Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

February 22, 2019

Mr. Pablo Valentín
Project Manager
United States Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

RE: January 2019 Monthly Progress Report
Campmarina Former Manufactured Gas Plant
Sheboygan, Wisconsin
Wisconsin Public Services Corporation
CERCLA Docket No. V-W-07-C-862, CERCLIS ID – WIN000510058

Dear Mr. Valentín:

Wisconsin Public Services Corporation (WPSC) is providing this monthly progress report for the WPSC Former Campmarina Manufactured Gas Plant (MGP) Site.

1) PROGRESS MADE DURING THE PAST MONTH

- Prepared and submitted December 2018 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by Janaury 26, 2019.

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- Groundwater analytical results from the December 13, 2018 sampling event and a site map have been included with this monthly progress report.

3) PROJECTED WORK

WPSC Actions

- Submit monthly progress report to USEPA by the 26th of the month.

USEPA Actions

- USEPA review of the Sheboygan-Campmarina River Operable Unit Five-Year Review Data Summary Technical Memorandum.

4) PROBLEMS OR POTENTIAL PROBLEMS ENCOUNTERED

- None

5) ACTUAL OR PLANNED RESOLUTION OF PROBLEMS OR POTENTIAL PROBLEMS

- None

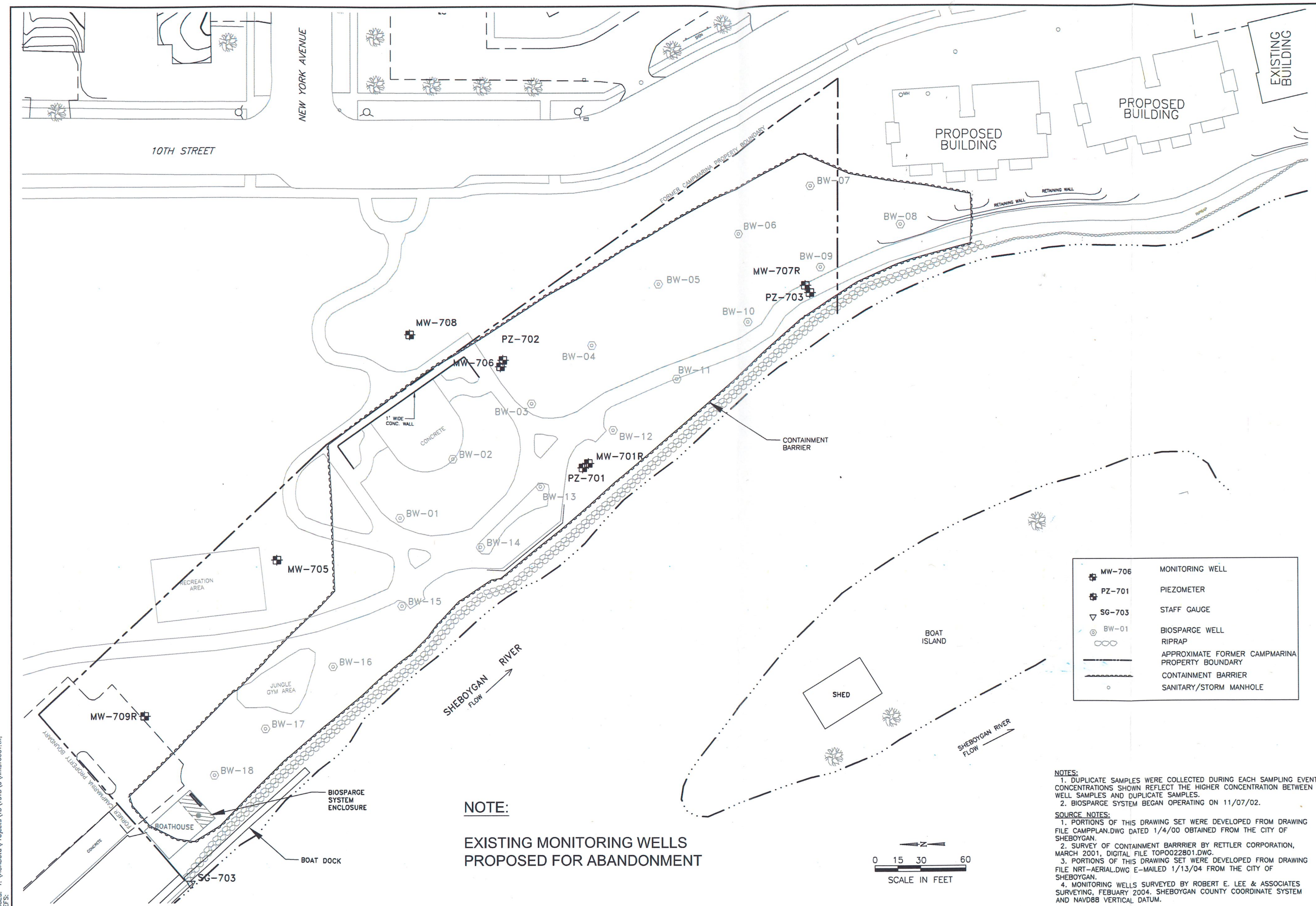
If you have any questions, please don't hesitate to contact me at (920) 433-2643 or brian.bartoszek@wecenergygroup.com.

Sincerely,

Brian F. Bartoszek, P.E.
Director Land Quality – Environmental

Enclosures: Site Map
December 2018 Groundwater Results Summary Tables

For distribution to: Mr. John Feeney, WDNR (US Mail and email)
Mr. Andrew Cawrse, OBG, Part of Ramboll (email)



NOTE:

EXISTING MONITORING WELLS PROPOSED FOR ABANDONMENT

NOTES:
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.
2. BIOSPARGE SYSTEM BEGAN OPERATING ON 11/07/02.

SOURCE NOTES:
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
2. SURVEY OF CONTAINMENT BARRRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOPO022801.DWG.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILE NRT-AERIAL.DWG E-MAILED 1/13/04 FROM THE CITY OF SHEBOYGAN.
4. MONITORING WELLS SURVEYED BY ROBERT E. LEE & ASSOCIATES SURVEYING, FEBUARY 2004. SHEBOYGAN COUNTY COORDINATE SYSTEM AND NAVD88 VERTICAL DATUM.

DRAWN BY:	NWD	DATE: 04/09/13
CHECKED BY:	JJW	DATE: 04/09/13
APPROVED BY:	JMK	DATE: 05/17/13
DRAWING NO: 1313-8-B.3.d-Monitoring Wells		
REFERENCE: SEE INFO BLOCK		

SITE MAP

BRRTS #02-60-000095
CAMP MARINA MANUFACTURED GAS PLANT
SHEBOYGAN, WISCONSIN

OBG

PROJECT NO.
67971

FIGURE NO.
1

May 17, 2013 10:05am PLOTTED BY: ndraskovich SAVED BY: ndraskovich
X: \ACAD\obg Projects \13\1313\8\1313-8-B.3.d-Monitoring Wells.dwg Layout1
IMAGES: Y: \ACAD\obg Projects \13\13\6 \ims\0001.tif;
XREFS:

Table 1 - December 2018 Groundwater Sample Results

Wisconsin Public Service Corp., Former Manufactured Gas Plant Site - Campmarina
732 Water Street, Sheboygan, Wisconsin
BRRTS#: 0260000095 FID#: 460134950 USEPA#: WIN000510058

9-digit Code	Sample Location	Sample Date	PAH 1-Methylnaphthalene	PAH 2-Methylnaphthalene	PAH Acenaphthene	PAH Acenaphthylene	PAH Anthracene	PAH Benzo(a)anthracene	PAH Benzo(k)fluoranthene	PAH Benzo(a)pyrene	PAH Benzo(b)fluoranthene	PAH Benzo(g,h,i)perylene	PAH Chrysene	PAH Dibenz(a,h)anthracene	PAH Indeno(1,2,3-cd)pyrene	PAH Fluoranthene	PAH Fluorene	PAH Naphthalene	PAH Phenanthrene	PAH Pyrene
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
			Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag
		Groundwater SL:	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**NS**	**0.2**	**0.2**	**NS**	**0.2**	**NS**	**NS**	**400**	**400**	**100**	**3,000**	**250**
		WI Groundwater PAL:	NS	NS	NS	NS	600	NS	NS	0.02	0.02	NS	0.02	NS	NS	80	80	10	NS	50
		Tap Water RSL:	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*2.5*	*0.025*	*0.25*	*120*	*25*	*0.025*	*0.25*	*800*	*290*	*0.17*	*1,800*	*120*
121318001	MW-709R	12/13/2018	<0.0061 U	<0.0051 U	<0.0063 U	<0.0052 U	<0.011 U	<0.0079 U	<0.0079 U	<0.011 U	<0.0060 U	0.014 J	<0.014 U	<0.010 U	<0.018 U	<0.011 U	<0.0083 U	<0.019 U	<0.014 U	0.0083 J
121318002	MW-708	12/13/2018	<0.0064 U	0.010 J	<0.0066 U	<0.0054 U	<0.011 U	<0.0082 U	<0.0082 U	<0.011 U	<0.0062 U	0.014 J	<0.014 U	<0.011 U	<0.019 U	<0.012 U	<0.0087 U	0.022 J	<0.015 U	0.011 J
121318003/121318004 (N)	MW-707R	12/13/2018	*46.9*	0.065	26.6	0.73	1.5	*0.045*	0.0098 J	0.016 J	0.016 J	0.018 J	<0.014 U	<0.010 U	<0.018 U	0.81	9.9	*15.1*	6.4	0.90
121318005	PZ-703	12/13/2018	0.042	0.012 J	0.30	0.029	0.012 J	0.013 J	<0.0086 U	0.013 J	<0.0065 U	0.018 J	<0.015 U	<0.011 U	<0.020 U	0.022 J	0.11	0.055 J	0.059 J	0.03 J
121318006	PZ-701	12/13/2018	0.0076 J	0.0076 J	<0.0067 U	<0.0055 U	<0.011 U	<0.0083 U	<0.0083 U	<0.012 U	<0.0063 U	0.017 J	<0.014 U	<0.011 U	<0.019 U	<0.012 U	<0.0088 U	<0.020 U	<0.015 U	0.01 J
121318007	MW-701R	12/13/2018	*170*	*141*	10.3	123	5.6 J	*1.2* J	<0.85 U	<1.2 U	***0.76*** J	1.1 J	<1.5 U	<1.1 U	<2.0 U	3.3 J	30.8	***1,500***	27.7	4.5
121318008	PZ-702	12/13/2018	<0.0059 U	0.0049 J	<0.0061 U	<0.0050 U	<0.010 U	<0.0076 U	<0.0076 U	<0.011 U	<0.0057 U	0.014 J	<0.013 U	<0.010 U	<0.018 U	<0.011 U	<0.0080 U	<0.018 U	<0.014 U	0.0088 J
121318009	MW-706	12/13/2018	*104*	*93.0*	81.3	0.80 J	6.2	<0.67 U	<0.67 U	<0.94 U	<0.51 U	0.82 J	<1.2 U	<0.89 U	<1.6 U	2.6 J	19.6	***667***	29.0	3.2 J
121318012	MW-705	12/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121318013	SG-703	12/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121318010	EB01	12/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121318011	TB01	12/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Number of Samples Analyzed:			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Detections:			5	7	4	4	4	3	1	2	2	8	1	0	0	4	4	5	4	8
Min:			0.0076	0.0049	0.3	0.029	0.012	0.013	0.0098	0.013	0.016	0.014	0.038	0	0	0.022	0.11	0.022	0.059	0.0083
Max:			170	141	81.3	123	6.2	1.2	0.0098	0.016	0.76	1.1	0.038	0	0	3.3	30.8	1,500	29	4.5
Groundwater SL:			**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**NS**	**0.2**	**0.2**	**NS**	**0.2**	**NS**	**NS**	**400**	**400**	**100**	**3,000**	**250**
Number of Samples that Exceed Groundwater SL:			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**
WI Groundwater PAL:			**NS**	**NS**	**NS**	**NS**	**600**	**NS**	**NS**	**0.02**	**0.02**	**NS**	**0.02**	**NS**	**NS**	**80**	**80**	**10**	**NS**	**50**
Number of Samples that Meet or Exceed WI PAL:			0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0
Tap Water RSL:			**1.1**	**36**	**530**	**530**	**1,800**	**0.03**	**2.5**	**0.025**	**0.25**	**120**	**25**	**0.025**	**0.25**	**800**	**290**	**0.17**	**1,800**	**120**
Number of Samples that Exceed Tap Water RSL:			*3*	*2*	*0*	*0*	*0*	*2*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*0*	*0*

Sorted by 9-digit Code
Analyte concentration exceeds the standard for:

BOLD	**Groundwater SL**
Underline	WI Groundwater PAL
Italic	*Tap Water RSL*

Yellow Highlighting in Statistics = detected Exceedances
Pink highlighting in the table= a GW SL exceedance;
results only exceeding the PAL and/or Tap Water criteria are not highlighted.
Statistics exclude the quality control samples (Equipment and Trip Blanks)

-- = Analysis not performed
< = Concentration is less than reported limit
µS/cm = microsiemens per centimeter (aka micromhos per centimeter)
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene and Xylene
Deg C = degrees Celsius
J = Estimated Concentration
mg/L = milligrams per liter
(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol

NS = No Screening Level
NTU = Nephelometric Turbidity Unit
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit; results that attain or exceed this criteria are considered in exceedance of the PAL
RNA = Remediation by Natural Attenuation (lab and field)
RSL = Regional Screening Level
s.u. = standard units
SL = Screening Level
U = Concentration was not detected above the reported limit

Lab comments and definitions can be found in associated laboratory reports.

Screening Levels:
Screening Levels used on this table were presented in the Multi-Site Risk Assessment Framework (RAF) Addendum Revision 6, issued in August 2017. Since that time, three revisions of the RSLs have been published by EPA in November 2017, May 2018, and November 2018. As a result of these three revisions, there were no updates to the RSLs necessary for the MGP-related constituents evaluated in this table.
The Groundwater SL presented is the more conservative of the State and MCL values presented in the RAF Addendum Revision 6.
PAL from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)

Table 1 - December 2018 Groundwater Sample Results

Wisconsin Public Service Corp., Former Manufactured Gas Plant Site - Campmarina
732 Water Street, Sheboygan, Wisconsin
BRRTS#: 0260000095 FID#: 460134950 USEPA#: WIN000510058

			BTEX	BTEX	BTEX	BTEX	Inorganic	Inorganic	Organic	RNA	RNA	RNA	RNA	RNA	RNA	RNA
9-digit Code	Sample Location	Sample Date	Benzene	Ethylbenzene	Toluene	Xylenes, Total	Nitrogen, NO2 + NO3, Total	Sulfate, Total	Methane	Dissolved Oxygen	Groundwater, depth to	Oxidation Reduction Potential	PH, Field	Specific Conductance, Field	Temperature, Water	Turbidity, Quantitative
		Reporting Units:	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs
			Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag	Value / Flag
		Groundwater SL:	**5**	**700**	**800**	**2,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
		WI Groundwater PAL:	0.5	140	160	400	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS
		Tap Water RSL:	*0.46*	*1.5*	*1,100*	*190*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
121318001	MW-709R	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	<95 U	37,500	2,570	0.15	4.24	-125.6	7.07	1749.2	9.99	6.77
121318002	MW-708	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	250 J	55,200	<1.4 U	2.40	9.86	27.2	7.23	3338.5	10.46	16.40
121318003/121318004 (N)	MW-707R	12/13/2018	***1,310***	***1,190***	10.1 J	143	<95 U	279,000	12,900	0.11	4.11	-183.7	7.14	1927.5	9.54	9.02
121318005	PZ-703	12/13/2018	***392***	*179*	10.9 J	84.3	290	1600 J	2,140	0.16	4.04	-147.6	7.04	600.1	9.37	3.13
121318006	PZ-701	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	<95 U	1800 J	<1.4 U	3.19	6.07	-4.1	7.41	200.0	9.37	1.55
121318007	MW-701R	12/13/2018	***4,140***	*585*	***2,830***	*646*	330	116,000	5.1	0.16	8.14	-147.6	6.93	1109.6	9.98	8.60
121318008	PZ-702	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	130 J	129,000	<1.4 U	2.38	5.69	-4.0	7.34	943.9	9.74	6.22
121318009	MW-706	12/13/2018	***3,710***	*280*	16.8 J	126 J	<95 U	<5,000 U	4,920	0.13	5.20	-149.2	6.42	2366.4	9.80	17.52
121318012	MW-705	12/13/2018	--	--	--	--	--	--	--	--	5.60	--	--	--	--	--
121318013	SG-703	12/13/2018	--	--	--	--	--	--	--	--	1.20	--	--	--	--	--
121318010	EB01	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	--	--	--	--	--	--	--	--	--	--
121318011	TB01	12/13/2018	<0.25 U	<0.22 U	<0.17 U	<1.5 U	--	--	--	--	--	--	--	--	--	--

Total Number of Samples Analyzed:	10	10	10	10	8	8	8	8	10	8	8	8	8	8	8
Number of Detections:	4	4	4	4	4	7	5	8	10	8	8	8	8	8	8
Min:	392	179	10.1	84.3	130	1,600	5.1	0.11	1.2	-183.7	6.42	200	9.37	1.55	
Max:	4,140	1,190	2,830	646	330	279,000	12,900	3.19	9.86	27.2	7.41	3,339	10.46	17.52	
Groundwater SL:	**5**	**700**	**800**	**2,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	
Number of Samples that Exceed Groundwater SL:	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
WI Groundwater PAL:	**0.5**	**140**	**160**	**400**	**2,000**	**125,000**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	
Number of Samples that Meet or Exceed WI PAL:	4	4	1	1	0	2	0	0	0	0	0	0	0	0	
Tap Water RSL:	**0.46**	**1.5**	**1,100**	**190**	**NS**	**NS**		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	
Number of Samples that Exceed Tap Water RSL:	*4*	*4*	*1*	*1*	*0*	*0*	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	

[O:ECK 1/8/19, C:SGW 1/8/19, C:KJS 1/17/19][U:ECK 2/11/19, C:AGC 2/12/19]

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