

GROUNDWATER MONITORING REPORT - MARCH 2014

YOUTH SERVICES CENTER
1211 EAST ALDER STREET
SEATTLE, WASHINGTON

Prepared for
King County Facilities Management Division

Prepared by
Herrera Environmental Consultants, Inc.



Note:

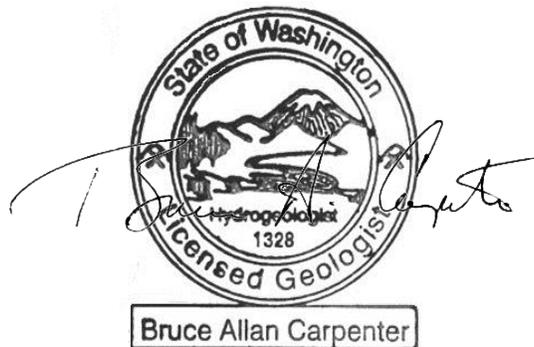
Some pages in this document have been purposely skipped or blank pages inserted so that this document will copy correctly when duplexed.

GROUNDWATER MONITORING REPORT - MARCH 2014

YOUTH SERVICES CENTER
1211 EAST ALDER STREET
SEATTLE, WASHINGTON

Prepared for
King County Facilities Management Division
500 Fourth Avenue, Room 820
Seattle, Washington 98104

Prepared by
Herrera Environmental Consultants, Inc.
2200 Sixth Avenue, Suite 1100
Seattle, Washington 98121
Telephone: 206/441-9080



April 22, 2014

CONTENTS

Introduction	1
Site Description and Background.....	1
Results	1
Groundwater Conditions	1
Groundwater Analytical Results.....	3
Limitations	3
 Attachment A Data Quality Review, Laboratory Analytical Report, Chain of Custody Record	

TABLES

Table 1. Summary of Water Level Elevation Data from Monitoring Wells at Youth Services Center, Seattle, Washington.....	2
Table 2. Groundwater Dry Cleaner Solvent Analytical Results Summary ($\mu\text{g/L}$), Youth Services Center, Seattle, Washington.....	4

FIGURES

Figure 1. Vicinity Map, Former Superior Asphalt Site, Yakima, Washington.	9
Figure 2. Water Level Contour Map and Diesel Concentrations in Groundwater, Former Superior Asphalt Site, September 25, 2013, Yakima, Washington.	10

Introduction

Herrera Environmental Consultants (Herrera) was contracted by King County Facilities Management Division to conduct a follow-up sampling of 12 groundwater monitoring wells located at the Youth Services Center, located at 1211 East Alder Street in Seattle, Washington, Washington (Figure 1). This report presents the results of groundwater monitoring performed in March 2014.

Site Description and Background

A Phase II Environmental Site Assessment (ESA) of the YSC site was completed in November 2013 by Herrera for King County Facilities Management Division as part of the County's background studies for future redevelopment of the site. Analytical results of groundwater samples collected from a number of monitoring wells during the Phase II ESA identified the presence of tetrachloroethylene (also known as perchloroethylene, or "perc") and other chemicals associated with dry cleaning in groundwater beneath the site. As the highest levels of these chemicals were observed at the upgradient boundary of the site, the source(s) appears to be one or more former dry cleaning businesses located to the north and offsite from the YSC site. These former businesses were identified in the Phase II ESA as well as an earlier Phase I ESA that was also performed by Herrera. The samples and results discussed in this report were collected as a follow-up to the data presented in the Phase II ESA for the purpose of assessing seasonal or other variations

Groundwater sampling identified a major plume of dry cleaning solvents composed of a mixture of tetrachloroethylene (also known as perchloroethylene or perc), trichloroethylene, and trans- and cis-dichloroethylenes. The degradation by-product vinyl chloride was not detected in any sample. Tetrachloroethylene was found at all 17 locations contamination was present, exceeding the Model Toxics Control (MTCA) method A cleanup level of 5 milligrams per liter (mg/L) at 13 of them; trichloroethylene was found at 7 of the same locations and the dichloroethylenes were found at 3 of the locations.

Results

Detailed subsurface conditions at the site are described in the 2013 Phase II ESA report. Groundwater monitoring and sampling, and sample management procedures followed the same protocols described in the 2013 Phase II ESA report.

Groundwater Conditions

Groundwater levels measured at 12 monitoring wells and 3 piezometers on March 26, 2014, are provided in Table 1, along with measurements from September 2013. Water level elevations across the property ranged from 0.2 to 3.4 feet higher in March, a month of heavy precipitation. March water levels were approximately 3 feet higher across the northwest portion of the property, 1.5 feet higher in the south-central portion of the property, and 0.5 feet higher in the southeast corner of the property than the previous September. Even though the overall site gradient was greater in March, the flow direction was very similar (Figure 2).

Table 1. Summary of Water Level Elevation Data from Monitoring Wells at Youth Services Center, Seattle, Washington.

Monitoring Well Identification	Measurement Date	Reference Point Elevation ^a (feet MSL)	Depth to Water ^b (feet)	Water Level Elevation (feet MSL)
MW-1S	9/23/13	254.65	8.98	245.67
	3/26/14	254.65	5.64	249.01
MW-1D	9/23/13	254.62	7.94	246.68
	3/26/14	254.62	5.06	249.56
MW-2	9/23/13	248.16	17.95	230.21
	3/26/14	248.16	14.89	233.27
MW-3	9/23/13	223.34	9.18	214.16
	3/26/14	223.34	8.50	214.84
MW-4	9/23/13	215.91	7.99	207.92
	3/26/14	215.91	7.61	208.30
MW-5	9/23/13	215.50	7.16	208.34
	3/26/14	215.50	6.98	208.52
MW-6	9/23/13	236.12	12.53	223.59
	3/26/14	236.12	10.82	225.30
MW-7	9/23/13	235.44	13.32	222.12
	3/26/14	235.44	10.91	224.53
MW-8	9/23/13	235.48	20.80	214.68
	3/26/14	235.48	19.23	216.25
MW-9	9/23/13	250.22	8.57	241.65
	3/26/14	250.22	7.37	242.85
MW-10	9/23/13	251.63	4.75	246.88
	3/26/14	251.63	3.86	247.77
MW-11	9/23/13	251.99	12.14	239.85
	3/26/14	251.99	9.15	242.84
P-2	9/23/13	246.19	14.30	231.89
	3/26/14	246.19	12.33	233.86
P-3	9/23/13	239.90	4.55	235.35
	3/26/14	239.90	2.42	237.48
P-9	9/23/13	216.55	NA	NA
	3/26/14	216.55	7.91	208.64

^a Top of well casing was surveyed to Mean Sea Level.

^b Depth to water measurements were taken from reference point marks on top of PVC well casing.

NA - not available

Water levels measured in MW-1s (5.6 feet below ground surface [bgs]) and in MW-1d (5.1 feet bgs) indicate an upward vertical gradient, similar to that measured 6 months earlier.

Groundwater Analytical Results

Analytical results for the March 26 sampling event are presented in Table 2 and distribution of tetrachloroethylene in groundwater across the site is shown in Figure 2; the laboratory report and a Data Quality Assurance Review are attached. All data were deemed acceptable, based on *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*.

Tetrachloroethylene concentrations increased significantly at MW-1s and MW-11, both nearest the offsite source(s), assumed to be immediately north of the northwest property corner. A significant increase in concentration also was seen in groundwater collected from MW-1d, approximately 25 feet deeper than in MW-1s; however, it did not exceed the MTCA method A cleanup level. Concentrations in the center of the property diminished significantly, but remained generally constant at the southern property line. Plume boundaries and general concentration gradients, defined by order-of-magnitude concentration divisions, appear similar between September and March (i.e., no change in depiction of the plume has been made, except for a slight adjustment at the southeast corner of the property).

The tetrachloroethylene concentration at MW-9 remained consistent between the two monitoring events, possibly associated with another historical dry cleaner source northeast of the primary source.

Limitations

This report has been prepared for exclusive use by King County. The analyses and conclusions included in this report are based on conditions encountered at the time of our field investigation, as well as professional experience and judgment. Herrera cannot be responsible for interpretation by others of the data contained in this report.

Herrera's services were performed with due diligence in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the area. No other warranty, express or implied, is made.

Table 2. Groundwater Dry Cleaner Solvent Analytical Results Summary (µg/L), Youth Services Center, Seattle, Washington.

Sample Identification	Date Sampled	Analytical Parameters				
		Tetrachloroethylene	Trichloroethylene	cis-1, 2 dichloroethylene	trans-1, 2 dichloroethylene	Vinyl chloride
MW-1s	9/23/13	3,900	21	26	ND (20)	ND (20)
	3/26/14	6,900	61	120	ND (30)	ND (30)
MW-1d	9/23/13	2.7	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/26/14	4.5	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW-2	9/23/13	3,000	ND (20)	ND (20)	ND (20)	ND (20)
	3/26/14	1,800	ND (10)	ND (10)	ND (10)	ND (10)
MW-3	9/23/13	ND(1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/26/14	ND(0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW-4	9/23/13	66	1.8	ND (0.20)	ND (0.20)	ND (0.20)
	3/26/14	45	1.7	ND (0.20)	ND (0.20)	ND (0.20)
MW-5	9/23/13	1.7	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/26/14	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW-6	7/30/13	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	9/23/13	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/27/14	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW 7	7/30/13	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	9/23/13	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/27/14	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW-8	7/30/13	150	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
	9/23/13	98	1.9	ND (1.0)	ND (1.0)	ND (1.0)
	3/26/14	100	2.0	ND (1.0)	ND (1.0)	ND (1.0)

Table 2 (continued). Groundwater Dry Cleaner Solvent Analytical Results Summary (µg/L), Youth Services Center, Seattle, Washington.

Sample Identification	Date Sampled	Analytical Parameters				
		Tetrachloroethylene	Trichloroethylene	cis-1, 2 dichloroethylene	trans-1, 2 dichloroethylene	Vinyl chloride
MW-9	9/23/13	230	16	ND (2.0)	ND (2.0)	ND (2.0)
	3/27/14	230	14	ND (1.0)	ND (1.0)	ND (1.0)
MW-10	9/23/13	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
	3/27/14	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
MW-11	9/23/13	3,000	ND (20)	ND (20)	ND (20)	ND (20)
	3/26/14	6,800	ND (30)	ND (30)	ND (30)	ND (30)
<i>MTCA Cleanup Level</i>		5.0 ^a	5.0 ^a	16.0 ^b	160 ^b	0.20 ^a

^a MTCA method A cleanup level for unrestricted land use

^b MTCA method B cleanup level

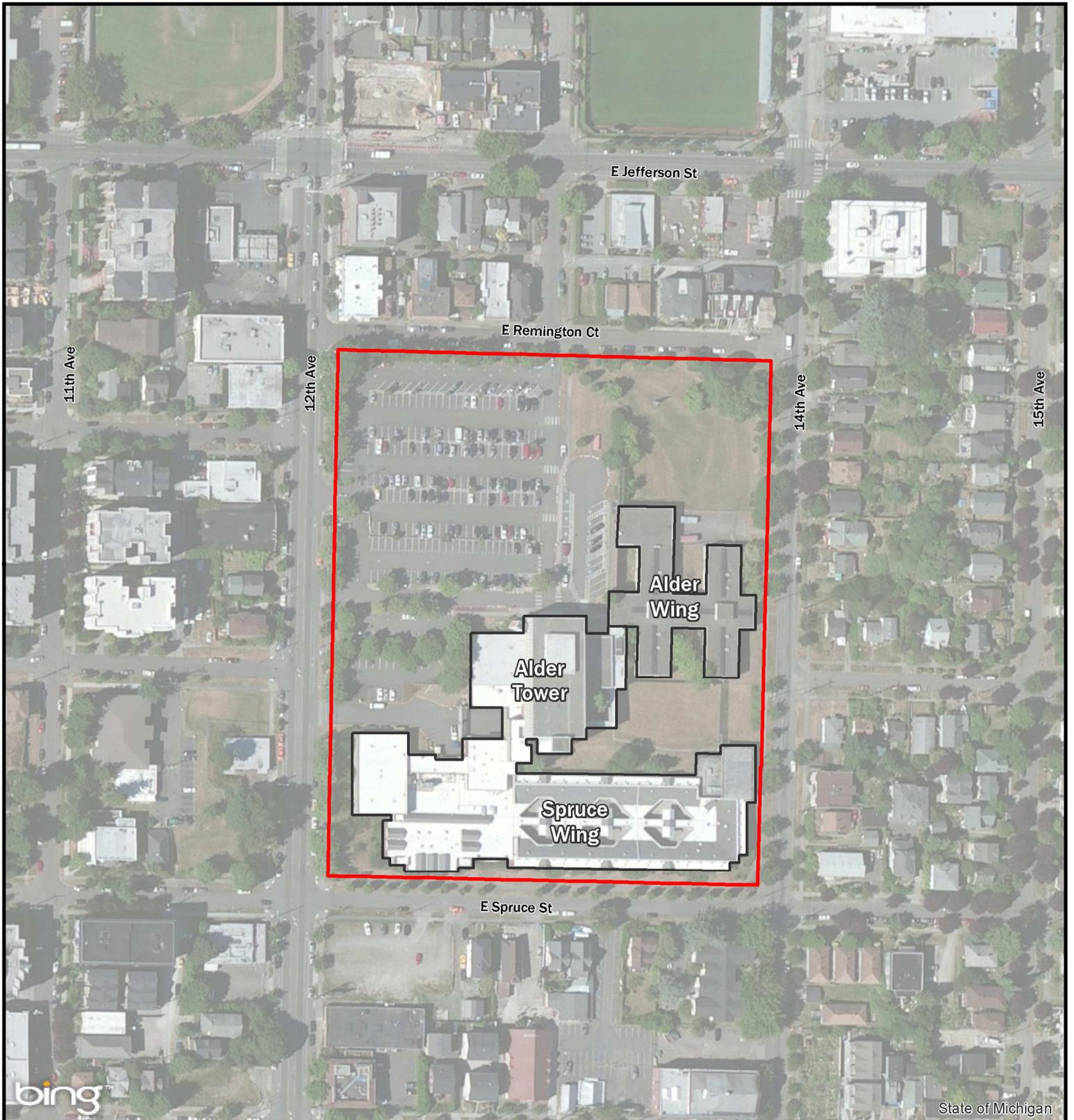
µg/L - micrograms per liter

Bold values were detected

Bold and shaded values exceed MTCA cleanup level

ND - Constituent not detected (detection limit)

FIGURES



bing

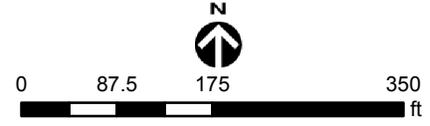
State of Michigan

Legend

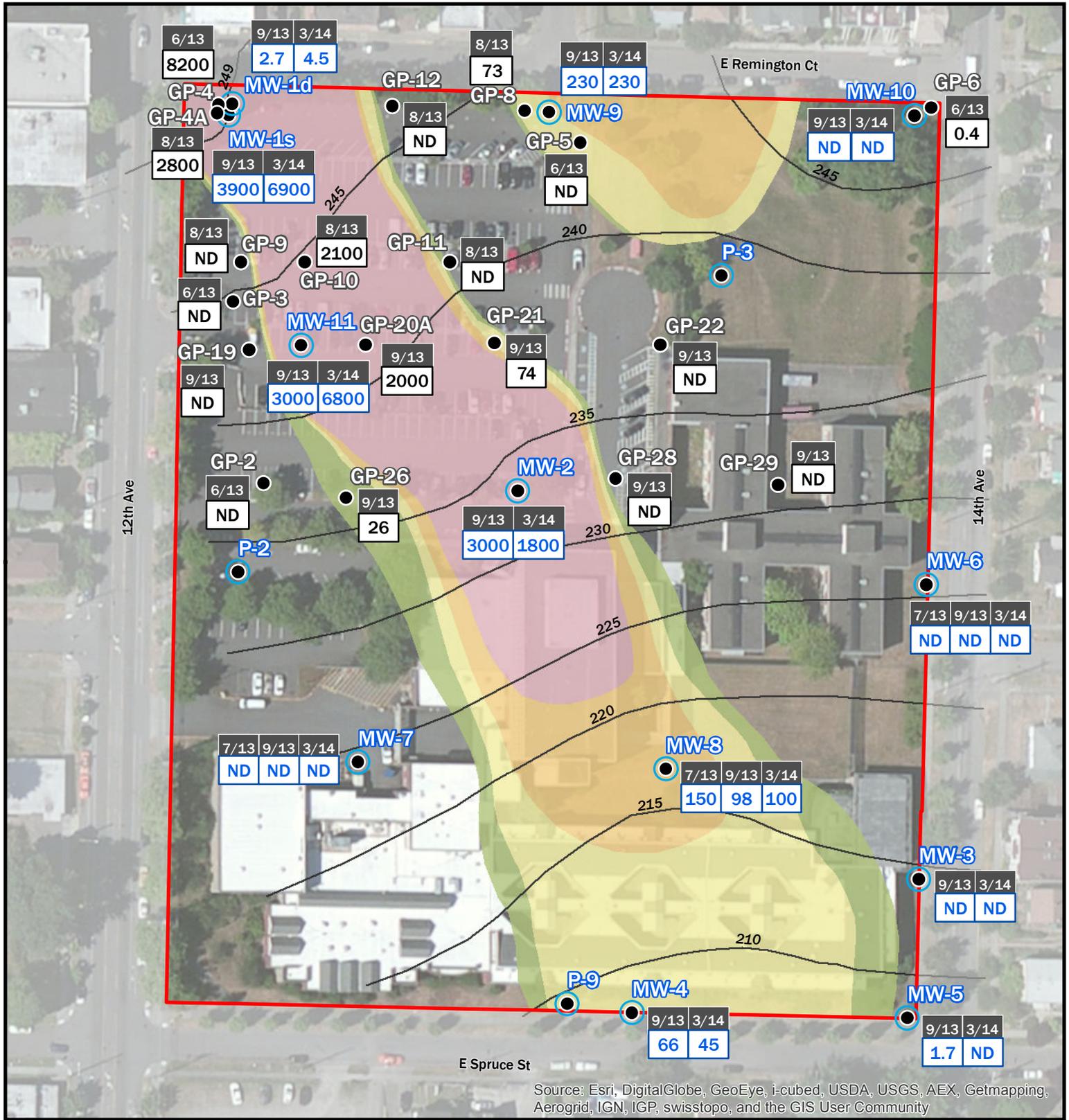
-  Existing building
-  Subject property



Figure 1.
Location Map, Youth Services Center,
Seattle, Washington.



Bing 2011 (Aerial)
 K:\Projects\09-04 193-002\Project\youth_service_center-site.mxd



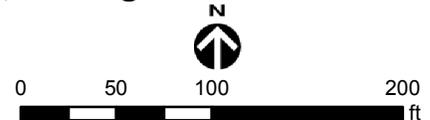
Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Approx. PCE concentration ($\mu\text{g/L}$)
 - < 1
 - 1 - 100
 - 100 - 1,000
 - > 1,000
- Monitoring well/piezometer location
- Probe location
- mm/yy
PCE concentration and sampling date
- Estimated groundwater elevation contour (5-ft)
- Subject property

Notes:
 YSC prefix has been removed from probe labels to improve legibility of figure.
 ND: non-detect concentration

Figure 2.
Groundwater Sampling Summary Results
 (as of March 2014), Youth Services Center,
 Seattle, Washington.



ATTACHMENT A

Data Quality Review, Laboratory Analytical Report, Chain of Custody Record

Data Quality Assurance Review Summary

A data quality assurance review was performed on all analytical data from groundwater samples collected on March 26 and 27 at Youth Services Center in Seattle, Washington. The laboratory's performance was reviewed in accordance with quality control specifications outlined by the analytical methods and the US Environmental Protection Agency (USEPA) functional guidelines for organic data review (USEPA 2008) and with laboratory quality control limits.

Twelve water samples were collected for chemical analysis from monitoring wells MW-1s, MW-1d, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11. OnSite Environmental Inc. of Redmond, Washington, analyzed all water samples for halogenated volatile organic compounds (HVOCs) using USEPA Method 8260C (USEPA 2006).

Quality control data submitted by the laboratory were reviewed; raw laboratory data were not provided or reviewed. Review of the laboratory report and data validation results is summarized below.

Water HVOC Analytical Results

The water HVOC results were determined to be acceptable for use and no data were qualified, based on the following criteria:

- **Holding Times**—All water samples were preserved with hydrochloric acid and analyzed within the maximum holding time (14 days) for USEPA Method 8260B.
- **Laboratory Reporting Limits**—The laboratory reporting (practical quantitation) limits for HVOC constituents in water were below regulatory criteria (i.e., WAC 173-340) for samples collected from wells MW-1d, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-12. The elevated detection of tetrachloroethylene required sample dilution in samples collected from wells MW-1s, MW-2, MW-8, MW-9, and MW-11, raising the practical quantitation limit for vinyl chloride, methylene chloride, and trichloroethylene above regulatory criteria.
- **Blank Analysis**—Two method blanks were analyzed with the water samples. The method blanks contained no reportable levels of HVOC constituents above practical quantitation limits, and no data have been qualified. No field blanks were collected.
- **Surrogate Analysis**—Three surrogate compounds were analyzed with the project samples and method blanks in accordance with the USEPA Method 8260C. As shown in Table A1, surrogate recovery values for each compound were within the respective laboratory control limit ranges.
- **Spike Blank Analysis**—Two spike blank/spike blank duplicate (SB/SBD) samples were analyzed with the project samples. Spike levels were 10 times the laboratory reporting (practical quantitation) limits. Percent recovery and RPD results were correctly calculated. As shown in Table A2, percent recovery and RPD values for the five HVOC targeted constituents were within their respective laboratory control limit ranges.

Table A1. Water HVOC Surrogate Recovery Results.			
Compound	Project Water Samples Percent Recovery	Method Blanks Percent Recovery	Laboratory QC Limits—Water
Dibromofluoromethane	93-103	99-102	62-122
Toluene-d8	94-101	99-100	70-120
4-Bromofluorobenzene	86-96	93-95	71-120

Table A2. Water HVOC Spike Blank Results.					
Compound	SB Percent Recovery	SBD Percent Recovery	Laboratory Percent Recovery Limits	SB/SBD RPD Results	Laboratory RPD QC Limits
1,1-Dichloroethene	100-103	96-100	63-142	3-4	0-17
Benzene	97-101	97-100	78-125	0-1	0-15
Trichloroethene	93-97	92-95	80-125	2	0-15
Toluene	96-99	94-98	80-125	2	0-15
Chlorobenzene	103-106	101-104	80-140	2	0-15

References

Ecology. 2011. Cleanup Levels and Risk Calculations (CLARC) under the Model Toxics Control Act Cleanup Regulation. Washington State Department of Ecology, Toxics Cleanup Program. Publication no. 94-145. Amended April 2011.

USEPA. 2006. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846 Third Edition, Updates I, II, IIA, IIB, IIIA, IIIB, IVA, and IVB. Office of Solid Waste and Emergency Response, US Environmental Protection Agency, Washington, D.C. February 2006.

USEPA. 2008. USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review. EPA 540-R-08-01. OSWER 9240.1-48. Office of Superfund Remediation and Technology Innovation (OSRTI), US Environmental Protection Agency, Washington, D.C. June 2008.



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 2, 2014

Peter Jowise
Herrera Environmental Consultants, Inc.
2200 6th Avenue, Suite 1100
Seattle, WA 98121

Re: Analytical Data for Project 09-04193-017
Laboratory Reference No. 1403-207

Dear Peter:

Enclosed are the analytical results and associated quality control data for samples submitted on March 27, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: April 2, 2014
Samples Submitted: March 27, 2014
Laboratory Reference: 1403-207
Project: 09-04193-017

Case Narrative

Samples were collected on March 26 and 27, 2014 and received by the laboratory on March 27, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1S					
Laboratory ID:	03-207-01					
Dichlorodifluoromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	150	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	120	30	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	61	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	270	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1S					
Laboratory ID:	03-207-01					
1,1,2-Trichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	6900	50	EPA 8260C	4-2-14	4-2-14	
1,3-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	150	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	30	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	150	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	42	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1D					
Laboratory ID:	03-207-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-1D					
Laboratory ID:	03-207-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	4.5	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2					
Laboratory ID:	03-207-03					
Dichlorodifluoromethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	50	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	10	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	50	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	10	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	50	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	50	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	10	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	10	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	10	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	10	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	90	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-2					
Laboratory ID:	03-207-03					
1,1,2-Trichloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	1800	10	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	10	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	50	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	10	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	10	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	50	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	10	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	10	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	14	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3					
Laboratory ID:	03-207-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-3					
Laboratory ID:	03-207-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4					
Laboratory ID:	03-207-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	1.7	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-4					
Laboratory ID:	03-207-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	45	1.0	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5					
Laboratory ID:	03-207-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5					
Laboratory ID:	03-207-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6					
Laboratory ID:	03-207-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-6					
Laboratory ID:	03-207-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7					
Laboratory ID:	03-207-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-7					
Laboratory ID:	03-207-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8					
Laboratory ID:	03-207-09					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	5.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	2.0	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	9.0	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-8					
Laboratory ID:	03-207-09					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	100	1.0	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	1.4	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9					
Laboratory ID:	03-207-10					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	5.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	14	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	9.0	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-9					
Laboratory ID:	03-207-10					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	230	1.0	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	5.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	1.4	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10					
Laboratory ID:	03-207-11					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10					
Laboratory ID:	03-207-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11					
Laboratory ID:	03-207-12					
Dichlorodifluoromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	150	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	150	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	270	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	30	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

HALOGENATED VOLATILES EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-11					
Laboratory ID:	03-207-12					
1,1,2-Trichloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	6800	30	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	150	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	30	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	30	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	150	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	30	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	30	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	42	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0401W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloromethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Iodomethane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-1-14	4-1-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chloroform	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Trichloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromomethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chloroethyl Vinyl Ether	ND	1.8	EPA 8260C	4-1-14	4-1-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-1-14	4-1-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0401W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Bromoform	ND	1.0	EPA 8260C	4-1-14	4-1-14	
Bromobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-1-14	4-1-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-1-14	4-1-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-1-14	4-1-14	
1,2,3-Trichlorobenzene	ND	0.28	EPA 8260C	4-1-14	4-1-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0402W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Chloromethane	ND	1.0	EPA 8260C	4-2-14	4-2-14	
Vinyl Chloride	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Bromomethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Chloroethane	ND	1.0	EPA 8260C	4-2-14	4-2-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Iodomethane	ND	1.0	EPA 8260C	4-2-14	4-2-14	
Methylene Chloride	ND	1.0	EPA 8260C	4-2-14	4-2-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Bromochloromethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Chloroform	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Trichloroethene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Dibromomethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Bromodichloromethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
2-Chloroethyl Vinyl Ether	ND	2.2	EPA 8260C	4-2-14	4-2-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	4-2-14	4-2-14	

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0402W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Tetrachloroethene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Dibromochloromethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Chlorobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Bromoform	ND	1.0	EPA 8260C	4-2-14	4-2-14	
Bromobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	4-2-14	4-2-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	4-2-14	4-2-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	4-2-14	4-2-14	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	4-2-14	4-2-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-120</i>				

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0401W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.0	9.62	10.0	10.0	100	96	63-142	4	17	
Benzene	9.68	9.68	10.0	10.0	97	97	78-125	0	15	
Trichloroethene	9.32	9.15	10.0	10.0	93	92	80-125	2	15	
Toluene	9.58	9.38	10.0	10.0	96	94	80-125	2	15	
Chlorobenzene	10.3	10.1	10.0	10.0	103	101	80-140	2	15	
<i>Surrogate:</i>										
Dibromofluoromethane					95	99	62-122			
Toluene-d8					96	97	70-120			
4-Bromofluorobenzene					91	94	71-120			

Date of Report: April 2, 2014
 Samples Submitted: March 27, 2014
 Laboratory Reference: 1403-207
 Project: 09-04193-017

**HALOGENATED VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0402W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.3	10.0	10.0	10.0	103	100	63-142	3	17	
Benzene	10.1	10.0	10.0	10.0	101	100	78-125	1	15	
Trichloroethene	9.67	9.48	10.0	10.0	97	95	80-125	2	15	
Toluene	9.90	9.75	10.0	10.0	99	98	80-125	2	15	
Chlorobenzene	10.6	10.4	10.0	10.0	106	104	80-140	2	15	
<i>Surrogate:</i>										
Dibromofluoromethane					97	100	62-122			
Toluene-d8					98	99	70-120			
4-Bromofluorobenzene					92	95	71-120			



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Laboratory Number: 03-207

Company: Herera Environmental
 Project Number: 09-04193-017/
 Project Name: YSC
 Project Manager: Peter Towise
 Sampled by: Bruce Carpenter

Turnaround Request (in working days)

(Check One)

Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days) (TPH analysis 5 Days)
 _____ (other)

Number of Containers

Date Sampled	Time Sampled	Matrix
3/26/14	1553	W
	1456	
	1050	
	1751	
	1515	
	1615	
3/27/14	1056	
	1218	
3/26/14	1355	
	1737	

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	NWTPH-HCID	NWTPH-GX/BTEX	NWTPH-GX	NWTPH-DX	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTC A Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	MW-15	3/26/14	1553	W																		
2	MW-1D		1456																			
3	MW-2		1050																			
4	MW-3		1751																			
5	MW-4		1515																			
6	MW-5		1615																			
7	MW-6	3/27/14	1056																			
8	MW-7		1218																			
9	MW-8	3/26/14	1355																			
10	MW-9		1737																			

Signature	Company	Date	Time	Comments/Special Instructions
	Herera Environmental	3/27/14	1400	Sent via carrier
	O8E	3/27/14	1800	
Relinquished				
Received				
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date				Chromatograms with final report <input type="checkbox"/>

