

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:

May 17, 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 monitoring groundwater in 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.

On March 29, 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 March 2017 indicates levels generally within or at the high end the range of those levels realized in past sampling events. 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 March 2017 indicated continued 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 March 2017 event:

- MW-26: Benzene was detected in MW-26 (centrally located Mill St. well) at 517 micrograms per liter (ug/L), continuing to exceed both the Part 201 NRDW and GSI Criteria for benzene. 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 detected in MW-26 at 8 ug/L, exceeding its part 201 NRDW Criteria. Vinyl chloride was not previously detected in MW-26 at 8 ug/L, but its detection limit during previous sampling events was elevated to 50 ug/L due to required dilutions. Other contaminants continue to remain below detection limits.
- MW-27: Trichloroethylene (TCE) was detected in MW-27 (southern-most Mill St. well) at 2 ug/L, below its respective Part 201 Criteria. Concentrations of TCE have steadily declined from a high 6 of ug/L during the September 2013 groundwater monitoring event, and have 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 available means with City of Pontiac such as an Alternative Institutional Control or Public Highway Institutional Control.

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
MW-20 (3-13')	917.38	3/29/2017	NP	5.45	NP	911.93
	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
MW-25 (4-14')	917.44	4/15/2015	NP	6.87	NP	910.57
	917.44	3/29/2017	NP	6.11	NP	911.33
	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
MW-26 (3-13')	915.68	10/27/2014	NP	4.91	NP	910.77
	915.68	4/15/2015	NP	5.30	NP	910.38
	915.68	3/29/2017	NP	4.12	NP	911.56
	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
MW-27 (6.5-16.5')	916.67	10/27/2014	NP	3.19	NP	913.48
	916.67	4/15/2015	NP	4.46	NP	912.21
	916.67	3/29/2017	NP	2.48	NP	914.19
	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

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
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater 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.
Date Collected:						12/2/2010	1/30/2013	6/27/2013	9/19/2013	5/23/2014	3/29/2017
Screened Interval (ft bgl):						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
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	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
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater 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.
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
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	<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-25	MW-25	MW-25	MW-25	MW-25	MW-25	MW-25
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater 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)
Date Collected:						1/30/2013	6/24/2013	9/19/2013	5/22/2014	10/28/2014	4/15/2015	3/29/2017
Screened Interval (ft bgl):						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
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-26	MW-26	MW-26	MW-26		MW-26		MW-26		MW-26	
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater 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)	
Date Collected:						1/30/2013	6/24/2013	9/19/2013	5/23/2014		10/27/2014		4/15/2015		3/29/2017	
Screened Interval (ft bgl):						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
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<50	<50	<100	<50	<50	<50	<50	<50	<50	<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
Other Target VOCs	ug/L	various	various	various	various	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
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater 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)
Date Collected:						1/30/2013	6/24/2013	9/19/2013	5/23/2014	10/27/2014	4/15/2015	3/29/2017
Screened Interval (ft bgl):						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
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	4	6	4	5	3	2
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

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:

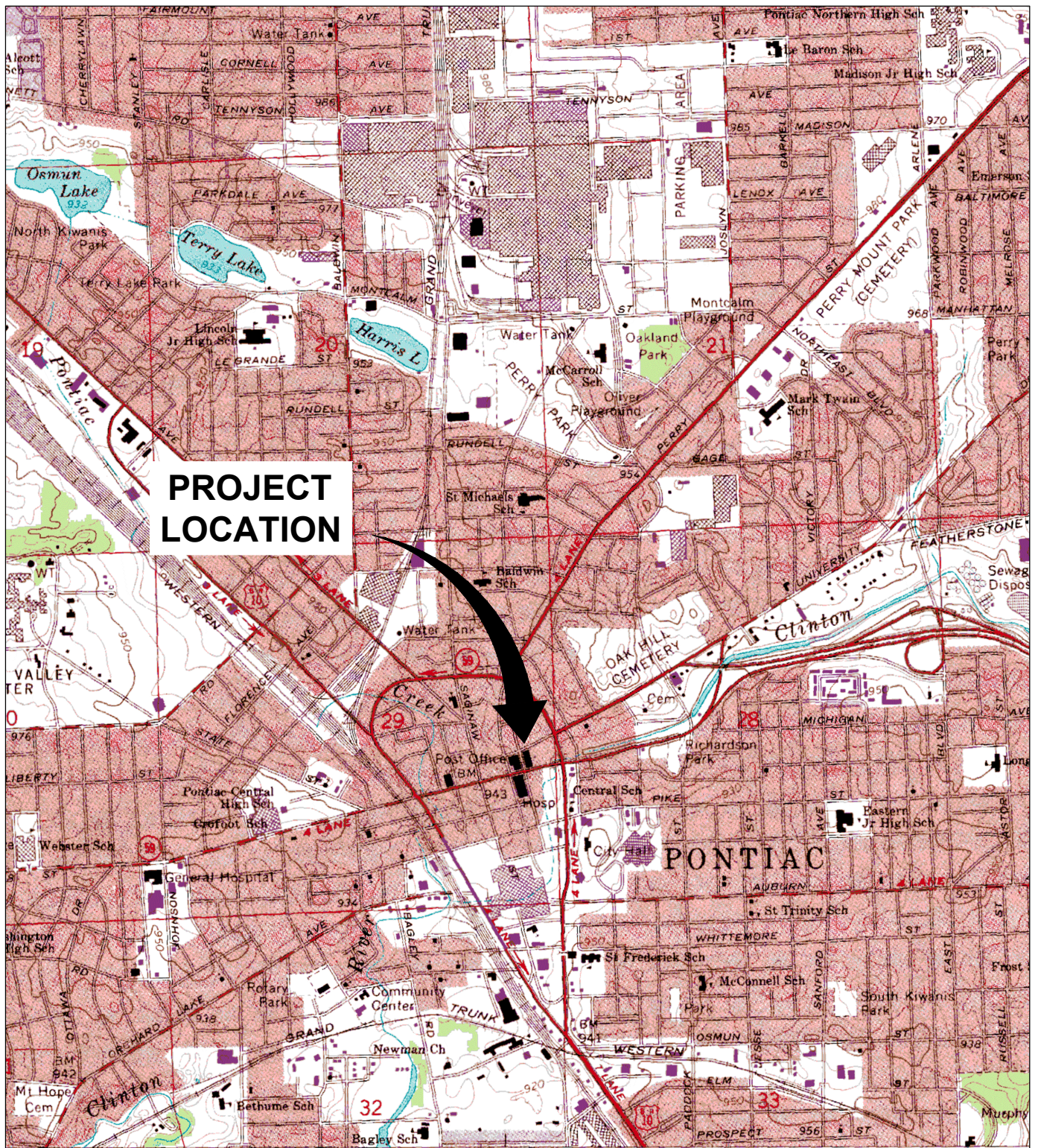
** Analyzed via USEPA Method 8260B

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.



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

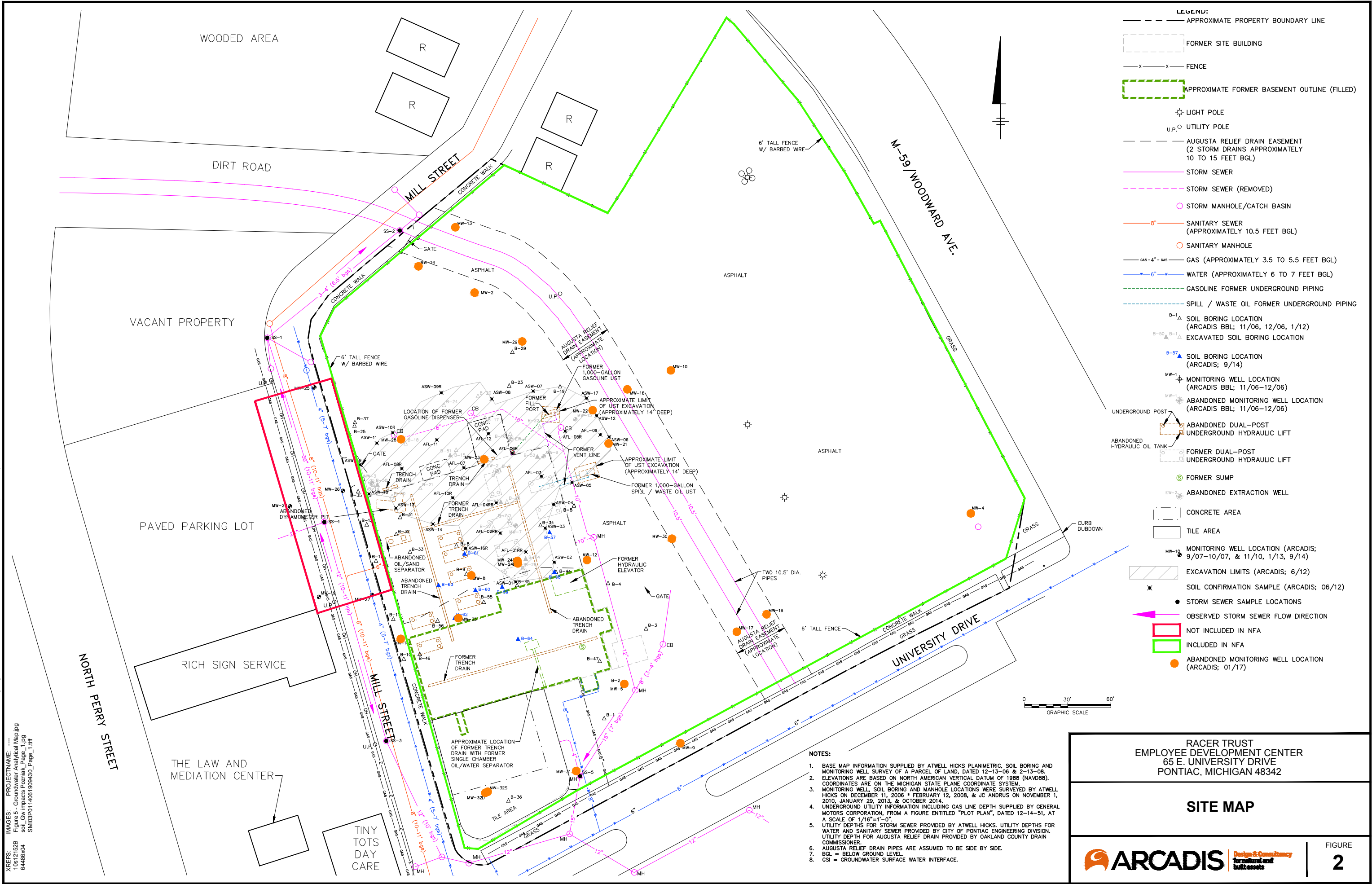


REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., PONTIAC NORTH, MICH, 1968, PHOTOREVISED 1983.



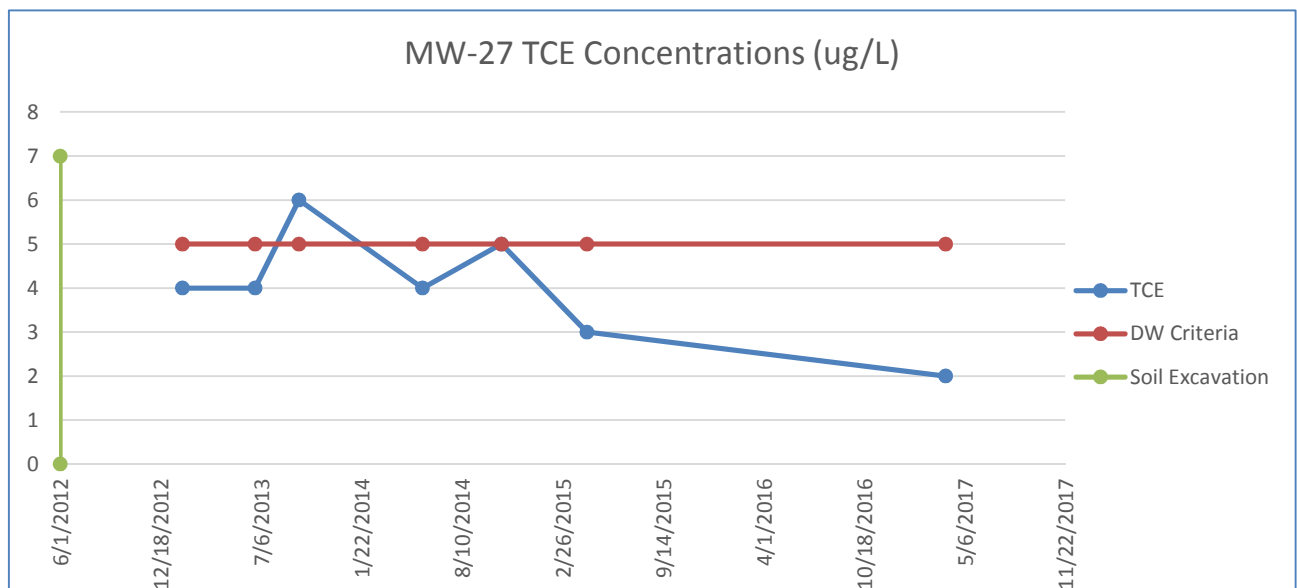
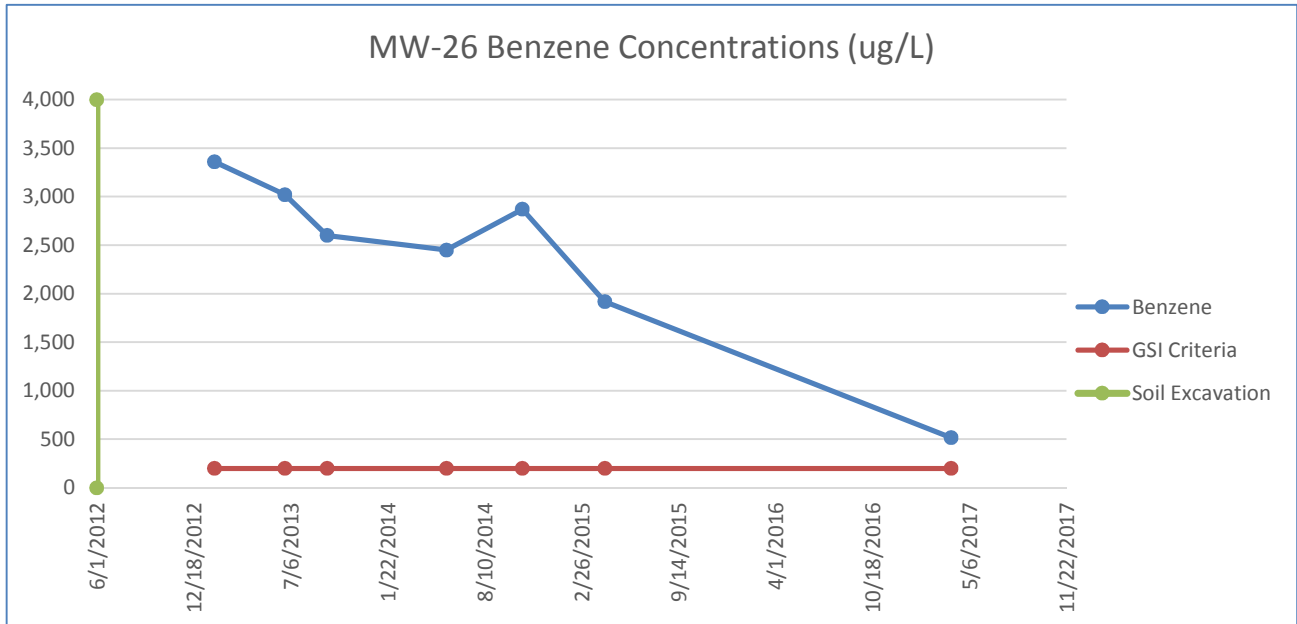
RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE LOCATION MAP



Figures 3A and 3B
Groundwater Analytical Trend Graphs

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







Analytical Laboratory Report

Report ID: S80295.01(01)
Generated on 04/06/2017

Report to

Attention: Ashlee Charters
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 517-974-4441 FAX: 248-994-2241
Email: Ashlee.Charters@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): S80295.01-S80295.07
Project: B0064486.2017.00003 / Racer Pontiac
Collected Date: 03/29/2017
Submitted Date/Time: 03/30/2017 14:30
Sampled by: Donald Richmond
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.

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

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 (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S80295.01	MW-27 (032917)	Groundwater	03/29/17 09:50
S80295.02	MW-26 (032917)	Groundwater	03/29/17 11:15
S80295.03	MW-25 (032917)	Groundwater	03/29/17 13:25
S80295.04	MW-19 (032917)	Groundwater	03/29/17 14:30
S80295.05	MW-20 (032917)	Groundwater	03/29/17 15:45
S80295.06	Trip Blank	Water	03/29/17 00:01
S80295.07	Dup-01	Groundwater	03/29/17 00:01



Analytical Laboratory Report

Lab Sample ID: S80295.01
Sample Tag: MW-27 (032917)
Collected Date/Time: 03/29/2017 09:50
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	04/05/17 04:30	JML	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 04:30	JML	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	04/05/17 04:30	JML	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	04/05/17 04:30	JML	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	75-71-8	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	04/05/17 04:30	JML	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	04/05/17 04:30	JML	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 04:30	JML	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	107-06-2	
Trichloroethene	2	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S80295.01 (continued)

Sample Tag: MW-27 (032917)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	04/05/17 04:30	JML		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 04:30	JML	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 04:30	JML	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S80295.02
Sample Tag: MW-26 (032917)
Collected Date/Time: 03/29/2017 11:15
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	50	SW5030C/8260C	04/05/17 18:34	JML	60-29-7	Y
Acetone	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:34	JML	67-64-1	Y
Methyl iodide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	74-88-4	Y
Carbon disulfide	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	1634-04-4	Y
Acrylonitrile	Not detected	ug/L	10	SW5030C/8260C	04/05/17 18:34	JML	107-13-1	Y
2-Butanone (MEK)	Not detected	ug/L	130	SW5030C/8260C	04/05/17 18:34	JML	78-93-3	Y
Dichlorodifluoromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	75-71-8	Y
Chloromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	74-87-3	Y
Vinyl chloride	8	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-01-4	Y
Bromomethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	74-83-9	Y
Chloroethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	75-00-3	Y
Trichlorofluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-69-4	Y
1,1-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-35-4	Y
Methylene chloride	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	156-60-5	Y
1,1-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	156-59-2	Y
Tetrahydrofuran*	Not detected	ug/L	450	SW5030C/8260C	04/05/17 18:34	JML	109-99-9	Y
Chloroform	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	67-66-3	Y
Bromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	74-97-5	Y
1,1,1-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:34	JML	108-10-1	Y
2-Hexanone	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:34	JML	591-78-6	Y
Carbon tetrachloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	56-23-5	Y
Benzene	517	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	71-43-2	Y
1,2-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	107-06-2	Y
Trichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	79-01-6	Y
1,2-Dichloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	78-87-5	Y
Bromodichloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-27-4	Y
Dibromomethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	10061-01-5	Y
Toluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	79-00-5	Y
Tetrachloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	110-57-6	Y
Dibromochloromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	124-48-1	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S80295.02 (continued)

Sample Tag: MW-26 (032917)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dibromoethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	106-93-4	Y
Chlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	630-20-6	Y
Ethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	100-41-4	Y
p,m-Xylene*	Not detected	ug/L	10	SW5030C/8260C	04/05/17 18:34	JML		Y
o-Xylene*	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	95-47-6	Y
Styrene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	100-42-5	Y
Isopropylbenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	98-82-8	Y
Bromoform	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	79-34-5	Y
1,2,3-Trichloropropane*	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	96-18-4	Y
n-Propylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	103-65-1	Y
Bromobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	108-67-8	Y
tert-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	98-06-6	Y
1,2,4-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	95-63-6	Y
sec-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	135-98-8	Y
p-Isopropyltoluene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	99-87-6	Y
1,3-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	541-73-1	Y
1,4-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	106-46-7	Y
1,2-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	95-50-1	Y
1,2,3-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	526-73-8	Y
n-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:34	JML	104-51-8	Y
Hexachloroethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	87-61-6	Y
Naphthalene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	91-20-3	Y
2-Methylnaphthalene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:34	JML	91-57-6	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S80295.03
Sample Tag: MW-25 (032917)
Collected Date/Time: 03/29/2017 13:25
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	04/05/17 17:30	JML	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:30	JML	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	04/05/17 17:30	JML	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	04/05/17 17:30	JML	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	75-71-8	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	04/05/17 17:30	JML	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:30	JML	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:30	JML	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S80295.03 (continued)

Sample Tag: MW-25 (032917)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	04/05/17 17:30	JML		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:30	JML	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:30	JML	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S80295.04
Sample Tag: MW-19 (032917)
Collected Date/Time: 03/29/2017 14:30
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	04/05/17 17:51	JML	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:51	JML	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	04/05/17 17:51	JML	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	04/05/17 17:51	JML	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	75-71-8	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	04/05/17 17:51	JML	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:51	JML	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 17:51	JML	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S80295.04 (continued)

Sample Tag: MW-19 (032917)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	04/05/17 17:51	JML		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 17:51	JML	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 17:51	JML	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S80295.05
Sample Tag: MW-20 (032917)
Collected Date/Time: 03/29/2017 15:45
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	04/05/17 18:13	JML	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 18:13	JML	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	04/05/17 18:13	JML	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	04/05/17 18:13	JML	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	75-71-8	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	04/05/17 18:13	JML	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	04/05/17 18:13	JML	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 18:13	JML	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S80295.05 (continued)

Sample Tag: MW-20 (032917)

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	04/05/17 18:13	JML		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 18:13	JML	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:13	JML	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S80295.06
Sample Tag: Trip Blank
Collected Date/Time: 03/29/2017 00:01
Matrix: Water
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW5030C/8260C	04/05/17 00:17	JML	60-29-7	
Acetone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 00:17	JML	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW5030C/8260C	04/05/17 00:17	JML	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW5030C/8260C	04/05/17 00:17	JML	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	75-71-8	
Chloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-01-4	
Bromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	74-83-9	
Chloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	156-59-2	
Tetrahydrofuran*	Not detected	ug/L	90	SW5030C/8260C	04/05/17 00:17	JML	109-99-9	
Chloroform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW5030C/8260C	04/05/17 00:17	JML	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW5030C/8260C	04/05/17 00:17	JML	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	56-23-5	
Benzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	10061-01-5	
Toluene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S80295.06 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	100-41-4	
p,m-Xylene*	Not detected	ug/L	2	SW5030C/8260C	04/05/17 00:17	JML		
o-Xylene*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	95-47-6	
Styrene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	98-82-8	
Bromoform	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	79-34-5	
1,2,3-Trichloropropane*	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW5030C/8260C	04/05/17 00:17	JML	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	87-61-6	
Naphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 00:17	JML	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S80295.07
Sample Tag: Dup-01
Collected Date/Time: 03/29/2017 00:01
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	4.7	IR

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

Extraction / Prep.

pH check for VOCs*	<2	STD Units		N/A	04/05/17 13:10	KCV		
--------------------	----	-----------	--	-----	----------------	-----	--	--

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	50	SW5030C/8260C	04/05/17 18:55	JML	60-29-7	Y
Acetone	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:55	JML	67-64-1	Y
Methyl iodide	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	74-88-4	Y
Carbon disulfide	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	1634-04-4	Y
Acrylonitrile	Not detected	ug/L	10	SW5030C/8260C	04/05/17 18:55	JML	107-13-1	Y
2-Butanone (MEK)	Not detected	ug/L	130	SW5030C/8260C	04/05/17 18:55	JML	78-93-3	Y
Dichlorodifluoromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	75-71-8	Y
Chloromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	74-87-3	Y
Vinyl chloride	8	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-01-4	Y
Bromomethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	74-83-9	Y
Chloroethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	75-00-3	Y
Trichlorofluoromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-69-4	Y
1,1-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-35-4	Y
Methylene chloride	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	156-60-5	Y
1,1-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	156-59-2	Y
Tetrahydrofuran*	Not detected	ug/L	450	SW5030C/8260C	04/05/17 18:55	JML	109-99-9	Y
Chloroform	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	67-66-3	Y
Bromochloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	74-97-5	Y
1,1,1-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:55	JML	108-10-1	Y
2-Hexanone	Not detected	ug/L	250	SW5030C/8260C	04/05/17 18:55	JML	591-78-6	Y
Carbon tetrachloride	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	56-23-5	Y
Benzene	512	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	71-43-2	Y
1,2-Dichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	107-06-2	Y
Trichloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	79-01-6	Y
1,2-Dichloropropane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	78-87-5	Y
Bromodichloromethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-27-4	Y
Dibromomethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	10061-01-5	Y
Toluene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	79-00-5	Y
Tetrachloroethene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	110-57-6	Y
Dibromochloromethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	124-48-1	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S80295.07 (continued)

Sample Tag: Dup-01

Analysis	Results	Units	RL	Method	Run Date/Time	Tech	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2-Dibromoethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	106-93-4	Y
Chlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	630-20-6	Y
Ethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	100-41-4	Y
p,m-Xylene*	Not detected	ug/L	10	SW5030C/8260C	04/05/17 18:55	JML		Y
o-Xylene*	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	95-47-6	Y
Styrene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	100-42-5	Y
Isopropylbenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	98-82-8	Y
Bromoform	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	79-34-5	Y
1,2,3-Trichloropropane*	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	96-18-4	Y
n-Propylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	103-65-1	Y
Bromobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	108-67-8	Y
tert-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	98-06-6	Y
1,2,4-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	95-63-6	Y
sec-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	135-98-8	Y
p-Isopropyltoluene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	99-87-6	Y
1,3-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	541-73-1	Y
1,4-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	106-46-7	Y
1,2-Dichlorobenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	95-50-1	Y
1,2,3-Trimethylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	526-73-8	Y
n-Butylbenzene	Not detected	ug/L	5	SW5030C/8260C	04/05/17 18:55	JML	104-51-8	Y
Hexachloroethane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	87-61-6	Y
Naphthalene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	91-20-3	Y
2-Methylnaphthalene	Not detected	ug/L	30	SW5030C/8260C	04/05/17 18:55	JML	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

