

MEMO

To:

MDEQ Southeast MI District Office
Attn: Mr. Greg Barrows
2770 Donald Court
Warren, MI 48092-2793

Copies:

Mr. Dave Favero (RACER)

Arcadis of Michigan, LLC

28550 Cabot Drive

Suite 500

Novi

Michigan 48377

Tel 248 994 2240

Fax 248 994 2241

From:

Brad Saunders

Date:

October 24, 2017

Arcadis Project No.:

B0064486.2017.00003

Subject:

Off-Site / Mill Street Groundwater Monitoring Event
RACER Trust Pontiac Employee Development Center (EDC) Site
Facility ID 6300600
65 East University, Pontiac, Oakland County, MI

The purpose of this memorandum is to report the results of a groundwater monitoring event conducted on September 27, 2017 encompassing the five remaining monitoring wells located off-site west of the RACER Trust Pontiac Employee Development Center (EDC) site (refer to **Figure 1** for Site Location Map). RACER achieved restricted No Further Action (NFA) for the site from MDEQ in December 2016 and sold the site to George W. Auch Company in February 2017, but the NFA did not include impacted property located west of the site. Three of the remaining monitoring wells are located in the City of Pontiac's Mill Street, while the other two monitoring wells are located on off-site properties immediately west of Mill Street. A prior groundwater monitoring event was conducted on March 29, 2017.

On September 27, 2017, ARCADIS conducted a gauging event and collected groundwater samples from monitoring wells MW-19, MW-20, MW-25, MW-26, and MW-27. Sampling methods and techniques were identical to those used for past groundwater sampling events. The analytical parameter list was limited to analysis of volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260, consistent with the most recent monitoring events as based on past results and constituents of concern. Samples were submitted to Merit Laboratories for analysis. Locations of the monitoring wells sampled are shown within the red-bordered area identified as "Not Included in the NFA" on the attached Site Map (refer to **Figure 2**).

The groundwater elevations for the remaining five monitoring wells are shown on **Table 1**. The groundwater gauging data from September 2017 indicated groundwater levels at the low end the range of those levels realized in past sampling events, which was in contrast to high levels realized in the March 2017 event. Groundwater flow direction in the vicinity of the Mill St. and two other off-site wells as

determined from previous site investigations indicated radial flow from the southwest portion of former Pontiac EDC site to the west. Groundwater analytical results (refer to **Table 2**) from the September 2017 indicated continued stable to decreasing concentrations of contaminants in the two monitoring wells where contaminants were previously detected, with no detection of contaminants in the other three monitoring wells. The following is a summary of the groundwater analytical results from the September 2017 event:

- MW-26: Benzene was detected in MW-26 (centrally located Mill St. well) at 197 micrograms per liter (ug/L), down from 517 ug/L detected in the March 2017 groundwater sampling event. The concentration of benzene in MW-26 continues to exceed its Part 201 NRDW Criteria of 5 ug/L, but is now slightly below its 200 ug/L GSI Criteria. The concentration of benzene has steadily decreased from a high of 3,360 ug/l detected in January 2013 following 2012 impacted soil excavation activities at the adjacent Pontiac EDC site. Vinyl chloride was not detected in MW-26 in the September 2017 sampling event at concentrations exceeding its 5 ug/L laboratory method detection limit. Vinyl chloride had been previously detected at 8 ug/L in the March 2017 groundwater sampling event, but was not detected at elevated laboratory method detection limits prior to that event. Other contaminants continue to remain below detection limits at MW-26.
- MW-27: Trichloroethylene (TCE) was detected in MW-27 (southern-most Mill St. well) at 3 ug/L. The concentration of TCE at MW-27 is slightly higher than 2 ug/L detected in the March 2017 groundwater sampling event, but remains below its respective Part 201 Criteria. The concentrations of TCE has declined from a high 6 of ug/L during the September 2013 groundwater monitoring event, and has not exceeded criteria since that event.
- Concentrations of target VOCs remain below Part 201 Generic Cleanup Criteria and laboratory method detection limits in MW-19 (off-site property west of Mill St.), MW-20 (off-site property west of Mill St.), and MW-25 (northern-most Mill St. well).

Trend graphs (refer to **Figures 3A and 3B**) showing analytical history of benzene in monitoring well MW-27 and TCE are also included as attachments to this memorandum. The Laboratory Analytical Report is also included as **Appendix A**.

Based on the results of groundwater monitoring activities and current conditions in the vicinity of the at the Site, ARCADIS proposes the following activities:

- Continue to monitor contaminant concentrations in the Mill Street monitoring wells and pursue MDEQ regulatory closure of the identified impacted area within Mill Street through a Public Highway Institutional Control with City of Pontiac.

Attachments

- 1 Table 1 Groundwater Level and Elevation Data
- 2 Table 2 Groundwater Analytical Data
- 3 Figure 1 Site Location Map
- 4 Figure 2 Site Map
- 5 Figures 3A & 3B MW-26 and MW-27 Trend Graphs
- 6 Appendix A Laboratory Analytical Report

TABLES



Table 1
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation (feet) ¹	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet) ¹
MW-19 (3-13')	917.38	12/2/2010	NP	4.21	NP	913.17
	917.38	1/28/2013	NP	5.63	NP	911.75
	917.38	6/24/2013	NP	4.87	NP	912.51
	917.38	9/17/2013	NP	6.02	NP	911.36
	917.38	5/21/2014	NP	4.29	NP	913.09
	917.38	10/27/2014	NP	5.67	NP	911.71
	917.38	4/15/2015	NP	5.98	NP	911.40
	917.38	3/29/2017	NP	5.45	NP	911.93
MW-20 (3-13')	917.38	9/27/2017	NP	6.85	NP	910.53
	917.44	12/2/2010	NP	7.15	NP	910.29
	917.44	1/28/2013	NP	7.05	NP	910.39
	917.44	6/24/2013	NP	6.67	NP	910.77
	917.44	9/17/2013	NP	7.51	NP	909.93
	917.44	5/21/2014	NP	6.24	NP	911.20
	917.44	10/27/2014	NP	6.72	NP	910.72
	917.44	4/15/2015	NP	6.87	NP	910.57
MW-25 (4-14')	917.44	3/29/2017	NP	6.11	NP	911.33
	917.44	9/27/2017	NP	8.71	NP	908.73
	915.68	1/28/2013	NP	5.25	NP	910.43
	915.68	6/24/2013	NP	4.71	NP	910.97
	915.68	9/17/2013	NP	5.91	NP	909.77
	915.68	5/21/2014	NP	4.11	NP	911.57
	915.68	10/27/2014	NP	4.91	NP	910.77
	915.68	4/15/2015	NP	5.30	NP	910.38
MW-26 (3-13')	915.68	3/29/2017	NP	4.12	NP	911.56
	915.68	9/27/2017	NP	6.72	NP	908.96
	916.67	1/28/2013	NP	3.49	NP	913.18
	916.67	6/24/2013	NP	3.43	NP	913.24
	916.67	9/17/2013	NP	3.64	NP	913.03
	916.67	5/21/2014	NP	3.40	NP	913.27
	916.67	10/27/2014	NP	3.19	NP	913.48
	916.67	4/15/2015	NP	4.46	NP	912.21
MW-27 (6.5-16.5')	916.67	3/29/2017	NP	2.48	NP	914.19
	916.67	9/27/2017	NP	4.42	NP	912.25
	916.75	1/28/2013	NP	8.11	NP	908.64
	916.75	6/24/2013	NP	6.83	NP	909.92
	916.75	9/17/2013	NP	6.67	NP	910.08
	916.75	5/21/2014	NP	6.79	NP	909.96
	916.75	10/27/2014	NP	8.00	NP	908.75
	916.75	4/15/2015	NP	8.47	NP	908.28
	916.75	3/29/2017	NP	7.24	NP	909.51
	916.75	9/27/2017	NP	9.06	NP	907.69

General Notes:

1. Elevations are based on feet above the North American Vertical Datum of 1988 (NAVD88).
2. Coordinates are on the Michigan State Plane Coordinate System.
3. Elevations and coordinates were determined during surveys completed on December 11, 2006, February 12, 2008, November 1, 2010, January 30, 2013 and October 24, 2014.

Acronyms and Abbreviations:

NP = No product

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
		Non-Residential Drinking Water Protection Criteria	Ground Water Surface Water Interface Criteria	Vapor Intrusion Ground Water Screening Level	Flammability and Explosivity Screening Level	Off-Site, West of Pontiac EDC Site and Mill St. 12/2/2010 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 1/30/2013 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 6/27/2013 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 9/19/2013 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 5/23/2014 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 3/29/2017 3-13'	Off-Site, West of Pontiac EDC Site and Mill St. 9/27/2017 3-13'
Date Collected:												
Screened Interval (ft bgl):												
Analytical Parameter	Units											
VOCs (EPA Method 8260)												
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
		Non-Residential Drinking Water Protection Criteria	Ground Water Surface Water Interface Criteria	Vapor Intrusion Ground Water Screening Level	Flammability and Explosivity Screening Level	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.	Off-Site, West of Pontiac EDC Site and Mill St.
Date Collected:						12/2/2010	1/30/2013	6/27/2013	9/20/2013	5/22/2014	10/27/2014	4/15/2015	3/29/2017	9/27/2017
Screened Interval (ft bgl):						3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'
Analytical Parameter	Units													
VOCs (EPA Method 8260)														
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-25	MW-25	MW-25	MW-25	MW-25	MW-25	MW-25	MW-25
Date Collected:		Non-Residential Drinking Water Protection Criteria	Ground Water Surface Water Interface Criteria	Vapor Intrusion Ground Water Screening Level	Flammability and Explosivity Screening Level	Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	Off-Site, City of Pontiac Mill Street (Northern)	Off-Site, City of Pontiac Mill Street (Northern)	Off-Site, City of Pontiac Mill Street (Northern)	Off-Site, City of Pontiac Mill Street (Northern)	Off-Site, City of Pontiac Mill Street (Northern)	Off-Site, City of Pontiac Mill Street (Northern)
Screened Interval (ft bgl):						1/30/2013	6/24/2013	9/19/2013	5/22/2014	10/28/2014	4/15/2015	3/29/2017	9/27/2017
						4-14'	4-14'	4-14'	4-14'	4-14'	4-14'	4-14'	4-14'
Analytical Parameter	Units												
VOCs (EPA Method 8260)													
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-26	MW-26	MW-26	MW-26		MW-26		MW-26		MW-26		MW-26	
		Non-Residential Drinking Water Protection Criteria	Ground Water Surface Water Interface Criteria	Vapor Intrusion Ground Water Screening Level	Flammability and Explosivity Screening Level	Off-Site, City of Pontiac Mill Street (Central)	Off-Site, City of Pontiac Mill Street (Central)	Off-Site, City of Pontiac Mill Street (Central)	Off-Site, City of Pontiac Mill Street (Central)		Off-Site, City of Pontiac Mill Street (Central)		Off-Site, City of Pontiac Mill Street (Central)		Off-Site, City of Pontiac Mill Street (Central)		Off-Site, City of Pontiac Mill Street (Central)	
Date Collected:						1/30/2013	6/24/2013	9/19/2013	5/23/2014		10/27/2014		4/15/2015		3/29/2017		9/27/2017	
Screened Interval (ft bgl):						3-13'	3-13'	3-13'	3-13'		3-13'		3-13'		3-13'		3-13'	
Analytical Parameter	Units																	
VOCs (EPA Method 8260)																		
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	3,360	3,020	2,600	2,450	2,530	2,870	3,200	1,920	1,490	517	512	197	191
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<50	<50	<100	<50	<50	<50	<50	<50	<50	<5	<5	<5	<5
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<50	<50	<100	<50	<50	<50	<50	<50	<50	8	8	<5	<5
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27
Date Collected:		Non-Residential Drinking Water Protection Criteria	Ground Water Surface Water Interface Criteria	Vapor Intrusion Ground Water Screening Level	Flammability and Explosivity Screening Level	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)	Off-Site, City of Pontiac Mill Street (Southern)
Screened Interval (ft bgl):						1/30/2013	6/24/2013	9/19/2013	5/23/2014	10/27/2014	4/15/2015	3/29/2017	9/27/2017
						6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'
Analytical Parameter	Units												
VOCs (EPA Method 8260)													
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	4	6	4	5	3	2	3
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND

See Notes on last page.

Table 2
Groundwater Analytical Data
RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

General Notes:

1. Cleanup criteria exceedances are bolded.
2. < denotes less than noted detection limit.
3. Cleanup Criteria: Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013).

Footnote:

** Analyzed via USEPA Method 8260B

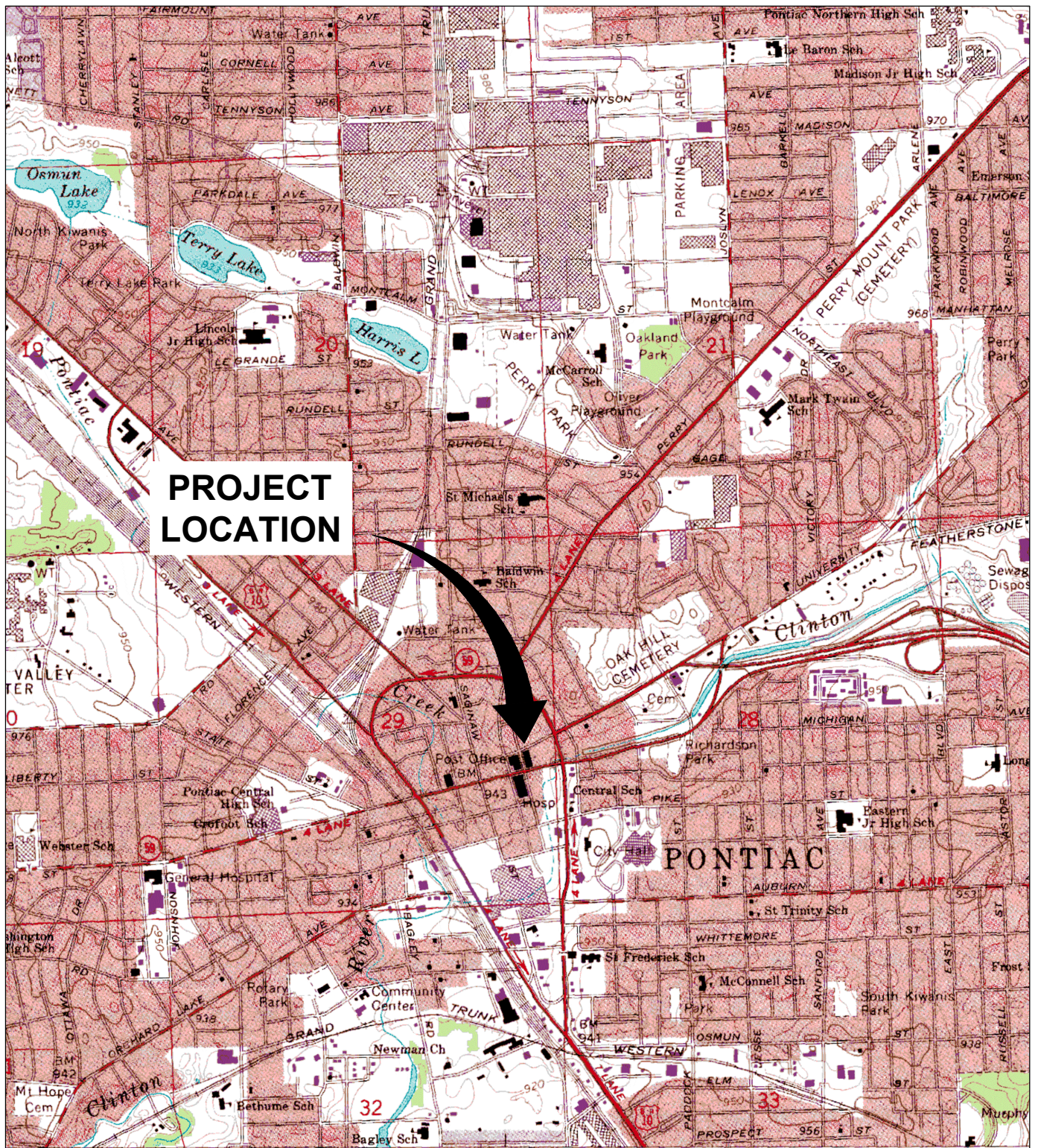
Acronyms and Abbreviations:

- ID Insufficient data to develop criterion
- ND Not detected
- (A) Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
- (X) The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. see formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure.

FIGURES



CITY: (Read) DIV: (Group) (Read) DE: (Read) LD: (Opt) PG: (Opt) PM: (Read) TM: (Opt) LYR: (Opt) ON: OFF: REF: G:\ENV\CAD\STRA\USE\ACT\1506446201\100003\DWG\6446801.dwg LAYOUT: 1 SAVED: 3/16/2016 2:36 PM ACADVER: 19.1S (LMS TECH) PAGES: 19 OF 19 PLOTTED: 3/16/2016 2:39 PM BY: HOWES, DAVID



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., PONTIAC NORTH, MICH, 1968, PHOTOREVISED 1983.



RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE LOCATION MAP



FIGURE

1

Figure 3A
Groundwater Analytical Trend Graph for Benzene

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

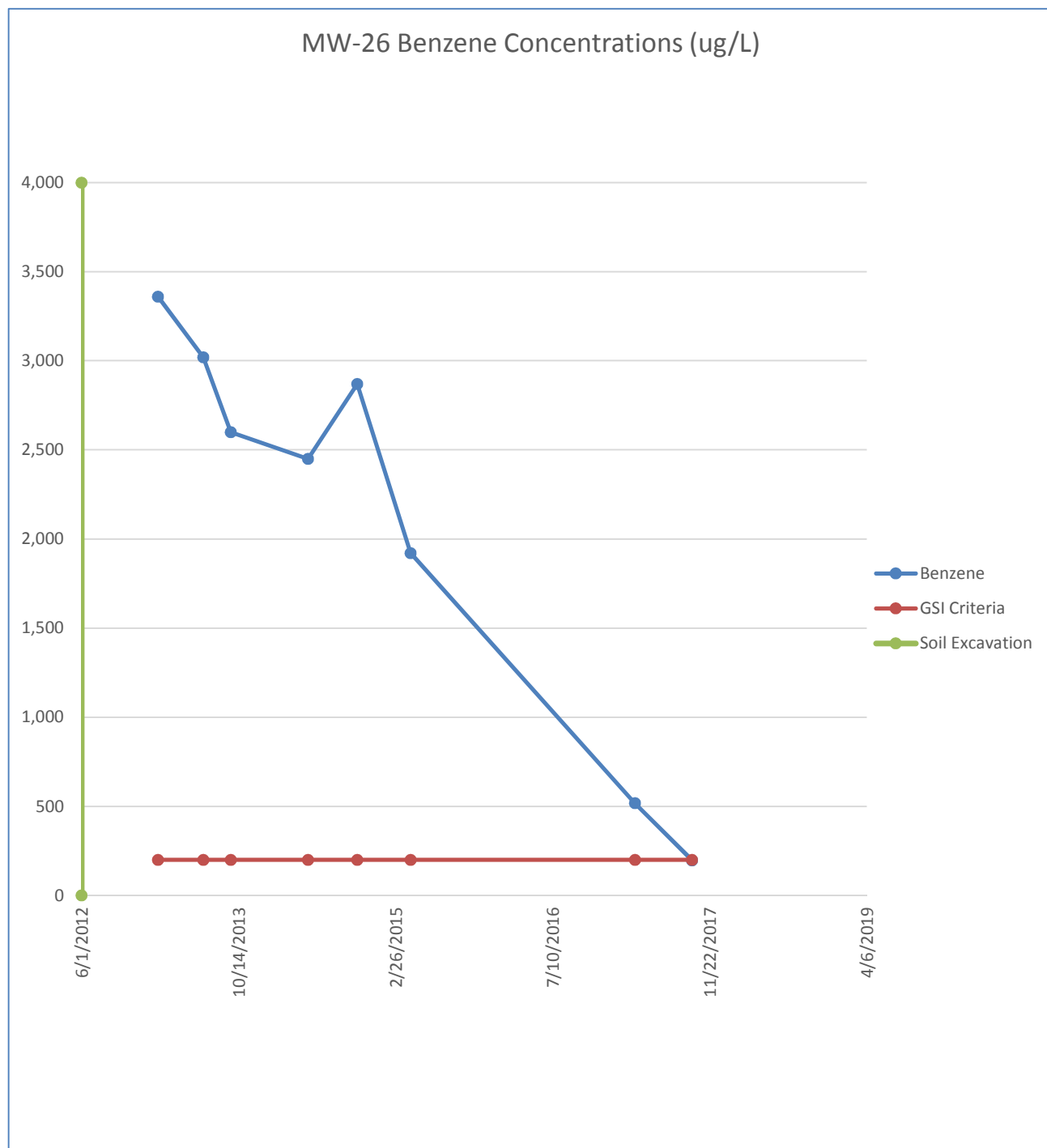
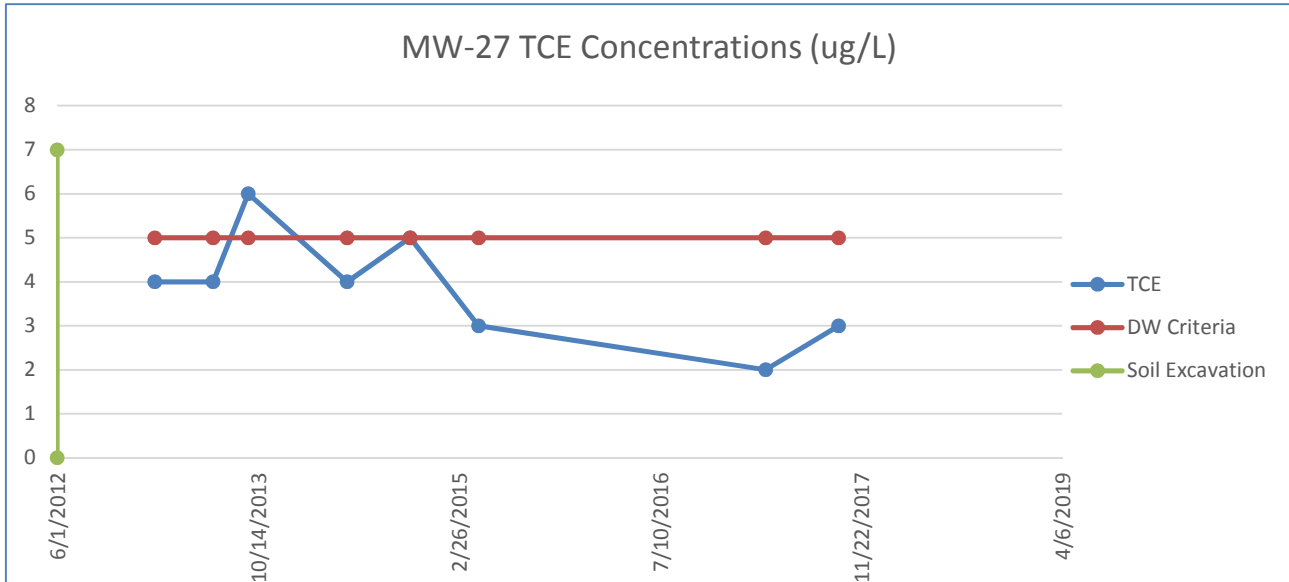


Figure 3B
Groundwater Analytical Trend Graph for TCE

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342







Analytical Laboratory Report

Report ID: S84046.01(01)
Generated on 10/03/2017

Report to

Attention: Brad Saunders
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1904 FAX: 248-994-2241
Email: brad.saunders@arcadis.com

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S84046.01-S84046.08
Project: B0064486.2017.00003 / RACER 64486
Collected Date: 09/27/2017
Submitted Date/Time: 09/28/2017 13:30
Sampled by: Chelsea Augustine
P.O. #: B0064486.2017.00003

Table of Contents

Cover Page (Page 1)
General Report Notes (Page 2)
Report Narrative (Page 2)
Laboratory Certifications (Page 3)
Qualifier Descriptions (Page 3)
Glossary of Abbreviations (Page 3)
Method Summary (Page 4)
Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.
Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods



Analytical Laboratory Report

Method Summary

Method	Version
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003



Analytical Laboratory Report

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S84046.01	Trip Blank	Water	09/27/17 00:01
S84046.02	MW-20(09272017)	Groundwater	09/27/17 09:55
S84046.03	MW-25(09272017)	Groundwater	09/27/17 11:20
S84046.04	MW-26(09272017)	Groundwater	09/27/17 12:45
S84046.05	MW-27(09272017)	Groundwater	09/27/17 13:45
S84046.06	MW-19(09272017)	Groundwater	09/27/17 14:45
S84046.07	Dup-01(09272017)	Groundwater	09/27/17 00:01
S84046.08	Equipment Blank	Water	09/27/17 09:10



Analytical Laboratory Report

Lab Sample ID: S84046.01

Sample Tag: Trip Blank

Collected Date/Time: 09/27/2017 00:01

Matrix: Water

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 15:42	JML		
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:42	JML		
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 15:42	JML		
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 15:42	JML	200,000	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	200	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	700	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 15:42	JML		
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	6,000	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:42	JML		
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:42	JML		
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	500	
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	500	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	500	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	500	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	700	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.01 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 15:42	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:42	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:42	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.02

Sample Tag: MW-20(09272017)

Collected Date/Time: 09/27/2017 09:55

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 21:12	JML		
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:12	JML		
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 21:12	JML		
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 21:12	JML	200,000	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	200	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	700	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 21:12	JML		
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	6,000	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:12	JML		
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:12	JML		
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	500	
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	500	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	500	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	500	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	700	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.02 (continued)

Sample Tag: MW-20(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 21:12	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:12	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:12	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.03

Sample Tag: MW-25(09272017)

Collected Date/Time: 09/27/2017 11:20

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 21:33	JML		
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:33	JML		
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 21:33	JML		
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 21:33	JML	200,000	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	200	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	700	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 21:33	JML		
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	6,000	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:33	JML		
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 21:33	JML		
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	500	
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	500	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	500	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	500	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	700	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.03 (continued)

Sample Tag: MW-25(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 21:33	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 21:33	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 21:33	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.04

Sample Tag: MW-26(09272017)

Collected Date/Time: 09/27/2017 12:45

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech Limits	Flags
----------	---------	-------	----	--------	---------------	-------------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV	
--------------------	----	-----------	--	-----	----------------	-----	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	50	SW5030C/8260C	10/02/17 19:11	JML	Y
Acetone	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:11	JML	Y
Methyl iodide	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Carbon disulfide	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
Acrylonitrile	Not detected	ug/L	10	SW5030C/8260C	10/02/17 19:11	JML	Y
2-Butanone (MEK)	Not detected	ug/L	130	SW5030C/8260C	10/02/17 19:11	JML 200,000	Y
Dichlorodifluoromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
Chloromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
Vinyl chloride	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 200	Y
Bromomethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
Chloroethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
Trichlorofluoromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
1,1-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 700	Y
Methylene chloride	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
trans-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
1,1-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
cis-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Tetrahydrofuran*	Not detected	ug/L	450	SW5030C/8260C	10/02/17 19:11	JML	Y
Chloroform	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 6,000	Y
Bromochloromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
1,1,1-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:11	JML	Y
2-Hexanone	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:11	JML	Y
Carbon tetrachloride	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 500	Y
Benzene	197	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 500	Y
1,2-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 500	Y
Trichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 500	Y
1,2-Dichloropropane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Bromodichloromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Dibromomethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y
cis-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Toluene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
trans-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
1,1,2-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Tetrachloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML 700	Y
trans-1,4-Dichloro-2-butene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	Y
Dibromochloromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S84046.04 (continued)

Sample Tag: MW-26(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dibromoethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Chlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	100,000	Y
1,1,1,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Ethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
p,m-Xylene*	Not detected	ug/L	10	SW5030C/8260C	10/02/17 19:11	JML		Y
o-Xylene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Styrene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Isopropylbenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
Bromoform	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,1,2,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,2,3-Trichloropropane*	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
n-Propylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Bromobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,3,5-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
tert-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,2,4-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
sec-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
p-Isopropyltoluene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
1,3-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,4-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML	7,500	Y
1,2-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
1,2,3-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
n-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:11	JML		Y
Hexachloroethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML	3,000	Y
1,2-Dibromo-3-chloropropane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
1,2,4-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
1,2,3-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
Naphthalene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y
2-Methylnaphthalene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:11	JML		Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S84046.05

Sample Tag: MW-27(09272017)

Collected Date/Time: 09/27/2017 13:45

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 14:52	JML		
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:52	JML		
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 14:52	JML		
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 14:52	JML	200,000	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	200	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	700	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 14:52	JML		
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	6,000	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:52	JML		
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:52	JML		
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	500	
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	500	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	500	
Trichloroethene	3	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	500	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	700	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.05 (continued)

Sample Tag: MW-27(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 14:52	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:52	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:52	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.06

Sample Tag: MW-19(09272017)

Collected Date/Time: 09/27/2017 14:45

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech Limits	Flags
----------	---------	-------	----	--------	---------------	-------------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV	
--------------------	----	-----------	--	-----	----------------	-----	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 15:14	JML	
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:14	JML	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 15:14	JML	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 15:14	JML	200,000
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	200
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	700
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 15:14	JML	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	6,000
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:14	JML	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 15:14	JML	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	500
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	500
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	500
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	500
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	700
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	



Analytical Laboratory Report

Lab Sample ID: S84046.06 (continued)

Sample Tag: MW-19(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 15:14	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 15:14	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 15:14	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.07

Sample Tag: Dup-01(09272017)

Collected Date/Time: 09/27/2017 00:01

Matrix: Groundwater

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	50	SW5030C/8260C	10/02/17 19:32	JML		Y
Acetone	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:32	JML		Y
Methyl iodide	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Carbon disulfide	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Acrylonitrile	Not detected	ug/L	10	SW5030C/8260C	10/02/17 19:32	JML		Y
2-Butanone (MEK)	Not detected	ug/L	130	SW5030C/8260C	10/02/17 19:32	JML	200,000	Y
Dichlorodifluoromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Chloromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Vinyl chloride	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	200	Y
Bromomethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Chloroethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Trichlorofluoromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,1-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	700	Y
Methylene chloride	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
trans-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,1-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
cis-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Tetrahydrofuran*	Not detected	ug/L	450	SW5030C/8260C	10/02/17 19:32	JML		Y
Chloroform	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	6,000	Y
Bromochloromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,1,1-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:32	JML		Y
2-Hexanone	Not detected	ug/L	250	SW5030C/8260C	10/02/17 19:32	JML		Y
Carbon tetrachloride	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	500	Y
Benzene	191	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	500	Y
1,2-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	500	Y
Trichloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	500	Y
1,2-Dichloropropane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Bromodichloromethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Dibromomethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
cis-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Toluene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
trans-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,1,2-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Tetrachloroethene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	700	Y
trans-1,4-Dichloro-2-butene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Dibromochloromethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S84046.07 (continued)

Sample Tag: Dup-01(09272017)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dibromoethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Chlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	100,000	Y
1,1,1,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Ethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
p,m-Xylene*	Not detected	ug/L	10	SW5030C/8260C	10/02/17 19:32	JML		Y
o-Xylene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Styrene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Isopropylbenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Bromoform	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,1,2,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,2,3-Trichloropropane*	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
n-Propylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Bromobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,3,5-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
tert-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,2,4-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
sec-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
p-Isopropyltoluene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
1,3-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,4-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML	7,500	Y
1,2-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
1,2,3-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
n-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	10/02/17 19:32	JML		Y
Hexachloroethane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML	3,000	Y
1,2-Dibromo-3-chloropropane	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
1,2,4-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
1,2,3-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
Naphthalene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y
2-Methylnaphthalene	Not detected	ug/L	30	SW5030C/8260C	10/02/17 19:32	JML		Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S84046.08

Sample Tag: Equipment Blank

Collected Date/Time: 09/27/2017 09:10

Matrix: Water

COC Reference: 107925

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	No	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
----------	---------	-------	----	--------	---------------	------	--------	-------

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	10/02/17 13:30	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	09/29/17 14:32	JML		
Acetone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:32	JML		
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	09/29/17 14:32	JML		
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	09/29/17 14:32	JML	200,000	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	200	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	700	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	09/29/17 14:32	JML		
Chloroform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	6,000	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:32	JML		
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	09/29/17 14:32	JML		
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	500	
Benzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	500	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	500	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	500	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Toluene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	700	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		



Analytical Laboratory Report

Lab Sample ID: S84046.08 (continued)

Sample Tag: Equipment Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	Limits	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	100,000	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	09/29/17 14:32	JML		
o-Xylene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Styrene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Bromoform	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML	7,500	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	09/29/17 14:32	JML		
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML	3,000	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	09/29/17 14:32	JML		

REPORT TO

CONTACT NAME				Brad Saunders			
COMPANY				Arcadis			
ADDRESS				28550 Cabot Drive, Suite 500			
CITY			STATE		ZIP CODE		
Novi			MI		48377		
PHONE NO.		FAX NO.		P.O. NO.			
810-225-1904							
E-MAIL ADDRESS				QUOTE NO.			
brad.saunders@arcadis.com							

CHAIN OF CUSTODY RECORD

CONTACT NAME		☒ SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.		E-MAIL ADDRESS	

INVOICE TO

PROJECT NO./NAME B006486-2017.00003 / RACER 64486	SAMPLER(S) - PLEASE PRINT/SIGN NAME Chelsea Augustine / Chelsea Augustine
--	--

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR W=WASTE

Containers & Preservatives

Certifications

☐ OHIO VAP ☐ Drinking Water☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York☐ Other _____

Special Instructions

[illegible]

RELINQUISHED BY:	<i>Chelsea Augustin / ARCADIS</i>	☒ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION			9-27-17	1606
RECEIVED BY:	<i>ARCADIS Cold Storage</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9-27-17	1606
RELINQUISHED BY:	<i>Chris Sy</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9-28-17	1602
RECEIVED BY:	<i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION			9-28-17	1602

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE		TIME	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE		TIME	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS		5.1	