25	0.800	88	75-125		
Beryllium	1.26		mg/l	0.0020	1.25	BRL	101	75-125		
<u>Matrix Spike (1812528-MS2)</u>										
Sodium	377	D	mg/l	3.75	6.25	371	100	75-125		
Calcium	276	QM2, D	mg/l	0.500	6.25	256	304	75-125		
Magnesium	36.0	QM2	mg/l	5.00	1.25	33.4	207	75-125		
<u>Matrix Spike (1812528-MS3)</u>										
Iron	6.28		mg/l	1.00	1.25	5.04	99	75-125		
Copper	1.51		mg/l	0.0050	1.25	BRL	121	75-125		
<u>Matrix Spike Dup (1812528-MSD1)</u>										
Manganese	1.77		mg/l	0.0040	1.25	0.591	94	75-125	5	20
Potassium	21.0		mg/l	0.500	12.5	9.14	95	75-125	6	20
Chromium	1.12		mg/l	0.0050	1.25	BRL	90	75-125	4	20
Nickel	1.13		mg/l	0.0050	1.25	BRL	90	75-125	3	20
Cobalt	1.13		mg/l	0.0050	1.25	BRL	90	75-125	4	20
Antimony	1.32		mg/l	0.0060	1.25	BRL	106	75-125	3	20
Selenium	1.37		mg/l	0.0150	1.25	BRL	110	75-125	4	20
Thallium	1.15		mg/l	0.0050	1.25	BRL	92	75-125	4	20
Zinc	1.11		mg/l	0.0250	1.25	0.0032	89	75-125	4	20
Lead	1.20		mg/l	0.0075	1.25	0.0122	95	75-125	3	20
Beryllium	1.31		mg/l	0.0020	1.25	BRL	105	75-125	4	20
Barium	1.95		mg/l	0.0050	1.25	0.800	92	75-125	2	20
Arsenic	1.276		mg/l	0.00400	1.25	0.0038	102	75-125	5	20
Aluminum	1.42		mg/l	0.0250	1.25	0.0150	112	75-125	7	20
Silver	1.30		mg/l	0.0050	1.25	BRL	104	75-125	1	20
Vanadium	1.22		mg/l	0.0050	1.25	BRL	98	70-130	3	20
Cadmium	1.15		mg/l	0.0025	1.25	BRL	92	75-125	3	20
<u>Matrix Spike Dup (1812528-MSD2)</u>										
Sodium	344	QM2, D	mg/l	3.75	6.25	371	-424	75-125	9	20
Calcium	276	QM2, D	mg/l	0.500	6.25	256	308	75-125	0.09	20
Magnesium	35.9	QM2	mg/l	5.00	1.25	33.4	202	75-125	0.2	20
<u>Matrix Spike Dup (1812528-MSD3)</u>										
Iron	6.16		mg/l	1.00	1.25	5.04	89	75-125	2	20
Copper	1.47		mg/l	0.0050	1.25	BRL	117	75-125	3	20
<u>Post Spike (1812528-PS1)</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 1812528 - SW846 3005A</b>										
<b><u>Post Spike (1812528-PS1)</u></b>										
Potassium	22.2		mg/l	0.500	12.5	9.14	105	80-120		
Manganese	1.90		mg/l	0.0040	1.25	0.591	105	80-120		
Nickel	1.22		mg/l	0.0050	1.25	BRL	97	80-120		
Chromium	1.19		mg/l	0.0050	1.25	BRL	95	80-120		
Antimony	1.43		mg/l	0.0060	1.25	BRL	114	80-120		
Arsenic	1.349		mg/l	0.00400	1.25	0.0038	108	80-120		
Selenium	1.48		mg/l	0.0150	1.25	BRL	118	80-120		
Thallium	1.15		mg/l	0.0050	1.25	BRL	92	80-120		
Vanadium	1.33		mg/l	0.0050	1.25	BRL	106	80-120		
Zinc	1.17		mg/l	0.0250	1.25	0.0032	93	80-120		
Lead	1.29		mg/l	0.0075	1.25	0.0122	102	80-120		
Cadmium	1.22		mg/l	0.0025	1.25	BRL	98	80-120		
Barium	2.07		mg/l	0.0050	1.25	0.800	102	80-120		
Aluminum	1.45		mg/l	0.0250	1.25	0.0150	115	80-120		
Silver	1.38		mg/l	0.0050	1.25	BRL	110	80-120		
Cobalt	1.21		mg/l	0.0050	1.25	BRL	97	80-120		
Beryllium	1.41		mg/l	0.0020	1.25	BRL	113	80-120		
<b><u>Post Spike (1812528-PS2)</u></b>										
Sodium	337	QM2, D	mg/l	3.75	6.25	371	-544	80-120		
Calcium	262	D	mg/l	0.500	6.25	256	80	80-120		
Magnesium	35.3	QM2	mg/l	5.00	1.25	33.4	151	80-120		
<b><u>Post Spike (1812528-PS3)</u></b>										
Iron	5.90	QM4X	mg/l	1.00	1.25	5.04	69	80-120		
Copper	1.45		mg/l	0.0050	1.25	BRL	116	80-120		

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### 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>EPA 245.1/7470A</b>										
Batch 1812530 - EPA200/SW7000 Series										
<u>Blank (1812530-BLK1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020						
<u>LCS (1812530-BS1)</u>										
Mercury	<b>0.00489</b>		mg/l	0.00020	0.00500	98	85-115			
<u>Duplicate (1812530-DUP1)</u>										
Mercury	< 0.00020	U	mg/l	0.00020		BRL				20
<u>Matrix Spike (1812530-MS1)</u>										
Mercury	<b>0.00515</b>		mg/l	0.00020	0.00500	BRL	103	80-120		
<u>Matrix Spike Dup (1812530-MSD1)</u>										
Mercury	<b>0.00519</b>		mg/l	0.00020	0.00500	BRL	104	80-120	0.7	20
<u>Post Spike (1812530-PS1)</u>										
Mercury	<b>0.00522</b>		mg/l	0.00020	0.00500	BRL	104	85-115		

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## 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).
J N	(Tentatively Identified Compounds) reported values are estimated concentrations of non-target analytes identified at greater than 10% of the nearest internal standard.
QC1	Analyte out of acceptance range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall 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.
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.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR5	RPD out of acceptance range.
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.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R06	MRL raised to correlate to batch QC reporting limits.
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.



ORIGIN ID:SYRA (315) 382-7727  
ASBESTOS & ENVIRONMENTAL CONSULTANT  
6308 FLY RD  
EAST SYRACUSE, NY 130579325  
UNITED STATES US

SHIP DATE: 07SEP18  
ACTWGT: 53.40 LB  
CAD: /POS1904  
DIMS: 24x15x13 IN  
BILL SENDER

Part # 156297-38898944747599  
#533767-38898944747599

TO **SAMPLE RECEIVING**  
**EURFONS SPECTRUM ANALYTICAL,**  
**11 ALMGREN DR**

**AGAWAM MA 01001**

(413) 789-9018  
INU:  
PO:

REF:

DEPT:



TRK#  
0215 8121 8970 3641

SATURDAY 12:00P  
PRIORITY OVERNIGHT

**XO EHTA**

01001  
MA-US BDL

RT 956 2 12:00 B  
ST 7 3641 09.08



®

Align Open End of FedEx Pouch Here

## Batch Summary

### 1812341

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

SC50148-01 (MW-05)  
SC50148-02 (MW-07)  
SC50148-03 (MW-08)  
SC50148-04 (MW-09)  
SC50148-05 (MW-D)

SC50148-03 (MW-08)  
SC50148-04 (MW-09)  
SC50148-05 (MW-D)

### 1812395

#### Semivolatile Organic Compounds by GCMS

1812395-BLK1  
1812395-BS1  
1812395-BSD1  
SC50148-01 (MW-05)  
SC50148-02 (MW-07)

1812530-BLK1  
1812530-BS1  
1812530-DUP1  
1812530-MS1  
1812530-MSD1  
SC50148-01 (MW-05)  
SC50148-02 (MW-07)  
SC50148-03 (MW-08)  
SC50148-04 (MW-09)  
SC50148-05 (MW-D)

### 1812441

#### Semivolatile Organic Compounds by GCMS

1812441-BLK1  
1812441-BS1  
1812441-BSD1  
1812441-MS1  
1812441-MSD1  
SC50148-03 (MW-08)  
SC50148-04 (MW-09)  
SC50148-05 (MW-D)

1812693-BLK1  
1812693-BS1  
1812693-BSD1  
1812693-MS1  
1812693-MSD1  
SC50148-01 (MW-05)  
SC50148-02 (MW-07)  
SC50148-03 (MW-08)

### 1812528

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

1812528-BLK1  
1812528-BLK2  
1812528-BLK3  
1812528-BS1  
1812528-BS2  
1812528-BS3  
1812528-BSD1  
1812528-BSD2  
1812528-BSD3  
1812528-DUP1  
1812528-DUP2  
1812528-DUP3  
1812528-MS1  
1812528-MS2  
1812528-MS3  
1812528-MSD1  
1812528-MSD2  
1812528-MSD3  
1812528-PS1  
1812528-PS2  
1812528-PS3  
SC50148-01 (MW-05)  
SC50148-02 (MW-07)

1812696-BLK1  
1812696-BS1  
1812696-BSD1  
SC50148-04 (MW-09)  
SC50148-05 (MW-D)  
SC50148-06 (Trip Blank)

### 1812696

#### Volatile Organic Compounds

**S820548***Volatile Organic Compounds*

S820548-CAL1  
 S820548-CAL2  
 S820548-CAL3  
 S820548-CAL4  
 S820548-CAL5  
 S820548-CAL6  
 S820548-CAL7  
 S820548-CAL8  
 S820548-CAL9  
 S820548-ICV1  
 S820548-LCV1  
 S820548-LCV2  
 S820548-TUN1

**S822214***Semivolatile Organic Compounds by GCMS*

S822214-CCV1  
 S822214-TUN1

**S821565***Semivolatile Organic Compounds by GCMS*

S821565-CAL1  
 S821565-CAL2  
 S821565-CAL3  
 S821565-CAL4  
 S821565-CAL5  
 S821565-CAL6  
 S821565-CAL7  
 S821565-CAL8  
 S821565-CAL9  
 S821565-CALA  
 S821565-ICV1  
 S821565-LCV1  
 S821565-LCV2  
 S821565-TUN1

**S822130***Semivolatile Organic Compounds by GCMS*

S822130-CCV1  
 S822130-TUN1

**S822148***Semivolatile Organic Compounds by GCMS*

S822148-CCV1  
 S822148-TUN1

**S822171***Volatile Organic Compounds*

S822171-CCV1  
 S822171-TUN1

**S822172***Volatile Organic Compounds*

S822172-CCV1  
 S822172-TUN1

Report Date:  
27-Dec-18 14:14**Laboratory Report****SC52429**

AECC Environmental Consulting  
6308 Fly Road  
East Syracuse, NY 13057  
Attn: Rich McKenna

Project: 700 Out Parcel - Syracuse, NY

Project #: 18-051

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 65 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:** SC52429  
**Project:** 700 Out Parcel - Syracuse, NY  
**Project Number:** 18-051

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SC52429-01	MW-05	Ground Water	05-Dec-18 11:14	06-Dec-18 10:47
SC52429-02	MW-07	Ground Water	05-Dec-18 12:16	06-Dec-18 10:47
SC52429-03	MW-08	Ground Water	05-Dec-18 14:47	06-Dec-18 10:47
SC52429-04	MW-09	Ground Water	05-Dec-18 13:43	06-Dec-18 10:47
SC52429-05	MW-D	Ground Water	05-Dec-18 00:00	06-Dec-18 10:47
SC52429-06	Trip Blank	Trip Blank	05-Dec-18 00:00	06-Dec-18 10:47

**CASE NARRATIVE:**

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

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

The samples were received 1.2 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.**

**SW-846 6010C****Blanks:**

---

P34404EB344404405

Estimated value

Calcium  
Iron  
Magnesium  
Manganese  
Zinc

---

P34404FB344404406

Estimated value

Calcium  
Iron  
Magnesium  
Manganese

**Samples:**

---

SC52429-01                  MW-05

Estimated value

Copper  
Iron  
Manganese  
Vanadium  
Zinc

---

SC52429-04                  MW-09

Estimated value

Zinc

---

SC52429-05                  MW-D

Estimated value

Zinc

**SW-846 8260C****Laboratory Control Samples:**

---

LCSL22QL183491AA

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

## **SW-846 8260C**

### **Laboratory Control Samples:**

LCSL22QL183491AA

---

Estimated value

Ethanol

LCSL29QL183513AA

---

Estimated value

Ethanol

### **Spikes:**

9929801                  *Source: SC52429-02*

---

Estimated value

Ethanol

9929802                  *Source: SC52429-02*

---

Estimated value

Ethanol

### **Samples:**

SC52429-03                  *MW-08*

---

Estimated value

2-Butanone  
2-Chlorotoluene  
Benzene, 1,2,3-trimethyl-  
Benzene, 1-ethyl-2-methyl-  
Benzene, 1-ethyl-3-methyl-  
Benzene, 2-ethenyl-1,4-dimet  
Benzene, 2-ethyl-1,4-dimethy  
Butane, 2-methyl-  
Cyclohexane  
Cyclohexane, methyl-  
Cyclopentane, methyl-  
n-Butylbenzene  
Pentane  
Pentane, 2-methyl-  
Pentane, 3-methyl-  
p-Isopropyltoluene  
sec-Butylbenzene  
tert-Butylbenzene  
Total VOC TICs  
Unknown  
Unknown aromatic

SC52429-04                  *MW-09*

---

## SW-846 8260C

### Samples:

SC52429-04                  MW-09

---

#### Estimated value

Acetone  
Benzene  
Benzene, (2-methyl-1-butenyl  
Benzene, 1,2,4,5-tetramethyl  
Benzene, 1,3-diethyl-  
Bicyclo[3.2.1]octane  
Cyclohexane, 1,2-dimethyl-  
Indan, 1-methyl-  
Isopropylbenzene  
Isopropylcyclobutane  
n-Butylbenzene  
n-Propylbenzene  
Pentalene, octahydro-  
Pentane, 2,3,3-trimethyl-  
Pentane, 2,3-dimethyl-  
p-Isopropyltoluene  
sec-Butylbenzene  
tert-Butylbenzene  
Total VOC TICs  
Unknown1  
Unknown2  
Unknown3  
Unknown4

#### Estimated value - Defined in case narrative (X)

Indan, 1-methyl-

SC52429-05                  MW-D

---

#### Estimated value

1H-Indene, 2,3-dihydro-1,2-d  
Acetone  
Benzene  
Benzene, 1,2,4,5-tetramethyl  
Benzene, 1,3-diethyl-  
Bicyclo[3.2.1]octane  
Cyclohexane, 1,2-dimethyl-  
Cyclopentane, 1,2-dimethyl-  
Indan, 1-methyl-  
Isopropylbenzene  
n-Butylbenzene  
n-Propylbenzene  
Pentalene, octahydro-, cis-  
Pentane, 2,3,3-trimethyl-  
Pentane, 2,3-dimethyl-  
p-Isopropyltoluene  
sec-Butylbenzene  
tert-Butylbenzene  
Total VOC TICs  
Unknown1  
Unknown2  
Unknown3  
Unknown4  
Unknown5

## **SW-846 8260C**

### **Samples:**

SC52429-05                  *MW-D*

---

Estimated value - Defined in case narrative (X)

Benzene, 1,3-diethyl-

LCSL29YL183513AA

---

Estimated value

Ethanol

## **SW-846 8270D**

### **Laboratory Control Samples:**

P5WULCSQ345WAU02

---

Estimated value

4-Nitrophenol

Benzidine

### **Spikes:**

9929801                  *Source: SC52429-02*

---

Estimated value

4-Nitrophenol

Pentachloronitrobenzene

9929802                  *Source: SC52429-02*

---

Estimated value

4-Nitrophenol

### **Samples:**

SC52429-01                  *MW-05*

---

Estimated value

Total SVOC TICs

Unknown

Estimated value - Detected in blank

Total SVOC TICs

Unknown

SC52429-02                  *MW-07*

---

Estimated value

Total SVOC TICs

Unknown

Estimated value - Detected in blank

Total SVOC TICs

Unknown

SC52429-03                  *MW-08*

---

**SW-846 8270D****Samples:**

---

SC52429-03                  *MW-08*

Estimated value

Acenaphthene  
Benzene, 1,3-dimethyl-  
Fluorene  
Total SVOC TICs

---

SC52429-04                  *MW-09*

Estimated value

Total SVOC TICs  
Unknown

---

SC52429-05                  *MW-D*

Estimated value

Total SVOC TICs  
Unknown

## Sample Acceptance Check Form

Client: AECC Environmental Consulting  
Project: 700 Out Parcel - Syracuse, NY / 18-051  
Work Order: SC52429  
Sample(s) received on: 12/6/2018

***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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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:** SC52429-01

**Client ID:** MW-05

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.103		0.0050	mg/l	SW-846 6010C
Calcium	91.9		0.500	mg/l	SW-846 6010C
Copper	0.0064	J.	0.0200	mg/l	SW-846 6010C
Iron	0.103	J.	0.200	mg/l	SW-846 6010C
Magnesium	11.8		0.100	mg/l	SW-846 6010C
Manganese	0.0017	J.	0.0200	mg/l	SW-846 6010C
Potassium	4.60		0.500	mg/l	SW-846 6010C
Sodium	428		5.00	mg/l	SW-846 6010C
Vanadium	0.0032	J.	0.0100	mg/l	SW-846 6010C
Zinc	0.0087	J.	0.0200	mg/l	SW-846 6010C

**Lab ID:** SC52429-02

**Client ID:** MW-07

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.536		0.0050	mg/l	SW-846 6010C
Calcium	249		0.500	mg/l	SW-846 6010C
Iron	0.249		0.200	mg/l	SW-846 6010C
Magnesium	36.8		0.100	mg/l	SW-846 6010C
Manganese	0.0257		0.0200	mg/l	SW-846 6010C
Potassium	12.0		0.500	mg/l	SW-846 6010C
Sodium	401		1.00	mg/l	SW-846 6010C

Lab ID: SC52429-03

Client ID: MW-08

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.479		0.0050	mg/l	SW-846 6010C
Calcium	259		0.500	mg/l	SW-846 6010C
Iron	11.0		0.200	mg/l	SW-846 6010C
Magnesium	33.8		0.100	mg/l	SW-846 6010C
Manganese	1.43		0.0200	mg/l	SW-846 6010C
Potassium	10.9		0.500	mg/l	SW-846 6010C
Sodium	64.1		1.00	mg/l	SW-846 6010C
1,2,4-Trimethylbenzene	340		10	ug/l	SW-846 8260C
1,3,5-Trimethylbenzene	110		10	ug/l	SW-846 8260C
2-Butanone	11	J.	20	ug/l	SW-846 8260C
2-Chlorotoluene	0.4	J.	10	ug/l	SW-846 8260C
Ethylbenzene	160		2	ug/l	SW-846 8260C
Isopropylbenzene	18		10	ug/l	SW-846 8260C
m+p-Xylene	620		10	ug/l	SW-846 8260C
Naphthalene	48		10	ug/l	SW-846 8260C
n-Butylbenzene	8	J.	10	ug/l	SW-846 8260C
n-Propylbenzene	48		10	ug/l	SW-846 8260C
o-Xylene	110		2	ug/l	SW-846 8260C
p-Isopropyltoluene	3	J.	10	ug/l	SW-846 8260C
sec-Butylbenzene	4	J.	10	ug/l	SW-846 8260C
tert-Butylbenzene	0.7	J.	10	ug/l	SW-846 8260C
Toluene	15		2	ug/l	SW-846 8260C
1-Methylnaphthalene	8		0.5	ug/l	SW-846 8270D
2-Methylnaphthalene	16		0.5	ug/l	SW-846 8270D
Acenaphthene	0.2	J.	0.5	ug/l	SW-846 8270D
Fluorene	0.3	J.	0.5	ug/l	SW-846 8270D
Naphthalene	33		0.5	ug/l	SW-846 8270D

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

Lab ID: SC52429-04

Client ID: MW-09

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.370		0.0050	mg/l	SW-846 6010C
Calcium	225		0.500	mg/l	SW-846 6010C
Iron	1.12		0.200	mg/l	SW-846 6010C
Magnesium	29.1		0.100	mg/l	SW-846 6010C
Manganese	0.282		0.0200	mg/l	SW-846 6010C
Potassium	15.3		0.500	mg/l	SW-846 6010C
Sodium	350		1.00	mg/l	SW-846 6010C
Zinc	0.0046	J.	0.0200	mg/l	SW-846 6010C
Acetone	2	J.	20	ug/l	SW-846 8260C
Benzene	0.3	J.	1	ug/l	SW-846 8260C
Isopropylbenzene	1	J.	5	ug/l	SW-846 8260C
n-Butylbenzene	0.3	J.	5	ug/l	SW-846 8260C
n-Propylbenzene	2	J.	5	ug/l	SW-846 8260C
p-Isopropyltoluene	0.4	J.	5	ug/l	SW-846 8260C
sec-Butylbenzene	1	J.	5	ug/l	SW-846 8260C
tert-Butylbenzene	0.4	J.	5	ug/l	SW-846 8260C

Lab ID: SC52429-05

Client ID: MW-D

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.372		0.0050	mg/l	SW-846 6010C
Calcium	222		0.500	mg/l	SW-846 6010C
Iron	1.07		0.200	mg/l	SW-846 6010C
Magnesium	28.6		0.100	mg/l	SW-846 6010C
Manganese	0.276		0.0200	mg/l	SW-846 6010C
Potassium	15.0		0.500	mg/l	SW-846 6010C
Sodium	345		1.00	mg/l	SW-846 6010C
Zinc	0.0031	J.	0.0200	mg/l	SW-846 6010C
Acetone	2	J.	20	ug/l	SW-846 8260C
Benzene	0.3	J.	1	ug/l	SW-846 8260C
Isopropylbenzene	2	J.	5	ug/l	SW-846 8260C
n-Butylbenzene	0.4	J.	5	ug/l	SW-846 8260C
n-Propylbenzene	2	J.	5	ug/l	SW-846 8260C
p-Isopropyltoluene	0.5	J.	5	ug/l	SW-846 8260C
sec-Butylbenzene	1	J.	5	ug/l	SW-846 8260C
tert-Butylbenzene	0.4	J.	5	ug/l	SW-846 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

MW-05

SC52429-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 11:14

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3005A</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7429-90-5	Aluminum	< 0.300		mg/l	0.300	0.153	1	SW-846 6010C	13-Dec-18 15:40	14-Dec-18 20:20	NA	34414044	
7440-36-0	Antimony	< 0.0500		mg/l	0.0500	0.0100	1	"	"	"	"	"	"
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	"
7440-39-3	Barium	<b>0.103</b>		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-41-7	Beryllium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-70-2	Calcium	<b>91.9</b>		mg/l	0.500	0.0330	1	"	"	"	"	"	"
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	"
7440-48-4	Cobalt	< 0.0050		mg/l	0.0050	0.0015	1	"	"	"	"	"	"
7440-50-8	Copper	<b>0.0064</b>	J.	mg/l	0.0200	0.0062	1	"	"	"	"	"	"
7439-89-6	Iron	<b>0.103</b>	J.	mg/l	0.200	0.0400	1	"	"	"	"	"	"
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	"
7439-95-4	Magnesium	<b>11.8</b>		mg/l	0.100	0.0190	1	"	"	"	"	"	"
7439-96-5	Manganese	<b>0.0017</b>	J.	mg/l	0.0200	0.0011	1	"	"	"	"	"	"
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0031	1	"	"	"	"	"	"
7440-09-7	Potassium	<b>4.60</b>		mg/l	0.500	0.203	1	"	"	"	"	"	"
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	"
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	"
7440-23-5	Sodium	<b>428</b>		mg/l	5.00	1.63	5	"	"	"	"	"	"
7440-28-0	Thallium	< 0.0300		mg/l	0.0300	0.0140	1	"	"	"	"	"	"
7440-62-2	Vanadium	<b>0.0032</b>	J.	mg/l	0.0100	0.0030	1	"	"	"	"	"	"
7440-66-6	Zinc	<b>0.0087</b>	J.	mg/l	0.0200	0.0030	1	"	"	"	"	"	"
<b>Prepared by method METHOD</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	14-Dec-18 09:10	15-Dec-18 07:46	NA	34505713	
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 5030C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	15-Dec-18 15:40	15-Dec-18 15:41	NA	.183491A/	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"

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Sample Identification

MW-05

SC52429-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 11:14

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	15-Dec-18 15:40	15-Dec-18 15:41	NA	.183491A/	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"

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Sample Identification**MW-05**

SC52429-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 11:14

Received

06-Dec-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>Subcontracted Analyses</b>															
<b>Subcontracted Analyses</b>															
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>															
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	SW-846 8260C	15-Dec-18 15:40	15-Dec-18 15:41	NA	.183491A/			
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"		
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"		
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"		
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"		
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"		
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"		
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
Total VOC TICs				ug/l			1	"	"	"	"	"	"		
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	"		
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
<b>Surrogate recoveries:</b>															
17060-07-0	1,2-Dichloroethane-d4	103			80-120 %			"	"	"	"	"	"		
460-00-4	4-Bromofluorobenzene	97			80-120 %			"	"	"	"	"	"		
1868-53-7	Dibromofluoromethane	105			80-120 %			"	"	"	"	"	"		
2037-26-5	Toluene-d8	94			80-120 %			"	"	"	"	"	"		
<b>Subcontracted Analyses</b>															
<b>Prepared by method SW-846 3510C</b>															
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>															
92-52-4	1,1'-Biphenyl	< 2		ug/l	2	0.5	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:02	NA	345WAU0			
95-94-3	1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"		
120-82-1	1,2,4-Trichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
122-66-7	1,2-Diphenylhydrazine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
90-12-0	1-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"		
58-90-2	2,3,4,6-Tetrachlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"		
95-95-4	2,4,5-Trichlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"		
88-06-2	2,4,6-Trichlorophenol	< 2		ug/l	2	0.6	1	"	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
105-67-9	2,4-Dimethylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
51-28-5	2,4-Dinitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"		

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Sample Identification**MW-05**

SC52429-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 11:14

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
121-14-2	2,4-Dinitrotoluene	< 5		ug/l	5	1	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:02	NA	345WAU0	
606-20-2	2,6-Dinitrotoluene	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-58-7	2-Chloronaphthalene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
95-57-8	2-Chlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-57-6	2-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
95-48-7	2-Methylphenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-74-4	2-Nitroaniline	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-75-5	2-Nitrophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	< 5		ug/l	5	2	1	"	"	"	"	"	"
99-09-2	3-Nitroaniline	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	< 14		ug/l	14	5	1	"	"	"	"	"	"
101-55-3	4-Bromophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-47-8	4-Chloroaniline	< 5		ug/l	5	2	1	"	"	"	"	"	"
7005-72-3	4-Chlorophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-44-5	4-Methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
100-01-6	4-Nitroaniline	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
100-02-7	4-Nitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
83-32-9	Acenaphthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
208-96-8	Acenaphthylene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-86-2	Acetophenone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-53-3	Aniline	< 5		ug/l	5	1	1	"	"	"	"	"	"
120-12-7	Anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
1912-24-9	Atrazine	< 5		ug/l	5	2	1	"	"	"	"	"	"
100-52-7	Benzaldehyde	< 5		ug/l	5	1	1	"	"	"	"	"	"
92-87-5	Benzidine	< 58		ug/l	58	20	1	"	"	"	"	"	"
56-55-3	Benzo(a)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
50-32-8	Benzo(a)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
205-99-2	Benzo(b)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
191-24-2	Benzo(g,h,i)perylene	< 0.5		ug/l	0.5	0.2	1	"	"	"	"	"	"
207-08-9	Benzo(k)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
65-85-0	Benzoic acid	< 19		ug/l	19	8	1	"	"	"	"	"	"
100-51-6	Benzyl alcohol	< 29		ug/l	29	10	1	"	"	"	"	"	"
111-91-1	bis(2-Chloroethoxy)methane	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
111-44-4	bis(2-Chloroethyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
39638-32-9	bis(2-Chloroisopropyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
117-81-7	bis(2-Ethylhexyl)phthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
85-68-7	Butylbenzylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
105-60-2	Caprolactam	< 14		ug/l	14	5	1	"	"	"	"	"	"
86-74-8	Carbazole	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
218-01-9	Chrysene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"

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Sample Identification**MW-05**

SC52429-01

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 11:14

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
84-74-2	Di-n-butylphthalate	< 5		ug/l	5	2	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:02	NA	345WAU0	
117-84-0	Di-n-octylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
53-70-3	Dibenz(a,h)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
132-64-9	Dibenzofuran	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
84-66-2	Diethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
131-11-3	Dimethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
206-44-0	Fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
86-73-7	Fluorene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
118-74-1	Hexachlorobenzene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	< 14		ug/l	14	5	1	"	"	"	"	"	"
67-72-1	Hexachloroethane	< 5		ug/l	5	1	1	"	"	"	"	"	"
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
78-59-1	Isophorone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
621-64-7	N-Nitroso-di-n-propylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	< 5		ug/l	5	2	1	"	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-95-3	Nitrobenzene	< 2		ug/l	2	0.8	1	"	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	< 5		ug/l	5	2	1	"	"	"	"	"	"
87-86-5	Pentachlorophenol	< 5		ug/l	5	1	1	"	"	"	"	"	"
85-01-8	Phenanthrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
108-95-2	Phenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
129-00-0	Pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
110-86-1	Pyridine	< 5		ug/l	5	2	1	"	"	"	"	"	"
Total SVOC TICs		<b>8</b>	J., B.	ug/l		1	"	"	"	"	"	"	"
Unknown		<b>8</b>	J., B.	ug/l		1	"	"	"	"	"	"	"

**Surrogate recoveries:**

118-79-6	2,4,6-Tribromophenol	105	10-155 %	"	"	"	"	"
321-60-8	2-Fluorobiphenyl	78	59-104 %	"	"	"	"	"
367-12-4	2-Fluorophenol	54	10-95 %	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	78	56-108 %	"	"	"	"	"
13127-88-3	Phenol-d6	42	10-69 %	"	"	"	"	"
1718-51-0	Terphenyl-d14	88	58-117 %	"	"	"	"	"

Sample Identification

MW-07

SC52429-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 12:16

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3005A</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7429-90-5	Aluminum	< 0.300		mg/l	0.300	0.153	1	SW-846 6010C	13-Dec-18 15:40	15-Dec-18 23:27	NA	34414044	
7440-36-0	Antimony	< 0.0500		mg/l	0.0500	0.0100	1	"	"	"	"	"	"
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	"
7440-39-3	Barium	0.536		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-41-7	Beryllium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-70-2	Calcium	249		mg/l	0.500	0.0330	1	"	"	"	"	"	"
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	"
7440-48-4	Cobalt	< 0.0050		mg/l	0.0050	0.0015	1	"	"	"	"	"	"
7440-50-8	Copper	< 0.0200		mg/l	0.0200	0.0062	1	"	"	"	"	"	"
7439-89-6	Iron	0.249		mg/l	0.200	0.0400	1	"	"	"	"	"	"
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	"
7439-95-4	Magnesium	36.8		mg/l	0.100	0.0190	1	"	"	"	"	"	"
7439-96-5	Manganese	0.0257		mg/l	0.0200	0.0011	1	"	"	"	"	"	"
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0031	1	"	"	"	"	"	"
7440-09-7	Potassium	12.0		mg/l	0.500	0.203	1	"	"	"	"	"	"
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	"
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	"
7440-23-5	Sodium	401		mg/l	1.00	0.326	1	"	"	"	"	"	"
7440-28-0	Thallium	< 0.0300		mg/l	0.0300	0.0140	1	"	"	"	"	"	"
7440-62-2	Vanadium	< 0.0100		mg/l	0.0100	0.0030	1	"	"	"	"	"	"
7440-66-6	Zinc	< 0.0200		mg/l	0.0200	0.0030	1	"	"	"	"	"	"
<b>Prepared by method METHOD</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	14-Dec-18 09:10	15-Dec-18 07:38	NA	34505713	
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 5030C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	15-Dec-18 13:29	15-Dec-18 13:30	NA	.183491A/	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"

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Sample Identification

MW-07

SC52429-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 12:16

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	15-Dec-18 13:29	15-Dec-18 13:30	NA	.183491A/	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"

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Sample Identification

MW-07

SC52429-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 12:16

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.		
<b>Subcontracted Analyses</b>															
<b>Subcontracted Analyses</b>															
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>															
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	SW-846 8260C	15-Dec-18 13:29	15-Dec-18 13:30	NA	.183491A/			
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"		
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"		
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"		
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"		
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"		
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"		
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"		
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
Total VOC TICs			0	ug/l			1	"	"	"	"	"	"		
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	"		
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"		
<b>Surrogate recoveries:</b>															
17060-07-0	1,2-Dichloroethane-d4	103			80-120 %			"	"	"	"	"	"		
460-00-4	4-Bromofluorobenzene	97			80-120 %			"	"	"	"	"	"		
1868-53-7	Dibromofluoromethane	106			80-120 %			"	"	"	"	"	"		
2037-26-5	Toluene-d8	94			80-120 %			"	"	"	"	"	"		
<b>Subcontracted Analyses</b>															
<b>Prepared by method SW-846 3510C</b>															
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>															
92-52-4	1,1'-Biphenyl	< 2		ug/l	2	0.5	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:23	NA	345WAU0			
95-94-3	1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"		
120-82-1	1,2,4-Trichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
122-66-7	1,2-Diphenylhydrazine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
90-12-0	1-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"		
58-90-2	2,3,4,6-Tetrachlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"		
95-95-4	2,4,5-Trichlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"		
88-06-2	2,4,6-Trichlorophenol	< 2		ug/l	2	0.6	1	"	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
105-67-9	2,4-Dimethylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"		
51-28-5	2,4-Dinitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"		

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Sample Identification

MW-07

SC52429-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 12:16

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
121-14-2	2,4-Dinitrotoluene	< 5		ug/l	5	1	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:23	NA	345WAU0	
606-20-2	2,6-Dinitrotoluene	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-58-7	2-Chloronaphthalene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
95-57-8	2-Chlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-57-6	2-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
95-48-7	2-Methylphenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-74-4	2-Nitroaniline	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-75-5	2-Nitrophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	< 5		ug/l	5	2	1	"	"	"	"	"	"
99-09-2	3-Nitroaniline	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	< 14		ug/l	14	5	1	"	"	"	"	"	"
101-55-3	4-Bromophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-47-8	4-Chloroaniline	< 5		ug/l	5	2	1	"	"	"	"	"	"
7005-72-3	4-Chlorophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-44-5	4-Methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
100-01-6	4-Nitroaniline	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
100-02-7	4-Nitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
83-32-9	Acenaphthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
208-96-8	Acenaphthylene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-86-2	Acetophenone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-53-3	Aniline	< 5		ug/l	5	1	1	"	"	"	"	"	"
120-12-7	Anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
1912-24-9	Atrazine	< 5		ug/l	5	2	1	"	"	"	"	"	"
100-52-7	Benzaldehyde	< 5		ug/l	5	1	1	"	"	"	"	"	"
92-87-5	Benzidine	< 58		ug/l	58	20	1	"	"	"	"	"	"
56-55-3	Benzo(a)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
50-32-8	Benzo(a)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
205-99-2	Benzo(b)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
191-24-2	Benzo(g,h,i)perylene	< 0.5		ug/l	0.5	0.2	1	"	"	"	"	"	"
207-08-9	Benzo(k)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
65-85-0	Benzoic acid	< 19		ug/l	19	8	1	"	"	"	"	"	"
100-51-6	Benzyl alcohol	< 29		ug/l	29	10	1	"	"	"	"	"	"
111-91-1	bis(2-Chloroethoxy)methane	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
111-44-4	bis(2-Chloroethyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
39638-32-9	bis(2-Chloroisopropyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
117-81-7	bis(2-Ethylhexyl)phthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
85-68-7	Butylbenzylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
105-60-2	Caprolactam	< 14		ug/l	14	5	1	"	"	"	"	"	"
86-74-8	Carbazole	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
218-01-9	Chrysene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"

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Sample Identification

MW-07

SC52429-02

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 12:16

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
84-74-2	Di-n-butylphthalate	< 5		ug/l	5	2	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 00:23	NA	345WAU0	
117-84-0	Di-n-octylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
53-70-3	Dibenz(a,h)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
132-64-9	Dibenzofuran	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
84-66-2	Diethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
131-11-3	Dimethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
206-44-0	Fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
86-73-7	Fluorene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
118-74-1	Hexachlorobenzene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	< 14		ug/l	14	5	1	"	"	"	"	"	"
67-72-1	Hexachloroethane	< 5		ug/l	5	1	1	"	"	"	"	"	"
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
78-59-1	Isophorone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
621-64-7	N-Nitroso-di-n-propylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	< 5		ug/l	5	2	1	"	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-95-3	Nitrobenzene	< 2		ug/l	2	0.8	1	"	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	< 5		ug/l	5	2	1	"	"	"	"	"	"
87-86-5	Pentachlorophenol	< 5		ug/l	5	1	1	"	"	"	"	"	"
85-01-8	Phenanthrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
108-95-2	Phenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
129-00-0	Pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
110-86-1	Pyridine	< 5		ug/l	5	2	1	"	"	"	"	"	"
Total SVOC TICs		9	J., B.	ug/l		1	"	"	"	"	"	"	"
Unknown		9	J., B.	ug/l		1	"	"	"	"	"	"	"

**Surrogate recoveries:**

118-79-6	2,4,6-Tribromophenol	103	10-155 %	"	"	"	"	"
321-60-8	2-Fluorobiphenyl	85	59-104 %	"	"	"	"	"
367-12-4	2-Fluorophenol	67	10-95 %	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	83	56-108 %	"	"	"	"	"
13127-88-3	Phenol-d6	48	10-69 %	"	"	"	"	"
1718-51-0	Terphenyl-d14	96	58-117 %	"	"	"	"	"

Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3005A</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7429-90-5	Aluminum	< 0.300		mg/l	0.300	0.153	1	SW-846 6010C	13-Dec-18 15:40	15-Dec-18 23:48	NA	34414044	
7440-36-0	Antimony	< 0.0500		mg/l	0.0500	0.0100	1	"	"	"	"	"	"
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	"
7440-39-3	Barium	<b>0.479</b>		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-41-7	Beryllium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-70-2	Calcium	<b>259</b>		mg/l	0.500	0.0330	1	"	"	"	"	"	"
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	"
7440-48-4	Cobalt	< 0.0050		mg/l	0.0050	0.0015	1	"	"	"	"	"	"
7440-50-8	Copper	< 0.0200		mg/l	0.0200	0.0062	1	"	"	"	"	"	"
7439-89-6	Iron	<b>11.0</b>		mg/l	0.200	0.0400	1	"	"	"	"	"	"
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	"
7439-95-4	Magnesium	<b>33.8</b>		mg/l	0.100	0.0190	1	"	"	"	"	"	"
7439-96-5	Manganese	<b>1.43</b>		mg/l	0.0200	0.0011	1	"	"	"	"	"	"
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0031	1	"	"	"	"	"	"
7440-09-7	Potassium	<b>10.9</b>		mg/l	0.500	0.203	1	"	"	"	"	"	"
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	"
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	"
7440-23-5	Sodium	<b>64.1</b>		mg/l	1.00	0.326	1	"	"	"	"	"	"
7440-28-0	Thallium	< 0.0300		mg/l	0.0300	0.0140	1	"	"	"	"	"	"
7440-62-2	Vanadium	< 0.0100		mg/l	0.0100	0.0030	1	"	"	"	"	"	"
7440-66-6	Zinc	< 0.0200		mg/l	0.0200	0.0030	1	"	"	"	"	"	"
<b>Prepared by method METHOD</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	14-Dec-18 09:10	15-Dec-18 07:48	NA	34505713	
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 5030C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	SW-846 8260C	15-Dec-18 18:13	15-Dec-18 18:14	NA	.183491A/	
71-55-6	1,1,1-Trichloroethane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 10		ug/l	10	0.8	2	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	<b>340</b>		ug/l	10	2	2	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 10		ug/l	10	0.6	2	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"

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Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
107-06-2	1,2-Dichloroethane	< 2		ug/l	2	0.6	2	SW-846 8260C	15-Dec-18 18:13	15-Dec-18 18:14	NA	.183491A/	
78-87-5	1,2-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	110		ug/l	10	0.6	2	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 500		ug/l	500	58	2	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
78-93-3	2-Butanone	11	J.	ug/l	20	0.6	2	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	0.4	J.	ug/l	10	0.4	2	"	"	"	"	"	"
591-78-6	2-Hexanone	< 20		ug/l	20	0.6	2	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 20		ug/l	20	1	2	"	"	"	"	"	"
67-64-1	Acetone	< 40		ug/l	40	1	2	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 40		ug/l	40	0.6	2	"	"	"	"	"	"
71-43-2	Benzene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
526-73-8	Benzene, 1,2,3-trimethyl-	93	J.	ug/l			2	"	"	"	"	"	"
611-14-3	Benzene, 1-ethyl-2-methyl-	200	J.	ug/l			2	"	"	"	"	"	"
620-14-4	Benzene, 1-ethyl-3-methyl-	98	J.	ug/l			2	"	"	"	"	"	"
2039-89-6	Benzene, 2-ethenyl-1,4-dimet	71	J.	ug/l			2	"	"	"	"	"	"
1758-88-9	Benzene, 2-ethyl-1,4-dimethy	72	J.	ug/l			2	"	"	"	"	"	"
108-86-1	Bromobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-25-2	Bromoform	< 8		ug/l	8	0.4	2	"	"	"	"	"	"
74-83-9	Bromomethane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
78-78-4	Butane, 2-methyl-	110	J.	ug/l			2	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-00-3	Chloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
67-66-3	Chloroform	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
74-87-3	Chloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
110-82-7	Cyclohexane	130	J.	ug/l			2	"	"	"	"	"	"
108-87-2	Cyclohexane, methyl-	170	J.	ug/l			2	"	"	"	"	"	"
96-37-7	Cyclopentane, methyl-	170	J.	ug/l			2	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"

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Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
74-95-3	Dibromomethane	< 2		ug/l	2	0.4	2	SW-846 8260C	15-Dec-18 18:13	15-Dec-18 18:14	NA	.183491A/	
75-71-8	Dichlorodifluoromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
64-17-5	Ethanol	< 1500		ug/l	1500	560	2	"	"	"	"	"	"
60-29-7	Ethyl ether	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
100-41-4	Ethylbenzene	160		ug/l	2	0.8	2	"	"	"	"	"	"
76-13-1	Freon 113	< 20		ug/l	20	0.4	2	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 10		ug/l	10	1	2	"	"	"	"	"	"
98-82-8	Isopropylbenzene	18		ug/l	10	0.4	2	"	"	"	"	"	"
179601-23-1	m+p-Xylene	620		ug/l	10	2	2	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
104-51-8	n-Butylbenzene	8	J.	ug/l	10	0.4	2	"	"	"	"	"	"
103-65-1	n-Propylbenzene	48		ug/l	10	0.4	2	"	"	"	"	"	"
91-20-3	Naphthalene	48		ug/l	10	2	2	"	"	"	"	"	"
95-47-6	o-Xylene	110		ug/l	2	0.8	2	"	"	"	"	"	"
99-87-6	p-Isopropyltoluene	3	J.	ug/l	10	0.4	2	"	"	"	"	"	"
109-66-0	Pentane	87	J.	ug/l			2	"	"	"	"	"	"
107-83-5	Pentane, 2-methyl-	220	J.	ug/l			2	"	"	"	"	"	"
96-14-0	Pentane, 3-methyl-	94	J.	ug/l			2	"	"	"	"	"	"
135-98-8	sec-Butylbenzene	4	J.	ug/l	10	0.4	2	"	"	"	"	"	"
100-42-5	Styrene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
994-05-8	t-Amyl methyl ether	< 10		ug/l	10	2	2	"	"	"	"	"	"
75-65-0	t-Butyl alcohol	< 100		ug/l	100	24	2	"	"	"	"	"	"
98-06-6	tert-Butylbenzene	0.7	J.	ug/l	10	0.6	2	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
109-99-9	Tetrahydrofuran	< 20		ug/l	20	1	2	"	"	"	"	"	"
108-88-3	Toluene	15		ug/l	2	0.4	2	"	"	"	"	"	"
	Total VOC TICs	1,700	J.	ug/l			2	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-buten e	< 100		ug/l	100	12	2	"	"	"	"	"	"
79-01-6	Trichloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
	Unknown	80	J.	ug/l			2	"	"	"	"	"	"
	Unknown aromatic	110	J.	ug/l			2	"	"	"	"	"	"
75-01-4	Vinyl Chloride	< 2		ug/l	2	0.4	2	"	"	"	"	"	"

**Surrogate recoveries:**

17060-07-0	1,2-Dichloroethane-d4	100	80-120 %	"	"	"	"
460-00-4	4-Bromofluorobenzene	99	80-120 %	"	"	"	"
1868-53-7	Dibromofluoromethane	104	80-120 %	"	"	"	"
2037-26-5	Toluene-d8	97	80-120 %	"	"	"	"

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

Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3510C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
92-52-4	1,1'-Biphenyl	< 2		ug/l	2	0.5	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 01:29	NA	345WAU0	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
122-66-7	1,2-Diphenylhydrazine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
90-12-0	1-Methylnaphthalene	8		ug/l	0.5	0.1	1	"	"	"	"	"	"
58-90-2	2,3,4,6-Tetrachlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	< 5		ug/l	5	1	1	"	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-58-7	2-Chloronaphthalene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
95-57-8	2-Chlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-57-6	2-Methylnaphthalene	16		ug/l	0.5	0.1	1	"	"	"	"	"	"
95-48-7	2-Methylphenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-74-4	2-Nitroaniline	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-75-5	2-Nitrophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	< 5		ug/l	5	2	1	"	"	"	"	"	"
99-09-2	3-Nitroaniline	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	< 14		ug/l	14	5	1	"	"	"	"	"	"
101-55-3	4-Bromophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-47-8	4-Chloroaniline	< 5		ug/l	5	2	1	"	"	"	"	"	"
7005-72-3	4-Chlorophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-44-5	4-Methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
100-01-6	4-Nitroaniline	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
100-02-7	4-Nitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
83-32-9	Acenaphthene	0.2	J.	ug/l	0.5	0.1	1	"	"	"	"	"	"
208-96-8	Acenaphthylene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-86-2	Acetophenone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-53-3	Aniline	< 5		ug/l	5	1	1	"	"	"	"	"	"
120-12-7	Anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
1912-24-9	Atrazine	< 5		ug/l	5	2	1	"	"	"	"	"	"
100-52-7	Benzaldehyde	< 5		ug/l	5	1	1	"	"	"	"	"	"
108-38-3	Benzene, 1,3-dimethyl-	460	J.	ug/l	1	"	"	"	"	"	"	"	"
92-87-5	Benzidine	< 57		ug/l	57	20	1	"	"	"	"	"	"

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Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
56-55-3	Benzo(a)anthracene	< 0.5		ug/l	0.5	0.1	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 01:29	NA	345WAU0	
50-32-8	Benzo(a)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
205-99-2	Benzo(b)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
191-24-2	Benzo(g,h,i)perylene	< 0.5		ug/l	0.5	0.2	1	"	"	"	"	"	"
207-08-9	Benzo(k)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
65-85-0	Benzoic acid	< 19		ug/l	19	8	1	"	"	"	"	"	"
100-51-6	Benzyl alcohol	< 29		ug/l	29	10	1	"	"	"	"	"	"
111-91-1	bis(2-Chloroethoxy)methane	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
111-44-4	bis(2-Chloroethyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
39638-32-9	bis(2-Chloroisopropyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
117-81-7	bis(2-Ethylhexyl)phthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
85-68-7	Butylbenzylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
105-60-2	Caprolactam	< 14		ug/l	14	5	1	"	"	"	"	"	"
86-74-8	Carbazole	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
218-01-9	Chrysene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
84-74-2	Di-n-butylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
117-84-0	Di-n-octylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
53-70-3	Dibenz(a,h)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
132-64-9	Dibenzofuran	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
84-66-2	Diethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
131-11-3	Dimethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
206-44-0	Fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
86-73-7	Fluorene	0.3	J.	ug/l	0.5	0.1	1	"	"	"	"	"	"
118-74-1	Hexachlorobenzene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	< 14		ug/l	14	5	1	"	"	"	"	"	"
67-72-1	Hexachloroethane	< 5		ug/l	5	1	1	"	"	"	"	"	"
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
78-59-1	Isophorone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
621-64-7	N-Nitroso-di-n-propylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	< 5		ug/l	5	2	1	"	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-20-3	Naphthalene	33		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-95-3	Nitrobenzene	< 2		ug/l	2	0.8	1	"	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	< 5		ug/l	5	2	1	"	"	"	"	"	"
87-86-5	Pentachlorophenol	< 5		ug/l	5	1	1	"	"	"	"	"	"
85-01-8	Phenanthrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
108-95-2	Phenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
129-00-0	Pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
110-86-1	Pyridine	< 5		ug/l	5	2	1	"	"	"	"	"	"
Total SVOC TICs		460	J.	ug/l			1	"	"	"	"	"	"

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Sample Identification**MW-08**

SC52429-03

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 14:47

Received

06-Dec-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>
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**Subcontracted Analyses**Subcontracted Analyses

Analysis performed by Eurofins Lancaster Laboratories Environmental - NA

Surrogate recoveries:

118-79-6	2,4,6-Tribromophenol	100		10-155 %		SW-846 8270D	11-Dec-18	-Dec-18 01: 18:00	NA	345WAU0		
321-60-8	2-Fluorobiphenyl	76		59-104 %		"	"	"	"	"	"	
367-12-4	2-Fluorophenol	61		10-95 %		"	"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	77		56-108 %		"	"	"	"	"	"	
13127-88-3	Phenol-d6	45		10-69 %		"	"	"	"	"	"	
1718-51-0	Terphenyl-d14	86		58-117 %		"	"	"	"	"	"	

Sample Identification

MW-09

SC52429-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 13:43

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3005A</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7429-90-5	Aluminum	< 0.300		mg/l	0.300	0.153	1	SW-846 6010C	13-Dec-18 15:40	15-Dec-18 23:56	NA	34414044	
7440-36-0	Antimony	< 0.0500		mg/l	0.0500	0.0100	1	"	"	"	"	"	"
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	"
7440-39-3	Barium	<b>0.370</b>		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-41-7	Beryllium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-70-2	Calcium	<b>225</b>		mg/l	0.500	0.0330	1	"	"	"	"	"	"
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	"
7440-48-4	Cobalt	< 0.0050		mg/l	0.0050	0.0015	1	"	"	"	"	"	"
7440-50-8	Copper	< 0.0200		mg/l	0.0200	0.0062	1	"	"	"	"	"	"
7439-89-6	Iron	<b>1.12</b>		mg/l	0.200	0.0400	1	"	"	"	"	"	"
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	"
7439-95-4	Magnesium	<b>29.1</b>		mg/l	0.100	0.0190	1	"	"	"	"	"	"
7439-96-5	Manganese	<b>0.282</b>		mg/l	0.0200	0.0011	1	"	"	"	"	"	"
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0031	1	"	"	"	"	"	"
7440-09-7	Potassium	<b>15.3</b>		mg/l	0.500	0.203	1	"	"	"	"	"	"
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	"
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	"
7440-23-5	Sodium	<b>350</b>		mg/l	1.00	0.326	1	"	"	"	"	"	"
7440-28-0	Thallium	< 0.0300		mg/l	0.0300	0.0140	1	"	"	"	"	"	"
7440-62-2	Vanadium	< 0.0100		mg/l	0.0100	0.0030	1	"	"	"	"	"	"
7440-66-6	Zinc	<b>0.0046</b>	J.	mg/l	0.0200	0.0030	1	"	"	"	"	"	"
<b>Prepared by method METHOD</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	14-Dec-18 09:10	15-Dec-18 07:50	NA	34505713	
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 5030C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	15-Dec-18 18:56	15-Dec-18 18:57	NA	.183491A/	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"

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Sample Identification**MW-09**

SC52429-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 13:43

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	15-Dec-18 18:56	15-Dec-18 18:57	NA	.183491A/	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	2	J.	ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	0.3	J.	ug/l	1	0.2	1	"	"	"	"	"	"
56253-64-6	Benzene, (2-methyl-1-butenyl	5	J.	ug/l			1	"	"	"	"	"	"
95-93-2	Benzene, 1,2,4,5-tetramethyl	6	J.	ug/l			1	"	"	"	"	"	"
141-93-5	Benzene, 1,3-diethyl-	8	J.	ug/l			1	"	"	"	"	"	"
6221-55-2	Bicyclo[3.2.1]octane	6	J.	ug/l			1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
6876-23-9	Cyclohexane, 1,2-dimethyl-,	9	J.	ug/l			1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

MW-09

SC52429-04

Client Project #

18-051

Matrix

Ground Water

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06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	SW-846 8260C	15-Dec-18 18:56	15-Dec-18 18:57	NA	.183491A/	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
767-58-8	Indan, 1-methyl-	9	J., X	ug/l			1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	1	J.	ug/l	5	0.2	1	"	"	"	"	"	"
872-56-0	Isopropylcyclobutane	7	J.	ug/l			1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
104-51-8	n-Butylbenzene	0.3	J.	ug/l	5	0.2	1	"	"	"	"	"	"
103-65-1	n-Propylbenzene	2	J.	ug/l	5	0.2	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
99-87-6	p-Isopropyltoluene	0.4	J.	ug/l	5	0.2	1	"	"	"	"	"	"
694-72-4	Pentalene, octahydro-	6	J.	ug/l			1	"	"	"	"	"	"
560-21-4	Pentane, 2,3,3-trimethyl-	7	J.	ug/l			1	"	"	"	"	"	"
565-59-3	Pentane, 2,3-dimethyl-	7	J.	ug/l			1	"	"	"	"	"	"
135-98-8	sec-Butylbenzene	1	J.	ug/l	5	0.2	1	"	"	"	"	"	"
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"
98-06-6	tert-Butylbenzene	0.4	J.	ug/l	5	0.3	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
	Total VOC TICs	110	J.	ug/l			1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	"
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
	Unknown1	11	J.	ug/l			1	"	"	"	"	"	"
	Unknown2	8	J.	ug/l			1	"	"	"	"	"	"
	Unknown3	9	J.	ug/l			1	"	"	"	"	"	"
	Unknown4	14	J.	ug/l			1	"	"	"	"	"	"
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

**Surrogate recoveries:**

17060-07-0	1,2-Dichloroethane-d4	102	80-120 %	"	"	"	"
460-00-4	4-Bromofluorobenzene	98	80-120 %	"	"	"	"
1868-53-7	Dibromofluoromethane	103	80-120 %	"	"	"	"
2037-26-5	Toluene-d8	95	80-120 %	"	"	"	"

**Subcontracted Analyses**

Prepared by method SW-846 3510C

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Sample Identification

MW-09

SC52429-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 13:43

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3510C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
92-52-4	1,1'-Biphenyl	< 2		ug/l	2	0.5	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 01:51	NA	345WAU0	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
122-66-7	1,2-Diphenylhydrazine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
90-12-0	1-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
58-90-2	2,3,4,6-Tetrachlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	< 5		ug/l	5	1	1	"	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-58-7	2-Chloronaphthalene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
95-57-8	2-Chlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-57-6	2-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
95-48-7	2-Methylphenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-74-4	2-Nitroaniline	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-75-5	2-Nitrophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	< 5		ug/l	5	2	1	"	"	"	"	"	"
99-09-2	3-Nitroaniline	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	< 14		ug/l	14	5	1	"	"	"	"	"	"
101-55-3	4-Bromophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-47-8	4-Chloroaniline	< 5		ug/l	5	2	1	"	"	"	"	"	"
7005-72-3	4-Chlorophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-44-5	4-Methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
100-01-6	4-Nitroaniline	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
100-02-7	4-Nitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
83-32-9	Acenaphthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
208-96-8	Acenaphthylene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-86-2	Acetophenone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-53-3	Aniline	< 5		ug/l	5	1	1	"	"	"	"	"	"
120-12-7	Anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
1912-24-9	Atrazine	< 5		ug/l	5	2	1	"	"	"	"	"	"
100-52-7	Benzaldehyde	< 5		ug/l	5	1	1	"	"	"	"	"	"
92-87-5	Benzidine	< 58		ug/l	58	20	1	"	"	"	"	"	"
56-55-3	Benzo(a)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"

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Sample Identification**MW-09**

SC52429-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 13:43

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
50-32-8	Benzo(a)pyrene	< 0.5		ug/l	0.5	0.1	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 01:51	NA	345WAU0	
205-99-2	Benzo(b)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
191-24-2	Benzo(g,h,i)perylene	< 0.5		ug/l	0.5	0.2	1	"	"	"	"	"	"
207-08-9	Benzo(k)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
65-85-0	Benzoic acid	< 19		ug/l	19	8	1	"	"	"	"	"	"
100-51-6	Benzyl alcohol	< 29		ug/l	29	10	1	"	"	"	"	"	"
111-91-1	bis(2-Chloroethoxy)methane	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
111-44-4	bis(2-Chloroethyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
39638-32-9	bis(2-Chloroisopropyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
117-81-7	bis(2-Ethylhexyl)phthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
85-68-7	Butylbenzylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
105-60-2	Caprolactam	< 14		ug/l	14	5	1	"	"	"	"	"	"
86-74-8	Carbazole	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
218-01-9	Chrysene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
84-74-2	Di-n-butylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
117-84-0	Di-n-octylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
53-70-3	Dibenz(a,h)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
132-64-9	Dibenzofuran	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
84-66-2	Diethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
131-11-3	Dimethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
206-44-0	Fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
86-73-7	Fluorene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
118-74-1	Hexachlorobenzene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	< 14		ug/l	14	5	1	"	"	"	"	"	"
67-72-1	Hexachloroethane	< 5		ug/l	5	1	1	"	"	"	"	"	"
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
78-59-1	Isophorone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
621-64-7	N-Nitroso-di-n-propylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	< 5		ug/l	5	2	1	"	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-95-3	Nitrobenzene	< 2		ug/l	2	0.8	1	"	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	< 5		ug/l	5	2	1	"	"	"	"	"	"
87-86-5	Pentachlorophenol	< 5		ug/l	5	1	1	"	"	"	"	"	"
85-01-8	Phenanthrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
108-95-2	Phenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
129-00-0	Pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
110-86-1	Pyridine	< 5		ug/l	5	2	1	"	"	"	"	"	"
Total SVOC TICs		<b>10</b>	J.	ug/l		1	"	"	"	"	"	"	"
Unknown		<b>10</b>	J.	ug/l		1	"	"	"	"	"	"	"

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Sample Identification**MW-09**

SC52429-04

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 13:43

Received

06-Dec-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>
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**Subcontracted Analyses**Subcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - NA**Surrogate recoveries:*

118-79-6	2,4,6-Tribromophenol	104		10-155 %		SW-846 8270D	11-Dec-18	-Dec-18 01: 18:00	NA	345WAU0		
321-60-8	2-Fluorobiphenyl	83		59-104 %		"	"	"	"	"	"	
367-12-4	2-Fluorophenol	66		10-95 %		"	"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	84		56-108 %		"	"	"	"	"	"	
13127-88-3	Phenol-d6	47		10-69 %		"	"	"	"	"	"	
1718-51-0	Terphenyl-d14	93		58-117 %		"	"	"	"	"	"	

Sample Identification

MW-D

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<u>Prepared by method SW-846 3005A</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7429-90-5	Aluminum	< 0.300		mg/l	0.300	0.153	1	SW-846 6010C	13-Dec-18 15:40	15-Dec-18 23:59	NA	34414044	
7440-36-0	Antimony	< 0.0500		mg/l	0.0500	0.0100	1	"	"	"	"	"	"
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	"
7440-39-3	Barium	<b>0.372</b>		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-41-7	Beryllium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	"
7440-70-2	Calcium	<b>222</b>		mg/l	0.500	0.0330	1	"	"	"	"	"	"
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	"
7440-48-4	Cobalt	< 0.0050		mg/l	0.0050	0.0015	1	"	"	"	"	"	"
7440-50-8	Copper	< 0.0200		mg/l	0.0200	0.0062	1	"	"	"	"	"	"
7439-89-6	Iron	<b>1.07</b>		mg/l	0.200	0.0400	1	"	"	"	"	"	"
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	"
7439-95-4	Magnesium	<b>28.6</b>		mg/l	0.100	0.0190	1	"	"	"	"	"	"
7439-96-5	Manganese	<b>0.276</b>		mg/l	0.0200	0.0011	1	"	"	"	"	"	"
7440-02-0	Nickel	< 0.0100		mg/l	0.0100	0.0031	1	"	"	"	"	"	"
7440-09-7	Potassium	<b>15.0</b>		mg/l	0.500	0.203	1	"	"	"	"	"	"
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	"
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	"
7440-23-5	Sodium	<b>345</b>		mg/l	1.00	0.326	1	"	"	"	"	"	"
7440-28-0	Thallium	< 0.0300		mg/l	0.0300	0.0140	1	"	"	"	"	"	"
7440-62-2	Vanadium	< 0.0100		mg/l	0.0100	0.0030	1	"	"	"	"	"	"
7440-66-6	Zinc	<b>0.0031</b>	J.	mg/l	0.0200	0.0030	1	"	"	"	"	"	"
<u>Prepared by method METHOD</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	14-Dec-18 09:10	15-Dec-18 07:56	NA	34505713	
<b>Subcontracted Analyses</b>													
<u>Prepared by method SW-846 5030C</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	17-Dec-18 23:18	17-Dec-18 23:19	NA	.183513A/	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"

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Sample Identification

MW-D

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	17-Dec-18 23:18	17-Dec-18 23:19	NA	.183513A/	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
17057-82-8	1H-Indene, 2,3-dihydro-1,2-d	6	J.	ug/l			1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	2	J.	ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	0.3	J.	ug/l	1	0.2	1	"	"	"	"	"	"
95-93-2	Benzene, 1,2,4,5-tetramethyl	7	J.	ug/l			1	"	"	"	"	"	"
141-93-5	Benzene, 1,3-diethyl-	8	J., X	ug/l			1	"	"	"	"	"	"
6221-55-2	Bicyclo[3.2.1]octane	6	J.	ug/l			1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromo(chloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
6876-23-9	Cyclohexane, 1,2-dimethyl-,	10	J.	ug/l			1	"	"	"	"	"	"
822-50-4	Cyclopentane, 1,2-dimethyl-,	7	J.	ug/l			1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"

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Sample Identification

MW-D

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	SW-846 8260C	17-Dec-18 23:18	17-Dec-18 23:19	NA	.183513A/	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
767-58-8	Indan, 1-methyl-	9	J.	ug/l			1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	2	J.	ug/l	5	0.2	1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
104-51-8	n-Butylbenzene	0.4	J.	ug/l	5	0.2	1	"	"	"	"	"	"
103-65-1	n-Propylbenzene	2	J.	ug/l	5	0.2	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
99-87-6	p-Isopropyltoluene	0.5	J.	ug/l	5	0.2	1	"	"	"	"	"	"
1755-05-1	Pentalene, octahydro-, cis-	6	J.	ug/l			1	"	"	"	"	"	"
560-21-4	Pentane, 2,3,3-trimethyl-	9	J.	ug/l			1	"	"	"	"	"	"
565-59-3	Pentane, 2,3-dimethyl-	6	J.	ug/l			1	"	"	"	"	"	"
135-98-8	sec-Butylbenzene	1	J.	ug/l	5	0.2	1	"	"	"	"	"	"
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"
98-06-6	tert-Butylbenzene	0.4	J.	ug/l	5	0.3	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
	Total VOC TICs	120	J.	ug/l			1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	"
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
	Unknown1	11	J.	ug/l			1	"	"	"	"	"	"
	Unknown2	8	J.	ug/l			1	"	"	"	"	"	"
	Unknown3	10	J.	ug/l			1	"	"	"	"	"	"
	Unknown4	15	J.	ug/l			1	"	"	"	"	"	"
	Unknown5	5	J.	ug/l			1	"	"	"	"	"	"
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

**Surrogate recoveries:**

17060-07-0	1,2-Dichloroethane-d4	100	80-120 %	"	"	"	"
460-00-4	4-Bromofluorobenzene	101	80-120 %	"	"	"	"
1868-53-7	Dibromofluoromethane	99	80-120 %	"	"	"	"

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Sample Identification

MW-D

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
2037-26-5	Toluene-d8	100			80-120 %			SW-846 8260C	17-Dec-18	-Dec-18 23:23:18	NA	.183513A/	
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 3510C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
92-52-4	1,1'-Biphenyl	< 2		ug/l	2	0.5	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 02:12	NA	345WAU0	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
122-66-7	1,2-Diphenylhydrazine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
90-12-0	1-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
58-90-2	2,3,4,6-Tetrachlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
105-67-9	2,4-Dimethylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	< 5		ug/l	5	1	1	"	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-58-7	2-Chloronaphthalene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
95-57-8	2-Chlorophenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-57-6	2-Methylnaphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
95-48-7	2-Methylphenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-74-4	2-Nitroaniline	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
88-75-5	2-Nitrophenol	< 2		ug/l	2	0.7	1	"	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	< 5		ug/l	5	2	1	"	"	"	"	"	"
99-09-2	3-Nitroaniline	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	< 14		ug/l	14	5	1	"	"	"	"	"	"
101-55-3	4-Bromophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-47-8	4-Chloroaniline	< 5		ug/l	5	2	1	"	"	"	"	"	"
7005-72-3	4-Chlorophenyl-phenylether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
106-44-5	4-Methylphenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
100-01-6	4-Nitroaniline	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
100-02-7	4-Nitrophenol	< 29		ug/l	29	10	1	"	"	"	"	"	"
83-32-9	Acenaphthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
208-96-8	Acenaphthylene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-86-2	Acetophenone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-53-3	Aniline	< 5		ug/l	5	1	1	"	"	"	"	"	"
120-12-7	Anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"

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Sample Identification

MW-D

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
1912-24-9	Atrazine	< 5		ug/l	5	2	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 02:12	NA	345WAU0	
100-52-7	Benzaldehyde	< 5		ug/l	5	1	1	"	"	"	"	"	"
92-87-5	Benzidine	< 58		ug/l	58	20	1	"	"	"	"	"	"
56-55-3	Benzo(a)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
50-32-8	Benzo(a)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
205-99-2	Benzo(b)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
191-24-2	Benzo(g,h,i)perylene	< 0.5		ug/l	0.5	0.2	1	"	"	"	"	"	"
207-08-9	Benzo(k)fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
65-85-0	Benzoic acid	< 19		ug/l	19	8	1	"	"	"	"	"	"
100-51-6	Benzyl alcohol	< 29		ug/l	29	10	1	"	"	"	"	"	"
111-91-1	bis(2-Chloroethoxy)methane	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
111-44-4	bis(2-Chloroethyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
39638-32-9	bis(2-Chloroisopropyl)ether	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
117-81-7	bis(2-Ethylhexyl)phthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
85-68-7	Butylbenzylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
105-60-2	Caprolactam	< 14		ug/l	14	5	1	"	"	"	"	"	"
86-74-8	Carbazole	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
218-01-9	Chrysene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
84-74-2	Di-n-butylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
117-84-0	Di-n-octylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
53-70-3	Dibenz(a,h)anthracene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
132-64-9	Dibenzofuran	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
84-66-2	Diethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
131-11-3	Dimethylphthalate	< 5		ug/l	5	2	1	"	"	"	"	"	"
206-44-0	Fluoranthene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
86-73-7	Fluorene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
118-74-1	Hexachlorobenzene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 2		ug/l	2	0.6	1	"	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	< 14		ug/l	14	5	1	"	"	"	"	"	"
67-72-1	Hexachloroethane	< 5		ug/l	5	1	1	"	"	"	"	"	"
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
78-59-1	Isophorone	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
621-64-7	N-Nitroso-di-n-propylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	< 5		ug/l	5	2	1	"	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	< 2		ug/l	2	0.5	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
98-95-3	Nitrobenzene	< 2		ug/l	2	0.8	1	"	"	"	"	"	"
82-68-8	Pentachloronitrobenzene	< 5		ug/l	5	2	1	"	"	"	"	"	"
87-86-5	Pentachlorophenol	< 5		ug/l	5	1	1	"	"	"	"	"	"
85-01-8	Phenanthrene	< 0.5		ug/l	0.5	0.1	1	"	"	"	"	"	"
108-95-2	Phenol	< 2		ug/l	2	0.5	1	"	"	"	"	"	"

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Sample Identification**MW-D**

SC52429-05

Client Project #

18-051

Matrix

Ground Water

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-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>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
129-00-0	Pyrene	< 0.5		ug/l	0.5	0.1	1	SW-846 8270D	11-Dec-18 18:00	14-Dec-18 02:12	NA	345WAU0	
110-86-1	Pyridine	< 5		ug/l	5	2	1	"	"	"	"	"	"
	Total SVOC TICs	10	J.	ug/l			1	"	"	"	"	"	"
	Unknown	10	J.	ug/l			1	"	"	"	"	"	"

*Surrogate recoveries:*

118-79-6	<i>2,4,6-Tribromophenol</i>	100	10-155 %	"	"	"	"	"	"
321-60-8	<i>2-Fluorobiphenyl</i>	82	59-104 %	"	"	"	"	"	"
367-12-4	<i>2-Fluorophenol</i>	65	10-95 %	"	"	"	"	"	"
4165-60-0	<i>Nitrobenzene-d5</i>	80	56-108 %	"	"	"	"	"	"
13127-88-3	<i>Phenol-d6</i>	50	10-69 %	"	"	"	"	"	"
1718-51-0	<i>Terphenyl-d14</i>	96	58-117 %	"	"	"	"	"	"

Sample Identification

**Trip Blank**  
SC52429-06

Client Project #

18-051

Matrix

Trip Blank

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
<b>Prepared by method SW-846 5030C</b>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - NA</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	15-Dec-18 13:07	15-Dec-18 13:08	NA	.183491A/	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

Trip Blank

SC52429-06

Client Project #

18-051

Matrix

Trip Blank

Collection Date/Time

05-Dec-18 00:00

Received

06-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<b>Subcontracted Analyses</b>													
<b>Subcontracted Analyses</b>													
Analysis performed by Eurofins Lancaster Laboratories Environmental - NA													
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	15-Dec-18 13:07	15-Dec-18 13:08	NA	.183491A/	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
Total VOC TICs		0		ug/l			1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	"
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

## Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	103	80-120 %	"	"	"	"	"	"
460-00-4	4-Bromofluorobenzene	97	80-120 %	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	106	80-120 %	"	"	"	"	"	"
2037-26-5	Toluene-d8	94	80-120 %	"	"	"	"	"	"

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 6010C</b>										
Batch 183441404405 - SW-846 3005A										
<u>Blank (P34404EB344404405)</u>										
Prepared: 13-Dec-18 Analyzed: 16-Dec-18										
Lead	< 0.0150		mg/l	0.0150				-		
Antimony	< 0.0500		mg/l	0.0500				-		
Arsenic	< 0.0500		mg/l	0.0500				-		
Barium	< 0.0050		mg/l	0.0050				-		
Beryllium	< 0.0050		mg/l	0.0050				-		
Cadmium	< 0.0050		mg/l	0.0050				-		
Calcium	<b>0.0363</b>	J.	mg/l	0.500				-		
Chromium	< 0.0150		mg/l	0.0150				-		
Cobalt	< 0.0050		mg/l	0.0050				-		
Vanadium	< 0.0100		mg/l	0.0100				-		
Iron	<b>0.0430</b>	J.	mg/l	0.200				-		
Zinc	<b>0.0055</b>	J.	mg/l	0.0200				-		
Magnesium	<b>0.0394</b>	J.	mg/l	0.100				-		
Manganese	<b>0.0029</b>	J.	mg/l	0.0200				-		
Nickel	< 0.0100		mg/l	0.0100				-		
Potassium	< 0.500		mg/l	0.500				-		
Selenium	< 0.0500		mg/l	0.0500				-		
Silver	< 0.0100		mg/l	0.0100				-		
Sodium	< 1.00		mg/l	1.00				-		
Thallium	< 0.0300		mg/l	0.0300				-		
Copper	< 0.0200		mg/l	0.0200				-		
Aluminum	< 0.300		mg/l	0.300				-		
<u>LCS (P34404EQ344404405)</u>										
Prepared: 13-Dec-18 Analyzed: 16-Dec-18										
Copper	<b>0.274</b>		mg/l	0.0200	0.250	110	90-115			
Zinc	<b>0.516</b>		mg/l	0.0200	0.500	103	89-111			
Vanadium	<b>0.499</b>		mg/l	0.0100	0.500	100	89-114			
Thallium	<b>0.161</b>		mg/l	0.0300	0.150	108	80-120			
Sodium	<b>9.89</b>		mg/l	1.00	10.0	99	87-112			
Silver	<b>0.0488</b>		mg/l	0.0100	0.0500	98	80-120			
Selenium	<b>0.151</b>		mg/l	0.0500	0.150	101	80-120			
Potassium	<b>10.2</b>		mg/l	0.500	10.0	102	88-112			
Nickel	<b>0.539</b>		mg/l	0.0100	0.500	108	90-114			
Aluminum	<b>2.05</b>		mg/l	0.300	2.00	102	80-120			
Lead	<b>0.158</b>		mg/l	0.0150	0.150	105	87-113			
Cobalt	<b>0.530</b>		mg/l	0.0050	0.500	106	90-111			
Chromium	<b>0.197</b>		mg/l	0.0150	0.200	98	87-110			
Calcium	<b>4.08</b>		mg/l	0.500	4.00	102	88-112			
Cadmium	<b>0.0527</b>		mg/l	0.0050	0.0500	105	90-111			
Beryllium	<b>0.0506</b>		mg/l	0.0050	0.0500	101	86-110			
Barium	<b>2.08</b>		mg/l	0.0050	2.00	104	87-111			
Arsenic	<b>0.153</b>		mg/l	0.0500	0.150	102	80-120			
Antimony	<b>0.522</b>		mg/l	0.0500	0.500	104	90-117			
Iron	<b>0.988</b>		mg/l	0.200	1.00	99	85-115			
Manganese	<b>0.524</b>		mg/l	0.0200	0.500	105	90-112			
Magnesium	<b>2.08</b>		mg/l	0.100	2.00	104	88-114			
Batch 183441404406 - SW-846 3005A										
<u>Matrix Spike (9929801)</u>										
Source: SC52429-02 Prepared: 13-Dec-18 Analyzed: 15-Dec-18										
Antimony	<b>0.520</b>		mg/l	0.0500	0.500	BRL	104	75-125		
Arsenic	<b>0.153</b>		mg/l	0.0500	0.150	BRL	102	75-125		
Barium	<b>2.73</b>		mg/l	0.0050	2.00	0.536	110	75-125		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 6010C</u></b>										
Batch 183441404406 - SW-846 3005A										
<b><u>Matrix Spike (9929801)</u></b>										
Beryllium	0.0510		mg/l	0.0050	0.0500	BRL	102	80-115		
Cadmium	0.0498		mg/l	0.0050	0.0500	BRL	100	75-125		
Calcium	244		mg/l	0.500	4.00	249	-128	75-125		
Chromium	0.193		mg/l	0.0150	0.200	BRL	97	75-125		
Cobalt	0.504		mg/l	0.0050	0.500	BRL	101	80-115		
Aluminum	2.03		mg/l	0.300	2.00	BRL	102	75-125		
Lead	0.137		mg/l	0.0150	0.150	BRL	91	75-125		
Iron	1.26		mg/l	0.200	1.00	0.249	101	75-125		
Manganese	0.537		mg/l	0.0200	0.500	0.0257	102	75-125		
Nickel	0.502		mg/l	0.0100	0.500	BRL	100	75-125		
Potassium	22.8		mg/l	0.500	10.0	12.0	109	75-125		
Selenium	0.140		mg/l	0.0500	0.150	BRL	93	75-125		
Silver	0.0520		mg/l	0.0100	0.0500	BRL	104	75-125		
Sodium	389		mg/l	1.00	10.0	401	-122	75-125		
Thallium	0.154		mg/l	0.0300	0.150	BRL	102	75-125		
Vanadium	0.528		mg/l	0.0100	0.500	BRL	106	85-120		
Zinc	0.518		mg/l	0.0200	0.500	BRL	104	75-125		
Copper	0.255		mg/l	0.0200	0.250	BRL	102	80-125		
Magnesium	37.4		mg/l	0.100	2.00	36.8	32	75-125		
<b><u>Matrix Spike Dup (9929802)</u></b>										
Magnesium	38.5		mg/l	0.100	2.00	36.8	89	75-125	3	20
Arsenic	0.163		mg/l	0.0500	0.150	BRL	109	75-125	6	20
Barium	2.77		mg/l	0.0050	2.00	0.536	112	75-125	1	20
Beryllium	0.0517		mg/l	0.0050	0.0500	BRL	103	80-115	1	20
Cadmium	0.0507		mg/l	0.0050	0.0500	BRL	101	75-125	2	20
Calcium	250		mg/l	0.500	4.00	249	36	75-125	3	20
Chromium	0.196		mg/l	0.0150	0.200	BRL	98	75-125	1	20
Cobalt	0.511		mg/l	0.0050	0.500	BRL	102	80-115	1	20
Copper	0.258		mg/l	0.0200	0.250	BRL	103	80-125	1	20
Antimony	0.526		mg/l	0.0500	0.500	BRL	105	75-125	1	20
Lead	0.144		mg/l	0.0150	0.150	BRL	96	75-125	5	20
Aluminum	2.08		mg/l	0.300	2.00	BRL	104	75-125	2	20
Manganese	0.544		mg/l	0.0200	0.500	0.0257	104	75-125	1	20
Nickel	0.508		mg/l	0.0100	0.500	BRL	102	75-125	1	20
Potassium	22.6		mg/l	0.500	10.0	12.0	107	75-125	1	20
Selenium	0.137		mg/l	0.0500	0.150	BRL	91	75-125	3	20
Silver	0.0538		mg/l	0.0100	0.0500	BRL	108	75-125	4	20
Sodium	408		mg/l	1.00	10.0	401	62	75-125	5	20
Thallium	0.173		mg/l	0.0300	0.150	BRL	115	75-125	12	20
Vanadium	0.534		mg/l	0.0100	0.500	BRL	107	85-120	1	20
Zinc	0.528		mg/l	0.0200	0.500	BRL	106	75-125	2	20
Iron	1.27		mg/l	0.200	1.00	0.249	102	75-125	1	20
<b><u>Laboratory Dup (9929803)</u></b>										
Chromium	< 0.0150		mg/l	0.0150		BRL	-	0		20
Thallium	< 0.0300		mg/l	0.0300		BRL	-	0		20
Sodium	390		mg/l	1.00		401	-	3		20
Silver	< 0.0100		mg/l	0.0100		BRL	-	0		20
Potassium	12.0		mg/l	0.500		12.0	-	0		20
Manganese	0.0248		mg/l	0.0200		0.0257	-	4		20
Magnesium	35.9		mg/l	0.100		36.8	-	2		20

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 6010C</b>										
Batch 183441404406 - SW-846 3005A										
<u>Laboratory Dup (9929803)</u>										
Source: SC52429-02      Prepared: 13-Dec-18    Analyzed: 15-Dec-18										
Lead	< 0.0150		mg/l	0.0150		BRL	-	0	20	
Iron	<b>0.238</b>		mg/l	0.200		0.249	-	4	20	
Vanadium	< 0.0100		mg/l	0.0100		BRL	-	0	20	
Cobalt	< 0.0050		mg/l	0.0050		BRL	-	0	20	
Selenium	< 0.0500		mg/l	0.0500		BRL	-	0	20	
Calcium	<b>243</b>		mg/l	0.500		249	-	2	20	
Cadmium	< 0.0050		mg/l	0.0050		BRL	-	0	20	
Beryllium	< 0.0050		mg/l	0.0050		BRL	-	0	20	
Barium	<b>0.526</b>		mg/l	0.0050		0.536	-	2	20	
Arsenic	< 0.0500		mg/l	0.0500		BRL	-	0	20	
Antimony	< 0.0500		mg/l	0.0500		BRL	-	0	20	
Zinc	< 0.0200		mg/l	0.0200		BRL	-	0	20	
Aluminum	< 0.300		mg/l	0.300		BRL	-	0	20	
Copper	< 0.0200		mg/l	0.0200		BRL	-	0	20	
Nickel	< 0.0100		mg/l	0.0100		BRL	-	0	20	
<u>Blank (P34404FB344404406)</u>										
Prepared: 13-Dec-18    Analyzed: 15-Dec-18										
Magnesium	<b>0.0506</b>	J.	mg/l	0.100			-			
Thallium	< 0.0300		mg/l	0.0300			-			
Sodium	< 1.00		mg/l	1.00			-			
Silver	< 0.0100		mg/l	0.0100			-			
Selenium	< 0.0500		mg/l	0.0500			-			
Potassium	< 0.500		mg/l	0.500			-			
Manganese	<b>0.0016</b>	J.	mg/l	0.0200			-			
Antimony	< 0.0500		mg/l	0.0500			-			
Lead	< 0.0150		mg/l	0.0150			-			
Aluminum	< 0.300		mg/l	0.300			-			
Iron	<b>0.0712</b>	J.	mg/l	0.200			-			
Barium	< 0.0050		mg/l	0.0050			-			
Zinc	< 0.0200		mg/l	0.0200			-			
Copper	< 0.0200		mg/l	0.0200			-			
Cobalt	< 0.0050		mg/l	0.0050			-			
Chromium	< 0.0150		mg/l	0.0150			-			
Vanadium	< 0.0100		mg/l	0.0100			-			
Calcium	<b>0.0495</b>	J.	mg/l	0.500			-			
Cadmium	< 0.0050		mg/l	0.0050			-			
Beryllium	< 0.0050		mg/l	0.0050			-			
Arsenic	< 0.0500		mg/l	0.0500			-			
Nickel	< 0.0100		mg/l	0.0100			-			
<u>LCS (P34404FQ344404406)</u>										
Prepared: 13-Dec-18    Analyzed: 15-Dec-18										
Iron	<b>1.03</b>		mg/l	0.200	1.00	103	85-115			
Cobalt	<b>0.527</b>		mg/l	0.0050	0.500	105	90-111			
Chromium	<b>0.194</b>		mg/l	0.0150	0.200	97	87-110			
Calcium	<b>4.12</b>		mg/l	0.500	4.00	103	88-112			
Cadmium	<b>0.0517</b>		mg/l	0.0050	0.0500	103	90-111			
Beryllium	<b>0.0496</b>		mg/l	0.0050	0.0500	99	86-110			
Barium	<b>2.02</b>		mg/l	0.0050	2.00	101	87-111			
Antimony	<b>0.494</b>		mg/l	0.0500	0.500	99	90-117			
Aluminum	<b>2.03</b>		mg/l	0.300	2.00	102	80-120			
Lead	<b>0.149</b>		mg/l	0.0150	0.150	99	87-113			
Arsenic	<b>0.149</b>		mg/l	0.0500	0.150	100	80-120			

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## Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 6010C</b>										
Batch 183441404406 - SW-846 3005A										
<u>LCS (P34404FQ344404406)</u>										
Manganese	0.522		mg/l	0.0200	0.500		104	90-112		
Nickel	0.530		mg/l	0.0100	0.500		106	90-114		
Potassium	10.1		mg/l	0.500	10.0		101	88-112		
Selenium	0.144		mg/l	0.0500	0.150		96	80-120		
Silver	0.0496		mg/l	0.0100	0.0500		99	80-120		
Sodium	9.97		mg/l	1.00	10.0		100	87-112		
Thallium	0.171		mg/l	0.0300	0.150		114	80-120		
Vanadium	0.503		mg/l	0.0100	0.500		101	89-114		
Zinc	0.509		mg/l	0.0200	0.500		102	89-111		
Magnesium	2.06		mg/l	0.100	2.00		103	88-114		
Copper	0.256		mg/l	0.0200	0.250		102	90-115		
<b>SW-846 7470A</b>										
Batch 183450571306 - METHOD										
<u>Matrix Spike (9929801)</u>										
Mercury	0.00087		mg/l	0.00020	0.0010	BRL	87	80-120		
<u>Matrix Spike Dup (9929802)</u>										
Mercury	0.00088		mg/l	0.00020	0.0010	BRL	88	80-120	1	20
<u>Laboratory Dup (9929803)</u>										
Mercury	< 0.00020		mg/l	0.00020	BRL		-	0		20
<u>Blank (P34571FB345571306)</u>										
Mercury	< 0.00020		mg/l	0.00020				-		
<u>LCS (P34571FQ345571306)</u>										
Mercury	0.00088		mg/l	0.00020	0.0010		88	80-114		
<b>SW-846 8260C</b>										
Batch L183491AA - SW-846 5030C										
<u>Matrix Spike (9929801)</u>										
Ethyl ether	18		ug/l	5	20	BRL	89	59-141		
m+p-Xylene	48		ug/l	5	40	BRL	119	80-120		
Isopropylbenzene	24		ug/l	5	20	BRL	121	80-120		
Hexachlorobutadiene	21		ug/l	5	20	BRL	105	63-120		
Freon 113	27		ug/l	10	20	BRL	133	73-139		
Chloromethane	17		ug/l	1	20	BRL	84	56-121		
Ethylbenzene	23		ug/l	1	20	BRL	116	80-120		
Methyl Tertiary Butyl Ether	20		ug/l	1	20	BRL	99	69-122		
Ethyl t-butyl ether	18		ug/l	1	20	BRL	92	68-121		
Ethanol	440	J.	ug/l	750	500	BRL	88	31-180		
di-Isopropyl ether	18		ug/l	1	20	BRL	88	70-124		
Dichlorodifluoromethane	21		ug/l	1	20	BRL	104	41-127		
Dibromomethane	24		ug/l	1	20	BRL	118	80-120		
Dibromochloromethane	24		ug/l	1	20	BRL	121	71-120		
Methylene Chloride	23		ug/l	1	20	BRL	114	80-120		
cis-1,2-Dichloroethene	25		ug/l	1	20	BRL	124	80-120		
t-Butyl alcohol	200		ug/l	50	200	BRL	101	60-130		
Chloroform	25		ug/l	1	20	BRL	125	80-120		
Chloroethane	18		ug/l	1	20	BRL	92	55-123		
cis-1,3-Dichloropropene	22		ug/l	1	20	BRL	111	75-120		
Tetrahydrofuran	110		ug/l	10	100	BRL	112	54-144		
Chlorobenzene	24		ug/l	1	20	BRL	120	80-120		
1,1,1,2-Tetrachloroethane	24		ug/l	1	20	BRL	118	78-120		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8260C</u></b>										
Batch L183491AA - SW-846 5030C										
<b><u>Matrix Spike (9929801)</u></b>										
<b><u>Source: SC52429-02</u></b>										
<b><u>Prepared &amp; Analyzed: 15-Dec-18</u></b>										
Vinyl Chloride	18		ug/l	1	20	BRL	92	56-120		
Trichlorofluoromethane	22		ug/l	1	20	BRL	111	55-135		
Trichloroethene	25		ug/l	1	20	BRL	127	80-120		
trans-1,4-Dichloro-2-butene	88		ug/l	50	100	BRL	88	33-143		
trans-1,3-Dichloropropene	21		ug/l	1	20	BRL	104	67-120		
Styrene	23		ug/l	5	20	BRL	116	80-120		
Toluene	23		ug/l	1	20	BRL	115	80-120		
Naphthalene	19		ug/l	5	20	BRL	94	53-124		
Tetrachloroethene	26		ug/l	1	20	BRL	130	80-120		
tert-Butylbenzene	23		ug/l	5	20	BRL	114	78-120		
t-Amyl methyl ether	20		ug/l	5	20	BRL	98	66-120		
sec-Butylbenzene	22		ug/l	5	20	BRL	111	77-120		
p-Isopropyltoluene	22		ug/l	5	20	BRL	112	76-120		
o-Xylene	23		ug/l	1	20	BRL	117	80-120		
n-Propylbenzene	22		ug/l	5	20	BRL	111	79-121		
n-Butylbenzene	21		ug/l	5	20	BRL	103	76-120		
trans-1,2-Dichloroethene	26		ug/l	1	20	BRL	129	80-120		
1,2,4-Trichlorobenzene	21		ug/l	5	20	BRL	105	63-120		
1,3-Dichlorobenzene	23		ug/l	5	20	BRL	113	80-120		
1,3,5-Trimethylbenzene	22		ug/l	5	20	BRL	110	75-120		
1,3,5-Trichlorobenzene	22		ug/l	5	20	BRL	109	66-123		
1,2-Dichloropropane	22		ug/l	1	20	BRL	108	80-120		
1,2-Dichloroethane	24		ug/l	1	20	BRL	119	73-124		
1,2-Dichlorobenzene	23		ug/l	5	20	BRL	113	80-120		
1,1,1-Trichloroethane	26		ug/l	1	20	BRL	128	67-126		
1,3-Dichloropropane	21		ug/l	1	20	BRL	104	80-120		
Carbon Tetrachloride	27		ug/l	1	20	BRL	133	64-134		
1,2-Dibromoethane	23		ug/l	1	20	BRL	113	77-120		
1,2,3-Trichloropropane	21		ug/l	5	20	BRL	103	75-124		
1,2,3-Trichlorobenzene	20		ug/l	5	20	BRL	102	66-120		
1,1-Dichloropropene	25		ug/l	5	20	BRL	124	78-120		
1,1-Dichloroethene	25		ug/l	1	20	BRL	126	80-131		
1,1-Dichloroethane	22		ug/l	1	20	BRL	109	80-120		
1,1,2-Trichloroethane	23		ug/l	1	20	BRL	115	80-120		
1,1,2,2-Tetrachloroethane	19		ug/l	1	20	BRL	96	72-120		
1,2-Dibromo-3-chloropropane	19		ug/l	5	20	BRL	95	47-131		
Bromobenzene	22		ug/l	5	20	BRL	112	80-120		
Carbon Disulfide	21		ug/l	5	20	BRL	107	65-128		
1,2,4-Trimethylbenzene	22		ug/l	5	20	BRL	109	75-120		
1,4-Dichlorobenzene	22		ug/l	5	20	BRL	112	80-120		
Bromoform	21		ug/l	4	20	BRL	104	51-120		
Bromodichloromethane	24		ug/l	1	20	BRL	122	71-120		
Bromochloromethane	23		ug/l	5	20	BRL	117	80-120		
Bromomethane	17		ug/l	1	20	BRL	84	53-128		
Benzene	24		ug/l	1	20	BRL	119	80-120		
Acrylonitrile	88		ug/l	20	100	BRL	88	60-129		
2-Butanone	130		ug/l	10	150	BRL	87	59-135		
1,4-Dioxane	600		ug/l	250	500	BRL	119	63-146		
2,2-Dichloropropane	23		ug/l	1	20	BRL	114	55-142		
Acetone	150		ug/l	20	150	BRL	101	54-157		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183491AA - SW-846 5030C										
<u>Matrix Spike (9929801)</u>										
2-Chlorotoluene	22		ug/l	5	20	BRL	112	80-120		
2-Hexanone	82		ug/l	10	100	BRL	82	56-135		
4-Chlorotoluene	23		ug/l	5	20	BRL	113	80-120		
4-Methyl-2-pentanone	88		ug/l	10	100	BRL	88	62-133		
<u>Surrogate: 1,2-Dichloroethane-d4</u>	52		ug/l		50		103	80-120		
<u>Surrogate: 4-Bromofluorobenzene</u>	50		ug/l		50		100	80-120		
<u>Surrogate: Dibromofluoromethane</u>	53		ug/l		50		105	80-120		
<u>Surrogate: Toluene-d8</u>	48		ug/l		50		96	80-120		
<u>Matrix Spike Dup (9929802)</u>						<u>Source: SC52429-02</u>				
							<u>Prepared &amp; Analyzed: 15-Dec-18</u>			
Ethanol	490	J.	ug/l	750	500	BRL	98	31-180	11	30
Isopropylbenzene	23		ug/l	5	20	BRL	117	80-120	3	30
Hexachlorobutadiene	21		ug/l	5	20	BRL	103	63-120	2	30
Freon 113	26		ug/l	10	20	BRL	129	73-139	3	30
Ethylbenzene	22		ug/l	1	20	BRL	112	80-120	3	30
Ethyl t-butyl ether	19		ug/l	1	20	BRL	94	68-121	2	30
Ethyl ether	17		ug/l	5	20	BRL	87	59-141	2	30
m+p-Xylene	46		ug/l	5	40	BRL	116	80-120	3	30
di-Isopropyl ether	18		ug/l	1	20	BRL	90	70-124	2	30
Dichlorodifluoromethane	21		ug/l	1	20	BRL	103	41-127	1	30
Dibromomethane	23		ug/l	1	20	BRL	117	80-120	1	30
Dibromochloromethane	23		ug/l	1	20	BRL	116	71-120	4	30
cis-1,3-Dichloropropene	22		ug/l	1	20	BRL	111	75-120	0	30
cis-1,2-Dichloroethene	24		ug/l	1	20	BRL	122	80-120	2	30
Chloromethane	17		ug/l	1	20	BRL	87	56-121	4	30
Chloroform	25		ug/l	1	20	BRL	124	80-120	1	30
Chlorobenzene	23		ug/l	1	20	BRL	114	80-120	5	30
Chloroethane	19		ug/l	1	20	BRL	93	55-123	1	30
t-Butyl alcohol	210		ug/l	50	200	BRL	103	60-130	3	30
1,3,5-Trimethylbenzene	22		ug/l	5	20	BRL	108	75-120	2	30
Trichlorofluoromethane	21		ug/l	1	20	BRL	106	55-135	5	30
Carbon Tetrachloride	27		ug/l	1	20	BRL	135	64-134	1	30
trans-1,4-Dichloro-2-butene	86		ug/l	50	100	BRL	86	33-143	2	30
trans-1,3-Dichloropropene	20		ug/l	1	20	BRL	102	67-120	2	30
trans-1,2-Dichloroethene	25		ug/l	1	20	BRL	125	80-120	4	30
Toluene	22		ug/l	1	20	BRL	112	80-120	3	30
Tetrahydrofuran	110		ug/l	10	100	BRL	109	54-144	2	30
Trichloroethene	25		ug/l	1	20	BRL	124	80-120	3	30
tert-Butylbenzene	21		ug/l	5	20	BRL	107	78-120	6	30
Methyl Tertiary Butyl Ether	20		ug/l	1	20	BRL	101	69-122	2	30
t-Amyl methyl ether	20		ug/l	5	20	BRL	99	66-120	2	30
Styrene	22		ug/l	5	20	BRL	111	80-120	4	30
sec-Butylbenzene	22		ug/l	5	20	BRL	108	77-120	3	30
p-Isopropyltoluene	22		ug/l	5	20	BRL	109	76-120	2	30
o-Xylene	22		ug/l	1	20	BRL	111	80-120	5	30
n-Propylbenzene	22		ug/l	5	20	BRL	108	79-121	2	30
n-Butylbenzene	20		ug/l	5	20	BRL	100	76-120	3	30
Naphthalene	18		ug/l	5	20	BRL	91	53-124	3	30
Methylene Chloride	22		ug/l	1	20	BRL	112	80-120	2	30
Tetrachloroethene	25		ug/l	1	20	BRL	125	80-120	4	30
1,2,3-Trichlorobenzene	20		ug/l	5	20	BRL	101	66-120	1	30

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8260C</u></b>										
Batch L183491AA - SW-846 5030C										
<u>Matrix Spike Dup (9929802)</u>										
<u>Source: SC52429-02</u>										
1,2-Dichloropropane	21		ug/l	1	20	BRL	107	80-120	1	30
1,3-Dichloropropane	21		ug/l	1	20	BRL	103	80-120	1	30
1,2-Dichloroethane	24		ug/l	1	20	BRL	119	73-124	0	30
1,2-Dichlorobenzene	22		ug/l	5	20	BRL	110	80-120	2	30
1,2-Dibromoethane	22		ug/l	1	20	BRL	109	77-120	4	30
1,2-Dibromo-3-chloropropane	19		ug/l	5	20	BRL	94	47-131	2	30
1,2,4-Trimethylbenzene	21		ug/l	5	20	BRL	107	75-120	2	30
Carbon Disulfide	21		ug/l	5	20	BRL	105	65-128	2	30
1,2,3-Trichloropropane	20		ug/l	5	20	BRL	101	75-124	2	30
1,3,5-Trichlorobenzene	21		ug/l	5	20	BRL	105	66-123	4	30
1,1-Dichloropropene	24		ug/l	5	20	BRL	122	78-120	2	30
1,1-Dichloroethene	25		ug/l	1	20	BRL	124	80-131	2	30
1,1-Dichloroethane	22		ug/l	1	20	BRL	109	80-120	0	30
1,1,2-Trichloroethane	22		ug/l	1	20	BRL	110	80-120	4	30
1,1,2,2-Tetrachloroethane	19		ug/l	1	20	BRL	94	72-120	2	30
1,1,1-Trichloroethane	26		ug/l	1	20	BRL	130	67-126	2	30
1,1,1,2-Tetrachloroethane	23		ug/l	1	20	BRL	114	78-120	4	30
Vinyl Chloride	19		ug/l	1	20	BRL	93	56-120	1	30
1,2,4-Trichlorobenzene	21		ug/l	5	20	BRL	103	63-120	2	30
Acetone	150		ug/l	20	150	BRL	98	54-157	2	30
Bromomethane	17		ug/l	1	20	BRL	86	53-128	2	30
Bromoform	20		ug/l	4	20	BRL	102	51-120	2	30
Bromodichloromethane	24		ug/l	1	20	BRL	121	71-120	1	30
Bromochloromethane	23		ug/l	5	20	BRL	113	80-120	4	30
Bromobenzene	22		ug/l	5	20	BRL	109	80-120	3	30
Benzene	23		ug/l	1	20	BRL	116	80-120	2	30
Acrylonitrile	89		ug/l	20	100	BRL	89	60-129	1	30
1,3-Dichlorobenzene	22		ug/l	5	20	BRL	110	80-120	3	30
4-Methyl-2-pentanone	90		ug/l	10	100	BRL	90	62-133	2	30
4-Chlorotoluene	22		ug/l	5	20	BRL	108	80-120	5	30
2-Hexanone	83		ug/l	10	100	BRL	83	56-135	1	30
2-Chlorotoluene	22		ug/l	5	20	BRL	110	80-120	2	30
2-Butanone	130		ug/l	10	150	BRL	89	59-135	3	30
2,2-Dichloropropane	23		ug/l	1	20	BRL	117	55-142	3	30
1,4-Dioxane	610		ug/l	250	500	BRL	122	63-146	2	30
1,4-Dichlorobenzene	22		ug/l	5	20	BRL	109	80-120	2	30
Surrogate: 4-Bromofluorobenzene	50		ug/l		50		101	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50		102	80-120		
Surrogate: Toluene-d8	47		ug/l		50		95	80-120		
Surrogate: Dibromofluoromethane	53		ug/l		50		106	80-120		
<u>LCS (LCSL21QL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
Dibromomethane	23		ug/l	1	20		113	80-120		
Chlorobenzene	22		ug/l	1	20		109	80-120		
4-Chlorotoluene	20		ug/l	5	20		101	80-120		
4-Methyl-2-pentanone	87		ug/l	10	100		87	62-133		
Acetone	170		ug/l	20	150		112	54-157		
Acrylonitrile	88		ug/l	20	100		88	60-129		
Benzene	21		ug/l	1	20		107	80-120		
Bromobenzene	20		ug/l	5	20		102	80-120		
Bromochloromethane	22		ug/l	5	20		111	80-120		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183491AA - SW-846 5030C										
<u>LCS (LCSL21QL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
Bromodichloromethane	23		ug/l	1	20	116	71-120			
Bromoform	21		ug/l	4	20	104	51-120			
Bromomethane	15		ug/l	1	20	75	53-128			
m+p-Xylene	43		ug/l	5	40	107	80-120			
Carbon Tetrachloride	24		ug/l	1	20	119	64-134			
2-Butanone	130		ug/l	10	150	85	59-135			
Chloroethane	16		ug/l	1	20	79	55-123			
Chloromethane	15		ug/l	1	20	74	56-121			
cis-1,3-Dichloropropene	21		ug/l	1	20	107	75-120			
Dibromochloromethane	23		ug/l	1	20	115	71-120			
Dichlorodifluoromethane	16		ug/l	1	20	78	41-127			
Ethyl ether	16		ug/l	5	20	82	59-141			
Ethyl t-butyl ether	18		ug/l	1	20	89	68-121			
Ethylbenzene	21		ug/l	1	20	105	80-120			
Freon 113	21		ug/l	10	20	107	73-139			
Hexachlorobutadiene	18		ug/l	5	20	91	63-120			
Isopropylbenzene	21		ug/l	5	20	107	80-120			
Carbon Disulfide	18		ug/l	5	20	90	65-128			
1,2-Dibromoethane	22		ug/l	1	20	110	77-120			
di-Isopropyl ether	17		ug/l	1	20	84	70-124			
1,1,1,2-Tetrachloroethane	22		ug/l	1	20	109	78-120			
1,1,1-Trichloroethane	23		ug/l	1	20	116	67-126			
1,1,2,2-Tetrachloroethane	18		ug/l	1	20	92	72-120			
1,1,2-Trichloroethane	21		ug/l	1	20	107	80-120			
1,1-Dichloroethane	20		ug/l	1	20	101	80-120			
1,1-Dichloroethene	21		ug/l	1	20	107	80-131			
1,1-Dichloropropene	22		ug/l	5	20	108	78-120			
1,2,3-Trichlorobenzene	19		ug/l	5	20	95	66-120			
1,2,3-Trichloropropane	20		ug/l	5	20	102	75-124			
1,2,4-Trichlorobenzene	20		ug/l	5	20	99	63-120			
2-Hexanone	80		ug/l	10	100	80	56-135			
1,2-Dibromo-3-chloropropane	19		ug/l	5	20	95	47-131			
2-Chlorotoluene	20		ug/l	5	20	102	80-120			
1,2-Dichlorobenzene	21		ug/l	5	20	106	80-120			
1,2-Dichloroethane	23		ug/l	1	20	117	73-124			
1,2-Dichloropropane	20		ug/l	1	20	101	80-120			
1,3,5-Trichlorobenzene	20		ug/l	5	20	100	66-123			
1,3,5-Trimethylbenzene	20		ug/l	5	20	100	75-120			
1,3-Dichlorobenzene	21		ug/l	5	20	105	80-120			
1,3-Dichloropropane	20		ug/l	1	20	100	80-120			
1,4-Dichlorobenzene	21		ug/l	5	20	104	80-120			
1,4-Dioxane	670		ug/l	250	500	133	63-146			
2,2-Dichloropropane	20		ug/l	1	20	102	55-142			
cis-1,2-Dichloroethene	23		ug/l	1	20	114	80-120			
1,2,4-Trimethylbenzene	20		ug/l	5	20	101	75-120			
t-Amyl methyl ether	19		ug/l	5	20	96	66-120			
Trichlorofluoromethane	18		ug/l	1	20	89	55-135			
Trichloroethene	23		ug/l	1	20	113	80-120			
trans-1,4-Dichloro-2-butene	85		ug/l	50	100	85	33-143			
trans-1,3-Dichloropropene	20		ug/l	1	20	101	67-120			

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8260C</u></b>										
<b>Batch L183491AA - SW-846 5030C</b>										
<u>LCS (LCSL21QL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
trans-1,2-Dichloroethene	23		ug/l	1	20	114	80-120			
Toluene	21		ug/l	1	20	104	80-120			
Tetrahydrofuran	130		ug/l	10	100	126	54-144			
Tetrachloroethene	23		ug/l	1	20	114	80-120			
tert-Butylbenzene	19		ug/l	5	20	93	78-120			
t-Butyl alcohol	220		ug/l	50	200	109	60-130			
Vinyl Chloride	15		ug/l	1	20	77	56-120			
Styrene	21		ug/l	5	20	106	80-120			
Methyl Tertiary Butyl Ether	19		ug/l	1	20	96	69-122			
sec-Butylbenzene	20		ug/l	5	20	99	77-120			
Chloroform	23		ug/l	1	20	115	80-120			
p-Isopropyltoluene	20		ug/l	5	20	101	76-120			
o-Xylene	21		ug/l	1	20	106	80-120			
n-Propylbenzene	20		ug/l	5	20	100	79-121			
n-Butylbenzene	19		ug/l	5	20	93	76-120			
Naphthalene	18		ug/l	5	20	88	53-124			
Methylene Chloride	21		ug/l	1	20	104	80-120			
Surrogate: Dibromofluoromethane	53		ug/l		50	106	80-120			
Surrogate: 1,2-Dichloroethane-d4	50		ug/l		50	101	80-120			
Surrogate: Toluene-d8	48		ug/l		50	96	80-120			
Surrogate: 4-Bromofluorobenzene	49		ug/l		50	99	80-120			
<u>LCS (LCSL22QL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
Ethanol	400	J.	ug/l	750	500	80	31-180			
<u>Blank (VBLKL21BL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
Chloroethane	< 1		ug/l	1			-			
1,1,2-Trichloroethane	< 1		ug/l	1			-			
1,1,2,2-Tetrachloroethane	< 1		ug/l	1			-			
1,1,1-Trichloroethane	< 1		ug/l	1			-			
Bromobenzene	< 5		ug/l	5			-			
Bromoform	< 5		ug/l	5			-			
Bromochloromethane	< 1		ug/l	1			-			
Bromodichloromethane	< 1		ug/l	1			-			
Bromoform	< 4		ug/l	4			-			
Bromomethane	< 1		ug/l	1			-			
Carbon Disulfide	< 5		ug/l	5			-			
Carbon Tetrachloride	< 1		ug/l	1			-			
Freon 113	< 10		ug/l	10			-			
1,1,1,2-Tetrachloroethane	< 1		ug/l	1			-			
Ethylbenzene	< 1		ug/l	1			-			
Ethyl ether	< 5		ug/l	5			-			
Chloroform	< 1		ug/l	1			-			
Chloromethane	< 1		ug/l	1			-			
cis-1,2-Dichloroethene	< 1		ug/l	1			-			
cis-1,3-Dichloropropene	< 1		ug/l	1			-			
Dibromochloromethane	< 1		ug/l	1			-			
Dibromomethane	< 1		ug/l	1			-			
Dichlorodifluoromethane	< 1		ug/l	1			-			
di-Isopropyl ether	< 1		ug/l	1			-			
Ethyl t-butyl ether	< 1		ug/l	1			-			
Ethanol	< 750		ug/l	750			-			
1,1-Dichloroethane	< 1		ug/l	1			-			

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183491AA - SW-846 5030C										
<u>Blank (VBLKL21BL183491AA)</u>										
<u>Prepared &amp; Analyzed: 15-Dec-18</u>										
Chlorobenzene	< 1		ug/l	1				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
Acrylonitrile	< 20		ug/l	20				-		
Benzene	< 1		ug/l	1				-		
o-Xylene	< 1		ug/l	1				-		
Hexachlorobutadiene	< 5		ug/l	5				-		
Acetone	< 20		ug/l	20				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
4-Chlorotoluene	< 5		ug/l	5				-		
2-Hexanone	< 10		ug/l	10				-		
2-Chlorotoluene	< 5		ug/l	5				-		
2-Butanone	< 10		ug/l	10				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,4-Dioxane	< 250		ug/l	250				-		
Trichloroethene	< 1		ug/l	1				-		
Isopropylbenzene	< 5		ug/l	5				-		
n-Butylbenzene	< 5		ug/l	5				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
Toluene	< 1		ug/l	1				-		
Tetrahydrofuran	< 10		ug/l	10				-		
Tetrachloroethene	< 1		ug/l	1				-		
tert-Butylbenzene	< 5		ug/l	5				-		
t-Butyl alcohol	< 50		ug/l	50				-		
m+p-Xylene	< 5		ug/l	5				-		
Styrene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
Vinyl Chloride	< 1		ug/l	1				-		
n-Propylbenzene	< 5		ug/l	5				-		
Naphthalene	< 5		ug/l	5				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
Methylene Chloride	< 1		ug/l	1				-		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183491AA - SW-846 5030C										
<u>Blank (VBLKL21BL183491AA)</u>										
Methyl Tertiary Butyl Ether	< 1		ug/l	1				-		
Surrogate: 1,2-Dichloroethane-d4	52		ug/l		50		104	80-120		
Surrogate: 4-Bromofluorobenzene	48		ug/l		50		97	80-120		
Surrogate: Dibromofluoromethane	52		ug/l		50		105	80-120		
Surrogate: Toluene-d8	47		ug/l		50		95	80-120		
Batch L183513AA - SW-846 5030C										
<u>LCS (LCSL28QL183513AA)</u>										
Dichlorodifluoromethane	14		ug/l	1	20		71	41-127		
m+p-Xylene	47		ug/l	5	20		117	80-120		
Isopropylbenzene	23		ug/l	5	20		117	80-120		
1,1,2,2-Tetrachloroethane	21		ug/l	1	20		105	72-120		
Hexachlorobutadiene	19		ug/l	5	20		96	63-120		
Freon 113	22		ug/l	10	20		109	73-139		
Ethylbenzene	23		ug/l	1	20		115	80-120		
Ethyl t-butyl ether	20		ug/l	1	20		100	68-121		
cis-1,2-Dichloroethene	24		ug/l	1	20		122	80-120		
di-Isopropyl ether	21		ug/l	1	20		105	70-124		
Chloroform	23		ug/l	1	20		116	80-120		
Dibromomethane	23		ug/l	1	20		113	80-120		
Dibromochloromethane	22		ug/l	1	20		111	71-120		
cis-1,3-Dichloropropene	22		ug/l	1	20		110	75-120		
Chloroethane	15		ug/l	1	20		76	55-123		
Tetrachloroethene	23		ug/l	1	20		117	80-120		
Methyl Tertiary Butyl Ether	21		ug/l	1	20		103	69-122		
Chloromethane	16		ug/l	1	20		82	56-121		
Ethyl ether	20		ug/l	5	20		98	59-141		
Chlorobenzene	23		ug/l	1	20		115	80-120		
Vinyl Chloride	17		ug/l	1	20		84	56-120		
Trichlorofluoromethane	16		ug/l	1	20		80	55-135		
Trichloroethene	24		ug/l	1	20		118	80-120		
trans-1,4-Dichloro-2-butene	86		ug/l	50	100		86	33-143		
trans-1,3-Dichloropropene	22		ug/l	1	20		110	67-120		
trans-1,2-Dichloroethene	25		ug/l	1	20		123	80-120		
Toluene	24		ug/l	1	20		118	80-120		
Tetrahydrofuran	110		ug/l	10	100		109	54-144		
t-Butyl alcohol	200		ug/l	50	200		102	60-130		
tert-Butylbenzene	20		ug/l	5	20		100	78-120		
Methylene Chloride	23		ug/l	1	20		116	80-120		
t-Amyl methyl ether	21		ug/l	5	20		103	66-120		
Styrene	23		ug/l	5	20		116	80-120		
sec-Butylbenzene	22		ug/l	5	20		112	77-120		
p-Isopropyltoluene	22		ug/l	5	20		111	76-120		
o-Xylene	23		ug/l	1	20		116	80-120		
n-Propylbenzene	23		ug/l	5	20		115	79-121		
n-Butylbenzene	21		ug/l	5	20		106	76-120		
Naphthalene	20		ug/l	5	20		98	53-124		
Bromobenzene	22		ug/l	5	20		110	80-120		
2,2-Dichloropropane	21		ug/l	1	20		103	55-142		
1,2-Dichloroethane	22		ug/l	1	20		108	73-124		
1,2-Dichloropropane	23		ug/l	1	20		115	80-120		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8260C</u></b>										
Batch L183513AA - SW-846 5030C										
<u>LCS (LCSL28QL183513AA)</u>										
<u>Prepared &amp; Analyzed: 17-Dec-18</u>										
1,3,5-Trichlorobenzene	21		ug/l	5	20	104	66-123			
1,3,5-Trimethylbenzene	22		ug/l	5	20	112	75-120			
1,3-Dichlorobenzene	22		ug/l	5	20	112	80-120			
Carbon Tetrachloride	22		ug/l	1	20	110	64-134			
1,2-Dichlorobenzene	22		ug/l	5	20	112	80-120			
Bromodichloromethane	21		ug/l	1	20	106	71-120			
1,3-Dichloropropane	22		ug/l	1	20	110	80-120			
2-Butanone	150		ug/l	10	150	101	59-135			
2-Chlorotoluene	23		ug/l	5	20	113	80-120			
2-Hexanone	94		ug/l	10	100	94	56-135			
4-Chlorotoluene	23		ug/l	5	20	113	80-120			
4-Methyl-2-pentanone	97		ug/l	10	100	97	62-133			
1,1,1,2-Tetrachloroethane	22		ug/l	1	20	110	78-120			
1,1,1-Trichloroethane	22		ug/l	1	20	112	67-126			
1,4-Dichlorobenzene	22		ug/l	5	20	111	80-120			
Bromoform	21		ug/l	5	20	107	80-120			
Carbon Disulfide	22		ug/l	5	20	112	65-128			
1,4-Dioxane	680		ug/l	250	500	136	63-146			
Bromoform	19		ug/l	4	20	97	51-120			
1,2-Dibromoethane	23		ug/l	1	20	114	77-120			
Benzene	24		ug/l	1	20	119	80-120			
Acrylonitrile	100		ug/l	20	100	104	60-129			
Acetone	150		ug/l	20	150	103	54-157			
1,1,2-Trichloroethane	24		ug/l	1	20	120	80-120			
1,2,4-Trimethylbenzene	22		ug/l	5	20	111	75-120			
1,1-Dichloroethene	24		ug/l	1	20	122	80-131			
1,1-Dichloropropene	23		ug/l	5	20	117	78-120			
Bromomethane	14		ug/l	1	20	68	53-128			
1,2,3-Trichlorobenzene	21		ug/l	5	20	103	66-120			
1,2,3-Trichloropropane	22		ug/l	5	20	108	75-124			
1,1-Dichloroethane	22		ug/l	1	20	112	80-120			
1,2,4-Trichlorobenzene	21		ug/l	5	20	105	63-120			
1,2-Dibromo-3-chloropropane	20		ug/l	5	20	99	47-131			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50		ug/l		50	100	80-120			
<i>Surrogate: Toluene-d8</i>	51		ug/l		50	102	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	52		ug/l		50	104	80-120			
<i>Surrogate: Dibromofluoromethane</i>	50		ug/l		50	100	80-120			
<u>LCSD (LCSL28YL183513AA)</u>										
<u>Prepared &amp; Analyzed: 17-Dec-18</u>										
1,1-Dichloropropene	22		ug/l	5	20	110	78-120	6	30	
1,2-Dibromo-3-chloropropane	20		ug/l	5	20	101	47-131	2	30	
1,2,4-Trimethylbenzene	22		ug/l	5	20	111	75-120	0	30	
1,2,4-Trichlorobenzene	20		ug/l	5	20	102	63-120	3	30	
1,2,3-Trichloropropane	22		ug/l	5	20	109	75-124	1	30	
1,2,3-Trichlorobenzene	20		ug/l	5	20	100	66-120	3	30	
1,2-Dibromoethane	23		ug/l	1	20	114	77-120	0	30	
1,1-Dichloroethene	22		ug/l	1	20	109	80-131	11	30	
1,1-Dichloroethane	22		ug/l	1	20	111	80-120	1	30	
1,1,2-Trichloroethane	24		ug/l	1	20	121	80-120	1	30	
1,1,2,2-Tetrachloroethane	23		ug/l	1	20	113	72-120	7	30	
1,1,1,2-Tetrachloroethane	21		ug/l	1	20	106	78-120	4	30	

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183513AA - SW-846 5030C										
<u>LCSD (LCSL28YL183513AA)</u>										
<u>Prepared &amp; Analyzed: 17-Dec-18</u>										
Hexachlorobutadiene	18		ug/l	5	20	90	63-120	7	30	
1,2-Dichlorobenzene	22		ug/l	5	20	112	80-120	1	30	
1,1,1-Trichloroethane	21		ug/l	1	20	105	67-126	6	30	
Freon 113	21		ug/l	10	20	103	73-139	5	30	
cis-1,3-Dichloropropene	22		ug/l	1	20	111	75-120	1	30	
n-Butylbenzene	21		ug/l	5	20	104	76-120	2	30	
Naphthalene	20		ug/l	5	20	100	53-124	2	30	
Methylene Chloride	22		ug/l	1	20	109	80-120	6	30	
Methyl Tertiary Butyl Ether	19		ug/l	1	20	97	69-122	5	30	
o-Xylene	23		ug/l	1	20	113	80-120	3	30	
Isopropylbenzene	23		ug/l	5	20	113	80-120	4	30	
sec-Butylbenzene	22		ug/l	5	20	110	77-120	2	30	
Ethyl t-butyl ether	20		ug/l	1	20	100	68-121	0	30	
Ethyl ether	19		ug/l	5	20	95	59-141	2	30	
di-Isopropyl ether	21		ug/l	1	20	104	70-124	1	30	
Dichlorodifluoromethane	13		ug/l	1	20	67	41-127	5	30	
Dibromomethane	23		ug/l	1	20	113	80-120	1	30	
Dibromochloromethane	22		ug/l	1	20	112	71-120	1	30	
m+p-Xylene	45		ug/l	5	40	114	80-120	3	30	
trans-1,2-Dichloroethene	23		ug/l	1	20	113	80-120	8	30	
1,2-Dichloroethane	22		ug/l	1	20	108	73-124	1	30	
Ethylbenzene	22		ug/l	1	20	111	80-120	3	30	
Vinyl Chloride	16		ug/l	1	20	82	56-120	3	30	
Trichlorofluoromethane	15		ug/l	1	20	75	55-135	6	30	
Trichloroethene	23		ug/l	1	20	113	80-120	4	30	
n-Propylbenzene	23		ug/l	5	20	114	79-121	1	30	
trans-1,3-Dichloropropene	22		ug/l	1	20	108	67-120	1	30	
p-Isopropyltoluene	22		ug/l	5	20	111	76-120	0	30	
Toluene	23		ug/l	1	20	115	80-120	3	30	
Tetrahydrofuran	120		ug/l	10	100	115	54-144	5	30	
Tetrachloroethene	23		ug/l	1	20	113	80-120	3	30	
tert-Butylbenzene	20		ug/l	5	20	99	78-120	1	30	
t-Butyl alcohol	200		ug/l	50	200	101	60-130	1	30	
t-Amyl methyl ether	21		ug/l	5	20	103	66-120	0	30	
trans-1,4-Dichloro-2-butene	87		ug/l	50	100	87	33-143	1	30	
1,3-Dichloropropane	23		ug/l	1	20	114	80-120	4	30	
4-Methyl-2-pentanone	100		ug/l	10	100	101	62-133	4	30	
4-Chlorotoluene	22		ug/l	5	20	112	80-120	0	30	
2-Hexanone	99		ug/l	10	100	99	56-135	6	30	
2-Chlorotoluene	23		ug/l	5	20	113	80-120	1	30	
2,2-Dichloropropane	20		ug/l	1	20	98	55-142	5	30	
Acetone	150		ug/l	20	150	102	54-157	0	30	
1,4-Dichlorobenzene	22		ug/l	5	20	110	80-120	1	30	
2-Butanone	150		ug/l	10	150	102	59-135	2	30	
1,3-Dichlorobenzene	22		ug/l	5	20	112	80-120	0	30	
1,3,5-Trimethylbenzene	22		ug/l	5	20	111	75-120	0	30	
1,3,5-Trichlorobenzene	21		ug/l	5	20	103	66-123	0	30	
cis-1,2-Dichloroethene	24		ug/l	1	20	120	80-120	2	30	
Styrene	23		ug/l	5	20	114	80-120	2	30	
1,2-Dichloropropane	22		ug/l	1	20	110	80-120	4	30	

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8260C</u></b>										
<b>Batch L183513AA - SW-846 5030C</b>										
<b><u>LCSD (LCSL28YL183513AA)</u></b>										
						<u>Prepared &amp; Analyzed: 17-Dec-18</u>				
1,4-Dioxane	730		ug/l	250	500	146	63-146	7	30	
Bromochloromethane	21		ug/l	5	20	106	80-120	1	30	
Bromomethane	13		ug/l	1	20	65	53-128	5	30	
Bromoform	19		ug/l	4	20	94	51-120	3	30	
Carbon Tetrachloride	21		ug/l	1	20	104	64-134	5	30	
Chlorobenzene	22		ug/l	1	20	112	80-120	3	30	
Acrylonitrile	100		ug/l	20	100	100	60-129	4	30	
Carbon Disulfide	20		ug/l	5	20	100	65-128	11	30	
Bromodichloromethane	22		ug/l	1	20	110	71-120	4	30	
Chloroethane	14		ug/l	1	20	71	55-123	6	30	
Bromobenzene	22		ug/l	5	20	112	80-120	2	30	
Chloroform	23		ug/l	1	20	114	80-120	2	30	
Chloromethane	16		ug/l	1	20	82	56-121	1	30	
Benzene	23		ug/l	1	20	117	80-120	2	30	
<i>Surrogate: Toluene-d8</i>	50		ug/l		50	101	80-120			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51		ug/l		50	102	80-120			
<i>Surrogate: Dibromofluoromethane</i>	49		ug/l		50	99	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	52		ug/l		50	104	80-120			
<b><u>LCS (LCSL29QL183513AA)</u></b>										
Ethanol	420	J.	ug/l	750	500	85	31-180			
<b><u>LCSD (LCSL29YL183513AA)</u></b>										
Ethanol	390	J.	ug/l	750	500	77	31-180	9	30	
<b><u>Blank (VBLKL28BL183513AA)</u></b>										
Methyl Tertiary Butyl Ether	< 1		ug/l	1			-			
m+p-Xylene	< 5		ug/l	5			-			
Isopropylbenzene	< 5		ug/l	5			-			
Hexachlorobutadiene	< 5		ug/l	5			-			
Freon 113	< 10		ug/l	10			-			
Ethylbenzene	< 1		ug/l	1			-			
Ethyl t-butyl ether	< 1		ug/l	1			-			
Ethyl ether	< 5		ug/l	5			-			
cis-1,3-Dichloropropene	< 1		ug/l	1			-			
Chloromethane	< 1		ug/l	1			-			
Methylene Chloride	< 1		ug/l	1			-			
di-Isopropyl ether	< 1		ug/l	1			-			
Dichlorodifluoromethane	< 1		ug/l	1			-			
Dibromomethane	< 1		ug/l	1			-			
Dibromochloromethane	< 1		ug/l	1			-			
cis-1,2-Dichloroethene	< 1		ug/l	1			-			
Trichloroethene	< 1		ug/l	1			-			
Chloroform	< 1		ug/l	1			-			
Ethanol	< 750		ug/l	750			-			
t-Butyl alcohol	< 50		ug/l	50			-			
Trichlorofluoromethane	< 1		ug/l	1			-			
1,1-Dichloroethane	< 1		ug/l	1			-			
Chloroethane	< 1		ug/l	1			-			
trans-1,4-Dichloro-2-butene	< 50		ug/l	50			-			
trans-1,2-Dichloroethene	< 1		ug/l	1			-			
Toluene	< 1		ug/l	1			-			
Tetrahydrofuran	< 10		ug/l	10			-			

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183513AA - SW-846 5030C										
<u>Blank (VBLKL28BL183513AA)</u>										
<u>Prepared &amp; Analyzed: 17-Dec-18</u>										
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
tert-Butylbenzene	< 5		ug/l	5				-		
Naphthalene	< 5		ug/l	5				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
Styrene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
o-Xylene	< 1		ug/l	1				-		
n-Propylbenzene	< 5		ug/l	5				-		
n-Butylbenzene	< 5		ug/l	5				-		
Tetrachloroethene	< 1		ug/l	1				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
Vinyl Chloride	< 1		ug/l	1				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
Acetone	< 20		ug/l	20				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
Bromomethane	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
Bromodichloromethane	< 1		ug/l	1				-		
Bromochloromethane	< 5		ug/l	5				-		
Bromobenzene	< 5		ug/l	5				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
Acrylonitrile	< 20		ug/l	20				-		
Chlorobenzene	< 1		ug/l	1				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
4-Chlorotoluene	< 5		ug/l	5				-		
2-Hexanone	< 10		ug/l	10				-		
2-Chlorotoluene	< 5		ug/l	5				-		
2-Butanone	< 10		ug/l	10				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
1,4-Dioxane	< 250		ug/l	250				-		
Benzene	< 1		ug/l	1				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8260C</b>										
Batch L183513AA - SW-846 5030C										
<u>Blank (VBLKL28BL183513AA)</u>										Prepared & Analyzed: 17-Dec-18
Surrogate: Toluene-d8	49		ug/l		50		98	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50		103	80-120		
Surrogate: Dibromofluoromethane	50		ug/l		50		99	80-120		
Surrogate: 4-Bromofluorobenzene	50		ug/l		50		99	80-120		
<b>SW-846 8270D</b>										
Batch 18345WAU026 - SW-846 3510C										
<u>Matrix Spike (9929801)</u>										Source: SC52429-02 Prepared: 11-Dec-18 Analyzed: 14-Dec-18
bis(2-Chloroisopropyl)ether	30		ug/l	2	48	BRL	62	71-110		
4-Chloroaniline	35		ug/l	5	48	BRL	72	10-141		
4-Chloro-3-methylphenol	48		ug/l	2	48	BRL	99	79-120		
4-Bromophenyl-phenylether	41		ug/l	2	48	BRL	86	74-114		
4,6-Dinitro-2-methylphenol	48		ug/l	14	48	BRL	100	73-124		
3-Nitroaniline	45		ug/l	2	48	BRL	94	40-136		
3,3'-Dichlorobenzidine	28		ug/l	5	48	BRL	59	33-121		
2-Nitrophenol	44		ug/l	2	48	BRL	92	80-120		
2-Nitroaniline	45		ug/l	2	48	BRL	95	80-120		
4-Chlorophenyl-phenylether	42		ug/l	2	48	BRL	87	71-109		
2-Methylnaphthalene	40		ug/l	0.5	48	BRL	84	67-103		
4-Nitrophenol	20	J.	ug/l	29	48	BRL	42	13-74		
bis(2-Ethylhexyl)phthalate	41		ug/l	5	48	BRL	86	81-115		
2-Chloronaphthalene	44		ug/l	1	48	BRL	92	52-118		
2,6-Dinitrotoluene	43		ug/l	2	48	BRL	90	80-120		
2,4-Dinitrotoluene	46		ug/l	5	48	BRL	96	81-116		
2,4-Dinitrophenol	97		ug/l	29	96	BRL	101	34-144		
2-Methylphenol	39		ug/l	2	48	BRL	82	68-111		
Atrazine	41		ug/l	5	48	BRL	85	58-122		
bis(2-Chloroethoxy)methane	41		ug/l	2	48	BRL	85	77-109		
Benzyl alcohol	35		ug/l	29	48	BRL	73	47-108		
Benzoic acid	42		ug/l	19	96	BRL	44	10-47		
Benzo(k)fluoranthene	41		ug/l	0.5	48	BRL	85	77-112		
Benzo(g,h,i)perylene	43		ug/l	0.5	48	BRL	91	78-112		
Benzo(b)fluoranthene	42		ug/l	0.5	48	BRL	88	76-117		
Benzo(a)pyrene	43		ug/l	0.5	48	BRL	90	82-110		
Benzo(a)anthracene	41		ug/l	0.5	48	BRL	86	77-112		
4-Methylphenol	37		ug/l	2	48	BRL	77	58-106		
Benzaldehyde	26		ug/l	5	48	BRL	54	23-129		
2,4-Dimethylphenol	37		ug/l	2	48	BRL	77	64-101		
Anthracene	42		ug/l	0.5	48	BRL	88	82-109		
Aniline	29		ug/l	5	48	BRL	61	34-90		
Phenanthrene	41		ug/l	0.5	48	BRL	85	80-107		
Acetophenone	39		ug/l	2	48	BRL	81	72-108		
Acenaphthylene	46		ug/l	0.5	48	BRL	96	76-118		
Acenaphthene	42		ug/l	0.5	48	BRL	89	76-112		
Butylbenzylphthalate	42		ug/l	5	48	BRL	88	80-120		
4-Nitroaniline	32		ug/l	2	48	BRL	66	59-99		
Benzidine	86		ug/l	57	240	BRL	36	10-114		
Pentachloronitrobenzene	2	J.	ug/l	5		BRL		-		
2,4-Dichlorophenol	43		ug/l	2	48	BRL	89	80-120		
Hexachloroethane	26		ug/l	5	48	BRL	54	15-103		
Indeno(1,2,3-cd)pyrene	44		ug/l	0.5	48	BRL	92	80-111		

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## Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8270D</u></b>										
Batch 18345WAU026 - SW-846 3510C										
<b><u>Matrix Spike (9929801)</u></b>										
<u>Source: SC52429-02</u>										
<u>Prepared: 11-Dec-18 Analyzed: 14-Dec-18</u>										
Isophorone	42		ug/l	2	48	BRL	87	79-115		
Naphthalene	37		ug/l	0.5	48	BRL	78	63-103		
Nitrobenzene	39		ug/l	2	48	BRL	82	78-108		
N-Nitrosodimethylamine	29		ug/l	5	48	BRL	61	42-79		
Hexachlorobutadiene	34		ug/l	2	48	BRL	72	10-119		
N-Nitrosodiphenylamine	42		ug/l	2	48	BRL	88	85-113		
Hexachlorobenzene	45		ug/l	0.5	48	BRL	93	75-113		
Pentachlorophenol	35		ug/l	5	48	BRL	74	56-129		
1,2-Dichlorobenzene	30		ug/l	2	48	BRL	63	27-114		
1,2,4-Trichlorobenzene	37		ug/l	2	48	BRL	77	37-114		
1,2,4,5-Tetrachlorobenzene	39		ug/l	2	48	BRL	82	71-103		
1,1'-Biphenyl	40		ug/l	2	48	BRL	84	68-109		
Phenol	26		ug/l	2	48	BRL	55	24-66		
Pyrene	41		ug/l	0.5	48	BRL	85	80-106		
Pyridine	17		ug/l	5	48	BRL	35	18-88		
N-Nitroso-di-n-propylamine	36		ug/l	2	48	BRL	75	71-114		
Chrysene	42		ug/l	0.5	48	BRL	88	75-109		
2,4,6-Trichlorophenol	46		ug/l	2	48	BRL	95	80-120		
2-Chlorophenol	40		ug/l	2	48	BRL	83	76-109		
2,4,5-Trichlorophenol	46		ug/l	2	48	BRL	96	80-120		
2,3,4,6-Tetrachlorophenol	45		ug/l	2	48	BRL	95	80-113		
1-Methylnaphthalene	40		ug/l	0.5	48	BRL	83	63-122		
1,4-Dichlorobenzene	31		ug/l	2	48	BRL	66	46-98		
1,3-Dichlorobenzene	31		ug/l	2	48	BRL	64	29-101		
1,2-Diphenylhydrazine	38		ug/l	2	48	BRL	80	52-135		
Hexachlorocyclopentadiene	49		ug/l	14	96	BRL	51	10-121		
Carbazole	42		ug/l	2	48	BRL	88	85-112		
bis(2-Chloroethyl)ether	37		ug/l	2	48	BRL	78	74-107		
Dibenz(a,h)anthracene	44		ug/l	0.5	48	BRL	93	80-120		
Dibenzofuran	43		ug/l	2	48	BRL	90	75-106		
Diethylphthalate	46		ug/l	5	48	BRL	96	65-120		
Dimethylphthalate	44		ug/l	5	48	BRL	92	22-139		
Di-n-butylphthalate	44		ug/l	5	48	BRL	92	80-120		
Di-n-octylphthalate	43		ug/l	5	48	BRL	90	79-123		
Fluoranthene	44		ug/l	0.5	48	BRL	91	78-113		
Fluorene	43		ug/l	0.5	48	BRL	90	77-109		
Caprolactam	18		ug/l	14	48	BRL	37	10-77		
<b><u>Surrogate: Terphenyl-d14</u></b>										
86										
<b><u>Surrogate: 2-Fluorobiphenyl</u></b>										
84										
<b><u>Surrogate: 2,4,6-Tribromophenol</u></b>										
190										
<b><u>Surrogate: Phenol-d6</u></b>										
98										
<b><u>Surrogate: Nitrobenzene-d5</u></b>										
81										
<b><u>Surrogate: 2-Fluorophenol</u></b>										
140										
<b><u>Matrix Spike Dup (9929802)</u></b>										
<u>Source: SC52429-02</u>										
<u>Prepared: 11-Dec-18 Analyzed: 14-Dec-18</u>										
1,2-Dichlorobenzene	32		ug/l	2	48	BRL	68	27-114	6	30
2,4,5-Trichlorophenol	45		ug/l	2	48	BRL	93	80-120	4	30
2,3,4,6-Tetrachlorophenol	43		ug/l	2	48	BRL	89	80-113	6	30
1-Methylnaphthalene	40		ug/l	0.5	48	BRL	84	63-122	0	30
1,4-Dichlorobenzene	32		ug/l	2	48	BRL	67	46-98	2	30
1,2-Diphenylhydrazine	39		ug/l	2	48	BRL	82	52-135	2	30

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## Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8270D</b>										
Batch 18345WAU026 - SW-846 3510C										
<u>Matrix Spike Dup (9929802)</u>										
<u>Source: SC52429-02</u>										
<u>Prepared: 11-Dec-18 Analyzed: 14-Dec-18</u>										
2,4,6-Trichlorophenol	44		ug/l	2	48	BRL	92	80-120	5	30
1,2,4-Trichlorobenzene	38		ug/l	2	48	BRL	80	37-114	5	30
1,2,4,5-Tetrachlorobenzene	40		ug/l	2	48	BRL	84	71-103	2	30
1,1'-Biphenyl	39		ug/l	2	48	BRL	82	68-109	3	30
1,3-Dichlorobenzene	30		ug/l	2	48	BRL	63	29-101	2	30
Caprolactam	18		ug/l	14	48	BRL	38	10-77	3	30
Di-n-octylphthalate	44		ug/l	5	48	BRL	93	79-123	2	30
Di-n-butylphthalate	45		ug/l	5	48	BRL	94	80-120	3	30
Dimethylphthalate	43		ug/l	5	48	BRL	89	22-139	3	30
Diethylphthalate	44		ug/l	5	48	BRL	93	65-120	4	30
Dibenzofuran	41		ug/l	2	48	BRL	86	75-106	6	30
Dibenz(a,h)anthracene	45		ug/l	0.5	48	BRL	94	80-120	1	30
2,4-Dichlorophenol	43		ug/l	2	48	BRL	91	80-120	2	30
Carbazole	44		ug/l	2	48	BRL	92	85-112	4	30
Hexachlorobenzene	45		ug/l	0.5	48	BRL	93	75-113	0	30
Butylbenzylphthalate	44		ug/l	5	48	BRL	92	80-120	5	30
bis(2-Ethylhexyl)phthalate	44		ug/l	5	48	BRL	92	81-115	7	30
bis(2-Chloroisopropyl)ether	29		ug/l	2	48	BRL	61	71-110	1	30
bis(2-Chloroethyl)ether	38		ug/l	2	48	BRL	79	74-107	1	30
bis(2-Chloroethoxy)methane	39		ug/l	2	48	BRL	82	77-109	4	30
2-Nitroaniline	43		ug/l	2	48	BRL	91	80-120	5	30
Benzoic acid	41		ug/l	19	95	BRL	43	10-47	2	30
Chrysene	45		ug/l	0.5	48	BRL	95	75-109	7	30
Nitrobenzene	39		ug/l	2	48	BRL	82	78-108	1	30
Pyridine	19		ug/l	5	48	BRL	39	18-88	12	30
Pyrene	42		ug/l	0.5	48	BRL	89	80-106	3	30
Phenol	26		ug/l	2	48	BRL	54	24-66	1	30
Phenanthrene	42		ug/l	0.5	48	BRL	88	80-107	4	30
Pentachlorophenol	35		ug/l	5	48	BRL	74	56-129	0	30
Pentachloronitrobenzene	< 5		ug/l	5		BRL	-	-	-	-
N-Nitrosodiphenylamine	43		ug/l	2	48	BRL	90	85-113	2	30
Fluoranthene	46		ug/l	0.5	48	BRL	96	78-113	4	30
N-Nitrosodimethylamine	29		ug/l	5	48	BRL	60	42-79	3	30
Fluorene	42		ug/l	0.5	48	BRL	88	77-109	3	30
Naphthalene	37		ug/l	0.5	48	BRL	78	63-103	1	30
Isophorone	41		ug/l	2	48	BRL	87	79-115	0	30
Indeno(1,2,3-cd)pyrene	44		ug/l	0.5	48	BRL	93	80-111	0	30
Hexachloroethane	27		ug/l	5	48	BRL	57	15-103	5	30
Hexachlorocyclopentadiene	49		ug/l	14	95	BRL	51	10-121	0	30
Hexachlorobutadiene	35		ug/l	2	48	BRL	74	10-119	3	30
Benzo(k)fluoranthene	42		ug/l	0.5	48	BRL	89	77-112	4	30
N-Nitroso-di-n-propylamine	37		ug/l	2	48	BRL	77	71-114	2	30
2-Methylnaphthalene	38		ug/l	0.5	48	BRL	80	67-103	5	30
4-Chloro-3-methylphenol	45		ug/l	2	48	BRL	94	79-120	6	30
Benzo(g,h,i)perylene	44		ug/l	0.5	48	BRL	91	78-112	0	30
4,6-Dinitro-2-methylphenol	48		ug/l	14	48	BRL	101	73-124	1	30
Benzyl alcohol	34		ug/l	29	48	BRL	72	47-108	2	30
3,3'-Dichlorobenzidine	33		ug/l	5	48	BRL	70	33-121	16	30
4-Chloroaniline	36		ug/l	5	48	BRL	76	10-141	5	30
2-Methylphenol	39		ug/l	2	48	BRL	82	68-111	1	30

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8270D</b>										
Batch 18345WAU026 - SW-846 3510C										
<u>Matrix Spike Dup (9929802)</u>										
<u>Source: SC52429-02</u>										
<u>Prepared: 11-Dec-18 Analyzed: 14-Dec-18</u>										
4-Bromophenyl-phenylether	43		ug/l	2	48	BRL	91	74-114	5	30
2-Chlorophenol	39		ug/l	2	48	BRL	82	76-109	2	30
2-Chloronaphthalene	42		ug/l	1	48	BRL	87	52-118	6	30
2,6-Dinitrotoluene	42		ug/l	2	48	BRL	89	80-120	1	30
2,4-Dinitrotoluene	44		ug/l	5	48	BRL	92	81-116	5	30
2,4-Dinitrophenol	88		ug/l	29	95	BRL	92	34-144	10	30
2,4-Dimethylphenol	36		ug/l	2	48	BRL	76	64-101	1	30
2-Nitrophenol	43		ug/l	2	48	BRL	89	80-120	3	30
Acetophenone	38		ug/l	2	48	BRL	80	72-108	2	30
Benzidine	110		ug/l	57	240	BRL	48	10-114	28	30
Benzaldehyde	30		ug/l	5	48	BRL	63	23-129	16	30
Atrazine	42		ug/l	5	48	BRL	89	58-122	4	30
Benzo(a)pyrene	44		ug/l	0.5	48	BRL	91	82-110	1	30
3-Nitroaniline	43		ug/l	2	48	BRL	91	40-136	4	30
Benzo(a)anthracene	43		ug/l	0.5	48	BRL	91	77-112	5	30
Aniline	30		ug/l	5	48	BRL	62	34-90	2	30
Anthracene	42		ug/l	0.5	48	BRL	89	82-109	0	30
Benzo(b)fluoranthene	43		ug/l	0.5	48	BRL	90	76-117	2	30
Acenaphthylene	43		ug/l	0.5	48	BRL	90	76-118	6	30
Acenaphthene	40		ug/l	0.5	48	BRL	85	76-112	5	30
4-Nitrophenol	19	J.	ug/l	29	48	BRL	40	13-74	5	30
4-Nitroaniline	33		ug/l	2	48	BRL	70	59-99	5	30
4-Methylphenol	37		ug/l	2	48	BRL	77	58-106	0	30
4-Chlorophenyl-phenylether	41		ug/l	2	48	BRL	85	71-109	3	30
Surrogate: 2,4,6-Tribromophenol	190		ug/l		190		97	10-155		
Surrogate: Phenol-d6	99		ug/l		190		52	10-69		
Surrogate: 2-Fluorobiphenyl	80		ug/l		95		84	59-104		
Surrogate: Nitrobenzene-d5	81		ug/l		95		85	56-108		
Surrogate: Terphenyl-d14	90		ug/l		95		94	58-117		
Surrogate: 2-Fluorophenol	140		ug/l		190		73	10-95		
<u>LCS (P5WULCSQ345WAU026)</u>										
<u>Prepared: 11-Dec-18 Analyzed: 13-Dec-18</u>										
Atrazine	44		ug/l	5	50		89	58-122		
4-Nitroaniline	36		ug/l	2	50		71	59-99		
2-Nitrophenol	46		ug/l	2	50		92	80-120		
3,3'-Dichlorobenzidine	35		ug/l	5	50		70	33-121		
3-Nitroaniline	44		ug/l	2	50		89	40-136		
4,6-Dinitro-2-methylphenol	50		ug/l	15	50		99	73-124		
4-Bromophenyl-phenylether	43		ug/l	2	50		86	74-114		
4-Chloro-3-methylphenol	48		ug/l	2	50		96	79-120		
4-Chloroaniline	35		ug/l	5	50		69	10-141		
Benzo(b)fluoranthene	43		ug/l	0.5	50		87	76-117		
4-Methylphenol	36		ug/l	2	50		72	58-106		
2-Methylnaphthalene	39		ug/l	0.5	50		77	67-103		
4-Nitrophenol	20	J.	ug/l	30	50		41	13-74		
Acenaphthene	41		ug/l	0.5	50		83	76-112		
Acenaphthylene	41		ug/l	0.5	50		82	76-118		
Acetophenone	41		ug/l	2	50		82	72-108		
Aniline	30		ug/l	5	50		59	34-90		
Anthracene	43		ug/l	0.5	50		86	82-109		
Benzidine	40	J.	ug/l	60	250		16	10-114		

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## Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8270D</b>										
Batch 18345WAU026 - SW-846 3510C										
<u>LCS (P5WULCSQ345WAU026)</u>										
<u>Prepared: 11-Dec-18 Analyzed: 13-Dec-18</u>										
Benzo(a)anthracene	45		ug/l	0.5	50	89	77-112			
4-Chlorophenyl-phenylether	42		ug/l	2	50	84	71-109			
2,4,6-Trichlorophenol	47		ug/l	2	50	94	80-120			
1,1'-Biphenyl	38		ug/l	2	50	75	68-109			
1,2,4,5-Tetrachlorobenzene	38		ug/l	2	50	76	71-103			
1,2,4-Trichlorobenzene	34		ug/l	2	50	68	37-114			
1,2-Dichlorobenzene	29		ug/l	2	50	59	27-114			
1,2-Diphenylhydrazine	40		ug/l	2	50	81	52-135			
1,3-Dichlorobenzene	27		ug/l	2	50	54	29-101			
1,4-Dichlorobenzene	29		ug/l	2	50	57	46-98			
1-Methylnaphthalene	39		ug/l	0.5	50	77	63-122			
2-Nitroaniline	44		ug/l	2	50	88	80-120			
2,4,5-Trichlorophenol	46		ug/l	2	50	93	80-120			
2-Methylphenol	40		ug/l	2	50	81	68-111			
2,4-Dichlorophenol	46		ug/l	2	50	92	80-120			
2,4-Dimethylphenol	38		ug/l	2	50	76	64-101			
2,4-Dinitrophenol	90		ug/l	30	100	90	34-144			
2,4-Dinitrotoluene	44		ug/l	5	50	87	81-116			
2,6-Dinitrotoluene	43		ug/l	2	50	86	80-120			
2-Chloronaphthalene	34		ug/l	1	50	69	52-118			
2-Chlorophenol	41		ug/l	2	50	83	76-109			
Benzo(a)pyrene	44		ug/l	0.5	50	89	82-110			
2,3,4,6-Tetrachlorophenol	43		ug/l	2	50	86	80-113			
N-Nitrosodimethylamine	35		ug/l	5	50	70	42-79			
Benzo(g,h,i)perylene	44		ug/l	0.5	50	88	78-112			
Hexachlorobutadiene	32		ug/l	2	50	64	10-119			
Benzaldehyde	37		ug/l	5	50	74	23-129			
Hexachlorocyclopentadiene	16		ug/l	15	100	16	10-121			
Hexachloroethane	24		ug/l	5	50	49	15-103			
Indeno(1,2,3-cd)pyrene	45		ug/l	0.5	50	90	80-111			
Isophorone	43		ug/l	2	50	86	79-115			
Fluorene	43		ug/l	0.5	50	87	77-109			
Nitrobenzene	41		ug/l	2	50	82	78-108			
Hexachlorobenzene	48		ug/l	0.5	50	95	75-113			
N-Nitroso-di-n-propylamine	38		ug/l	2	50	75	71-114			
N-Nitrosodiphenylamine	44		ug/l	2	50	87	85-113			
Pentachloronitrobenzene	46		ug/l	5	50	92	71-113			
Pentachlorophenol	32		ug/l	5	50	65	56-129			
Phenanthrene	44		ug/l	0.5	50	88	80-107			
Phenol	21		ug/l	2	50	42	24-66			
Pyrene	44		ug/l	0.5	50	88	80-106			
Pyridine	24		ug/l	5	50	49	18-88			
Naphthalene	36		ug/l	0.5	50	71	63-103			
Carbazole	45		ug/l	2	50	91	85-112			
Benzyl alcohol	38		ug/l	30	50	76	47-108			
bis(2-Chloroethoxy)methane	42		ug/l	2	50	84	77-109			
bis(2-Chloroethyl)ether	39		ug/l	2	50	77	74-107			
bis(2-Chloroisopropyl)ether	31		ug/l	2	50	61	71-110			
Benzo(k)fluoranthene	44		ug/l	0.5	50	89	77-112			
Fluoranthene	47		ug/l	0.5	50	94	78-113			

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## Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>SW-846 8270D</b>										
Batch 18345WAU026 - SW-846 3510C										
<u>LCS (P5WULCSQ345WAU026)</u>										
Benzoic acid	50		ug/l	20	100		50	10-47		
Caprolactam	22		ug/l	15	50		44	10-77		
bis(2-Ethylhexyl)phthalate	44		ug/l	5	50		88	81-115		
Chrysene	44		ug/l	0.5	50		89	75-109		
Dibenz(a,h)anthracene	45		ug/l	0.5	50		90	80-120		
Dibenzofuran	41		ug/l	2	50		83	75-106		
Diethylphthalate	42		ug/l	5	50		84	65-120		
Dimethylphthalate	38		ug/l	5	50		75	22-139		
Di-n-butylphthalate	46		ug/l	5	50		93	80-120		
Di-n-octylphthalate	46		ug/l	5	50		91	79-123		
Butylbenzylphthalate	45		ug/l	5	50		90	80-120		
<u>Surrogate: Terphenyl-d14</u>										
Surrogate: Phenol-d6	91		ug/l		100		91	58-117		
Surrogate: 2-Fluorophenol	87		ug/l		200		43	10-69		
Surrogate: Nitrobenzene-d5	130		ug/l		200		65	10-95		
Surrogate: 2-Fluorobiphenyl	84		ug/l		100		84	56-108		
Surrogate: 2,4,6-Tribromophenol	80		ug/l		100		80	59-104		
Surrogate: 2,4,6-Tribromophenol	190		ug/l		200		93	10-155		
<u>LCSD (P5WULCSY345WAU026)</u>										
Pentachloronitrobenzene	48		ug/l	5	50		96	71-113	4	30
Surrogate: 2,4,6-Tribromophenol	210		ug/l		200		106	10-155		
Surrogate: Phenol-d6	93		ug/l		200		46	10-69		
Surrogate: Nitrobenzene-d5	84		ug/l		100		84	56-108		
Surrogate: 2-Fluorobiphenyl	88		ug/l		100		88	59-104		
Surrogate: Terphenyl-d14	98		ug/l		100		98	58-117		
Surrogate: 2-Fluorophenol	140		ug/l		200		71	10-95		
<u>Blank (PLKWU34B345WAU026)</u>										
Benzoic acid	< 20		ug/l	20			-			
Diethylphthalate	< 5		ug/l	5			-			
Dibenzofuran	< 2		ug/l	2			-			
Dibenz(a,h)anthracene	< 0.5		ug/l	0.5			-			
Chrysene	< 0.5		ug/l	0.5			-			
Carbazole	< 2		ug/l	2			-			
Caprolactam	< 15		ug/l	15			-			
Butylbenzylphthalate	< 5		ug/l	5			-			
bis(2-Ethylhexyl)phthalate	< 5		ug/l	5			-			
bis(2-Chloroisopropyl)ether	< 2		ug/l	2			-			
bis(2-Chloroethyl)ether	< 2		ug/l	2			-			
Benzyl alcohol	< 30		ug/l	30			-			
Di-n-octylphthalate	< 5		ug/l	5			-			
Benzo(k)fluoranthene	< 0.5		ug/l	0.5			-			
Benzo(g,h,i)perylene	< 0.5		ug/l	0.5			-			
Benzo(b)fluoranthene	< 0.5		ug/l	0.5			-			
Benzo(a)pyrene	< 0.5		ug/l	0.5			-			
Benzo(a)anthracene	< 0.5		ug/l	0.5			-			
Benzidine	< 60		ug/l	60			-			
bis(2-Chloroethoxy)methane	< 2		ug/l	2			-			
Isophorone	< 2		ug/l	2			-			
N-Nitrosodiphenylamine	< 2		ug/l	2			-			
Pentachloronitrobenzene	< 5		ug/l	5			-			
Pentachlorophenol	< 5		ug/l	5			-			

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8270D</u></b>										
Batch 18345WAU026 - SW-846 3510C										
<u>Blank (PLKWU34B345WAU026)</u>										
<u>Prepared: 11-Dec-18 Analyzed: 13-Dec-18</u>										
Phenanthrene	< 0.5		ug/l	0.5			-			
Phenol	< 2		ug/l	2			-			
Pyrene	< 0.5		ug/l	0.5			-			
Pyridine	< 5		ug/l	5			-			
N-Nitrosodimethylamine	< 5		ug/l	5			-			
Dimethylphthalate	< 5		ug/l	5			-			
Naphthalene	< 0.5		ug/l	0.5			-			
Di-n-butylphthalate	< 5		ug/l	5			-			
Indeno(1,2,3-cd)pyrene	< 0.5		ug/l	0.5			-			
Hexachloroethane	< 5		ug/l	5			-			
Hexachlorocyclopentadiene	< 15		ug/l	15			-			
Hexachlorobutadiene	< 2		ug/l	2			-			
Hexachlorobenzene	< 0.5		ug/l	0.5			-			
Fluorene	< 0.5		ug/l	0.5			-			
Fluoranthene	< 0.5		ug/l	0.5			-			
Anthracene	< 0.5		ug/l	0.5			-			
Nitrobenzene	< 2		ug/l	2			-			
1-Methylnaphthalene	< 0.5		ug/l	0.5			-			
2-Chloronaphthalene	< 1		ug/l	1			-			
Benzaldehyde	< 5		ug/l	5			-			
2,4-Dinitrotoluene	< 5		ug/l	5			-			
2,4-Dinitrophenol	< 30		ug/l	30			-			
2,4-Dimethylphenol	< 2		ug/l	2			-			
2,4-Dichlorophenol	< 2		ug/l	2			-			
2,4,6-Trichlorophenol	< 2		ug/l	2			-			
Atrazine	< 5		ug/l	5			-			
2,3,4,6-Tetrachlorophenol	< 2		ug/l	2			-			
2-Chlorophenol	< 2		ug/l	2			-			
1,4-Dichlorobenzene	< 2		ug/l	2			-			
1,3-Dichlorobenzene	< 2		ug/l	2			-			
1,2-Diphenylhydrazine	< 2		ug/l	2			-			
1,2-Dichlorobenzene	< 2		ug/l	2			-			
1,2,4-Trichlorobenzene	< 2		ug/l	2			-			
1,2,4,5-Tetrachlorobenzene	< 2		ug/l	2			-			
1,1'-Biphenyl	< 2		ug/l	2			-			
N-Nitroso-di-n-propylamine	< 2		ug/l	2			-			
2,4,5-Trichlorophenol	< 2		ug/l	2			-			
4-Chloro-3-methylphenol	< 2		ug/l	2			-			
Aniline	< 5		ug/l	5			-			
Acetophenone	< 2		ug/l	2			-			
Acenaphthylene	< 0.5		ug/l	0.5			-			
Acenaphthene	< 0.5		ug/l	0.5			-			
4-Nitrophenol	< 30		ug/l	30			-			
4-Nitroaniline	< 2		ug/l	2			-			
4-Methylphenol	< 2		ug/l	2			-			
4-Chlorophenyl-phenylether	< 2		ug/l	2			-			
2,6-Dinitrotoluene	< 2		ug/l	2			-			
4-Chloroaniline	< 5		ug/l	5			-			
4-Bromophenyl-phenylether	< 2		ug/l	2			-			
4,6-Dinitro-2-methylphenol	< 15		ug/l	15			-			

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### Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b><u>SW-846 8270D</u></b>										
Batch 18345WAU026 - SW-846 3510C										
<u>Blank (PLKWU34B345WAU026)</u> Prepared: 11-Dec-18 Analyzed: 13-Dec-18										
3-Nitroaniline	< 2		ug/l	2				-		
3,3'-Dichlorobenzidine	< 5		ug/l	5				-		
2-Nitrophenol	< 2		ug/l	2				-		
2-Nitroaniline	< 2		ug/l	2				-		
2-Methylphenol	< 2		ug/l	2				-		
2-Methylnaphthalene	< 0.5		ug/l	0.5				-		
<i>Surrogate: 2-Fluorobiphenyl</i>	74		ug/l		100		74	59-104		
<i>Surrogate: 2,4,6-Tribromophenol</i>	190		ug/l		200		97	10-155		
<i>Surrogate: Terphenyl-d14</i>	93		ug/l		100		93	58-117		
<i>Surrogate: Phenol-d6</i>	65		ug/l		200		32	10-69		
<i>Surrogate: 2-Fluorophenol</i>	110		ug/l		200		53	10-95		
<i>Surrogate: Nitrobenzene-d5</i>	80		ug/l		100		80	56-108		

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## Notes and Definitions

B.	Estimated value - Detected in blank
J.	Estimated value
X	Estimated value - Defined in case narrative (X)
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

Report To: AECC  
6308 Fly Road  
East Syracuse, NY 13057

Invoice To: AECC  
Carol Beck  
cbeck@aecgroup.com

Telephone #: (315) 432-9400  
Project Mgr: Rich McKenna

*SCS2429* *8y*

**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.

Project No: 18-051  
Site Name: 700 Out Parcel  
Location: Syracuse  
Sampler(s): Drew Brantner State: NY

F=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= \_\_\_\_\_ 12= \_\_\_\_\_

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= Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers			Analysis			Check if chlorinated	QA/QC Reporting Notes: * additional charges may apply	
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	82200 TL Vols	8270 TL SVols	600/476 TL Mats		
SCS2429-01	MW-05	12/5/18	1114	G	GW	3	—	—	1	X	X	X	<input type="checkbox"/>	MA DEP MCP CAM Report? <input type="checkbox"/> Yes <input type="checkbox"/> No CT DPH RCP Report? <input type="checkbox"/> Yes <input type="checkbox"/> No
02	MW-07	12/5/18	1216	G	GW	9	3	3	—	X	X	X	<input type="checkbox"/>	<input type="checkbox"/> Standard <input type="checkbox"/> No QC <input type="checkbox"/> DQA* <input type="checkbox"/> ASP B* <input type="checkbox"/> ASP A* <input type="checkbox"/> NJ Reduced* <input type="checkbox"/> NJ Full* <input type="checkbox"/> NJ Reduced* <input type="checkbox"/> Tier II* <input type="checkbox"/> Tier IV* <input type="checkbox"/> Other: _____
03	MW-08	12/5/18	1447	G	GW	3	1	1	—	X	X	X	<input type="checkbox"/>	State-specific reporting standards: _____
04	MW-09	12/5/18	1343	G	GW	3	1	1	—	X	X	X	<input type="checkbox"/>	<input type="checkbox"/> MS/MSD
05	MW-D	12/5/18	—	G	GW	3	1	1	—	X	X	X	<input type="checkbox"/>	<input type="checkbox"/>
06	Trip Blank	—	—	—	—	2	—	—	—	X	—	—	<input type="checkbox"/>	<input type="checkbox"/>

Relinquished by:

Received by:

Date:

Time:

Temp °C

 EDD format:

Excel, PDF

 E-mail to:

rmckenna@aecgroup.com

dbrantner@aecgroup.com

*Drew Brantner**FedEx**12/5/18**1550*Observed  
*1,2*Correction Factor  
*8*Corrected  
*1,2*IR ID #  
*01*Condition upon receipt: Custody Seals:  Present  Infect  Broken Ambient  Iced  Refrigerated  DI VOA Frozen  Soil Jar Frozen

## Batch Summary

### 183441404405

#### Subcontracted Analyses

P34404EB344404405  
P34404EQ344404405  
SC52429-01 (MW-05)

SC52429-03 (MW-08)

SC52429-04 (MW-09)

SC52429-06 (Trip Blank)

VBLKL21BL183491AA

### 183441404406

#### Subcontracted Analyses

9929801  
9929802  
9929803  
P34404FB344404406  
P34404FQ344404406  
SC52429-02 (MW-07)  
SC52429-03 (MW-08)  
SC52429-04 (MW-09)  
SC52429-05 (MW-D)

### L183513AA

#### Subcontracted Analyses

LCSL28QL183513AA  
LCSL28YL183513AA  
LCSL29QL183513AA  
LCSL29YL183513AA  
SC52429-05 (MW-D)  
VBLKL28BL183513AA

### 183450571306

#### Subcontracted Analyses

9929801  
9929802  
9929803  
P34571FB345571306  
P34571FQ345571306  
SC52429-01 (MW-05)  
SC52429-02 (MW-07)  
SC52429-03 (MW-08)  
SC52429-04 (MW-09)  
SC52429-05 (MW-D)

### 18345WAU026

#### Subcontracted Analyses

9929801  
9929802  
P5WULCSQ345WAU026  
P5WULCSY345WAU026  
PLKWU34B345WAU026  
SC52429-01 (MW-05)  
SC52429-02 (MW-07)  
SC52429-03 (MW-08)  
SC52429-04 (MW-09)  
SC52429-05 (MW-D)

### L183491AA

#### Subcontracted Analyses

9929801  
9929802  
LCSL21QL183491AA  
LCSL22QL183491AA  
SC52429-01 (MW-05)  
SC52429-02 (MW-07)