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

July 25, 2018

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

RE: June 2018 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

BRRTS#: 02600000095
FID#: 460134950

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 May 2018 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by June 26, 2018.
- Completed second quarter field-measured parameter and groundwater sampling event on June 4, 2018.

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- Groundwater analytical results from the June 4, 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

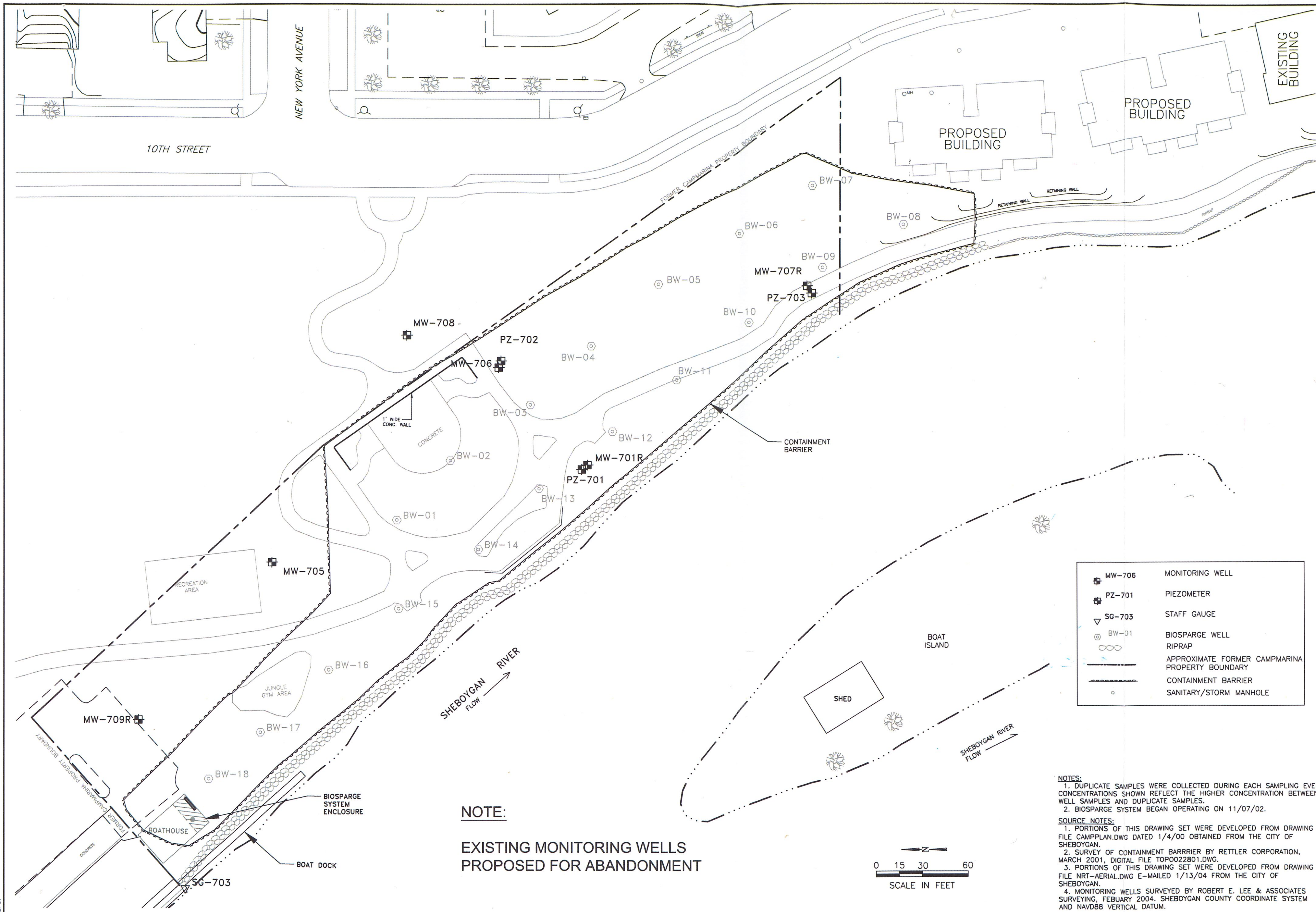
If you have any questions, please don't hesitate to contact me at (920) 433-2643 or brian.bartoszek@wecenergygroup.com.

Sincerely,,

Brian F. Bartoszek, P.E.
Manager – Remediation

Enclosures: Site Map
June 2018 Groundwater Results Summary Tables

For distribution to: Mr. Pablo Valentín, USEPA (email)
Mr. John Feeney, WDNR (US Mail and 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

Y:\ACAData\Projects\13\1313\8\1313-8-B.3.d-Monitoring Wells.dwg Layout1
IMAGES: Y:\ACAData\Projects\13\1313\6\hms10001.tif;
XREFS:

Table 1 - June 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

			PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH
9-digit Code	Sample Location	Sample Date	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAHs (Lab Calc)
		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	µg/L
		Groundwater SL:	**NS**	**NS**	**NS**	**NS**	**3,000**	**NS**	**0.2**	**0.2**	**NS**	**NS**	**0.2**	**NS**	**400**	**400**	**NS**	**100**	**3,000**	**250**	**NS**
		WI Groundwater PAL:	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	NS
		Tap Water RSL:	*1.1*	*36*	*530*	*530*	*1,800*	*0.03*	*0.025*	*0.25*	*120*	*2.5*	*25*	*0.025*	*800*	*290*	*0.25*	*0.17*	*1,800*	*120*	*NS*
060418001	MW-709R	6/4/2018	<0.0057 U	<0.0047 U	<0.0058 U	<0.0048 U	0.015 J	<0.0073 U	<0.010 U	0.013 J	0.0096 J	0.0082 J	0.017 J	<0.0096 U	0.036 J	<0.0077 U	<0.017 U	<0.018 U	0.018 J	0.029 J	0.18
060418002	MW-708	6/4/2018	<0.0057 U	<0.0048 U	<0.0059 U	<0.0048 U	<0.010 U	<0.0073 U	<0.010 U	<0.0056 U	<0.0066 U	<0.0073 U	<0.013 U	<0.0097 U	<0.010 U	<0.0077 U	<0.017 U	<0.018 U	<0.013 U	<0.0074 U	0.026
060418003/060418004 (N)	MW-707R	6/4/2018	*88.7*	1.3	20.7	1.1 J	1.3 J	<0.35 U	<0.49 U	<0.27 U	<0.32 U	<0.35 U	<0.61 U	<0.47 U	<0.50 U	8.6	<0.82 U	***424***	7.1	0.65 J	554
060418005	PZ-703	6/4/2018	0.0061 J	<0.0047 U	0.025 J	0.051	<0.010 U	<0.0073 U	<0.010 U	<0.0055 U	<0.0065 U	<0.0073 U	<0.013 U	<0.0096 U	<0.010 U	0.060	<0.017 U	0.041 J	0.022 J	0.0074 J	0.23
060418006	PZ-701	6/4/2018	<0.0057 U	<0.0048 U	<0.0059 U	<0.0048 U	<0.010 U	<0.0073 U	<0.010 U	<0.0056 U	<0.0066 U	<0.0073 U	<0.013 U	<0.0097 U	<0.010 U	<0.0077 U	<0.017 U	0.019 J	<0.013 U	<0.0074 U	0.045
060418007	MW-701R	6/4/2018	*179*	*140*	117	1.3 J	8.7	<0.75 U	<1.0 U	<0.57 U	<0.67 U	<0.75 U	<1.3 U	<0.99 U	3.3 J	25.8	<1.7 U	***1,090***	44.5	4.7	1,610
060418008	PZ-702	6/4/2018	0.0083 J	0.013 J	<0.0059 U	<0.0048 U	<0.010 U	<0.0073 U	<0.010 U	<0.0056 U	<0.0066 U	<0.0073 U	<0.013 U	<0.0097 U	<0.010 U	<0.0077 U	<0.017 U	0.042 J	<0.013 U	<0.0074 U	0.088
060418009	MW-706	6/4/2018	*282*	*285*	11.9	166	11.6	*3.4 J*	***2.3 J***	***2.8 J***	1.9 J	<1.5 U	***4.3 J***	<1.9 U	9.9 J	39.8	<3.4 U	***2,270***	50.7	12.3	3,150
060418012	MW-705	6/4/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
060418013	SG-703	6/4/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
060418010	Equipment Blank	6/4/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
060418011	Trip Blank	6/4/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total Number of Samples Analyzed:	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Detections:	5	4	4	4	4	1	1	2	2	1	2	0	3	4	0	6	5	5	8	
Min:	0.0061	0.013	0.025	0.051	0.015	3.4	2.3	0.013	0.0096	0.0082	0.017	0	0.036	0.06	0	0.019	0.018	0.0074	0.026	
Max:	282	285	117	166	11.6	3.4	2.3	2.8	1.9	0.0082	4.3	0	9.9	39.8	0	2270	50.7	12.3	3150	
Groundwater SL:	NS	NS	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	100	3000	250	NS	
Number of Samples that Exceed Groundwater SL:	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3	0	0	0	
WI Groundwater PAL:	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50	NS	
Number of Samples that Meet or Exceed WI PAL:	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3	0	0	0	
Tap Water RSL:	1.1	36	530	530	1800	0.03	0.025	0.25	120	2.5	25	0.025	800	290	0.25	0.17	1800	120	NS	
Number of Samples that Exceed Tap Water RSL:	*3*	*2*	0	0	0	*1*	*1*	*1*	0	0	0	0	0	0	0	*3*	0	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)

Screening Levels:

Groundwater and Tap Water Screening Levels used on this table were presented in the Multi-Site Risk Assessment Framework (RAF) Addendum Revision 6 (Exponent, August 2017).
RAF Addendum (Revision 6) was issued in August 2017. Since that time two revisions of the RSLs have been published by EPA in November 2017 and in May 2018. As a result of these two 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.
WI Groundwater PAL from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)
PAL from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)

-- = 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
Lab comments and definitions can be found in associated laboratory reports.
mg/L = milligrams per liter
MGP = Manufactured Gas Plant
(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
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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

Table 1 - June 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
		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*
060418001	MW-709R	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	<95 U	68,900	681	0.11	4.33	-215.5	7.84	1722.3	14.18	11.03
060418002	MW-708	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	120 J	53,400	<1.4 U	5.47	10.04	52.5	7.97	2697.6	14.89	104.46
060418003/060418004 (N)	MW-707R	6/4/2018	***1,450***	***1,940***	26.5 J	*557*	<95 U	107,000	5,560	0.11	4.13	-266.0	7.84	1543.4	13.99	23.52
060418005	PZ-703	6/4/2018	***429***	*153*	10.7	94.7	<95 U	<5,000 U	1,100	0.32	4.34	-242.6	8.45	611.24	17.37	7.65
060418006	PZ-701	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	430	91,800	<1.4 U	1.31	5.26	-6.7	8.00	736.17	16.98	0.00
060418007	MW-701R	6/4/2018	***3,550***	*311*	14.9 J	165	<95 U	<5,000 U	6,220	0.02	5.33	-202.4	7.31	1898.4	15.85	495.69
060418008	PZ-702	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	<95 U	<5,000 U	<1.4 U	3.38	6.43	9.7	8.19	199.64	18.11	3.01
060418009	MW-706	6/4/2018	***6,170***	***830***	***3,960***	*1,130*	<95 U	69,500	26.6	--	7.98	--	--	--	--	--
060418012	MW-705	6/4/2018	--	--	--	--	--	--	--	--	5.87	--	--	--	--	--
060418013	SG-703	6/4/2018	--	--	--	--	--	--	--	--	1.11	--	--	--	--	--
060418010	Equipment Blank	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	--	--	--	--	--	--	--	--	--	--
060418011	Trip Blank	6/4/2018	<0.50 U	<0.50 U	<0.50 U	<1.5 U	--	--	--	--	--	--	--	--	--	--

Total Number of Samples Analyzed:	10	10	10	10	8	8	8	7	10	7	7	7	7	7
Number of Detections:	4	4	4	4	2	5	5	7	10	7	7	7	7	7
Min:	429	153	10.7	94.7	120	53,400	26.6	0.02	1.11	-266	7.31	199.64	13.99	0
Max:	6,170	1,940	3,960	1,130	430	107,000	6,220	5.47	10.04	52.5	8.45	2,697.6	18.11	495.69
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**	**2**	**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	2	0	0	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	NS
Number of Samples that Exceed Tap Water RSL:	*4*	*4*	*1*	*2*	0	0	0	0	0	0	0	0	0	0

[O:ECK 7/11/18][C:MGP 7/11/18, QA: JQW 7/12/18]

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