



Wisconsin Public Service Corporation

700 North Adams Street  
P.O. Box 19001  
Green Bay, WI 54307-9001

[www.wisconsinpublicservice.com](http://www.wisconsinpublicservice.com)

February 26, 2018

Mr. Pablo Valentín  
USEPA Region 5 – SR6J  
77 W. Jackson Boulevard  
Chicago, Illinois 60604-3590

**RE: January 2018 Monthly Progress Report**  
Wisconsin Public Service Corporation  
**CERCLA Docket No. V-W-07-C-862**

Please find enclosed the monthly progress report for the Wisconsin Public Service Corporation's Sheboygan – Campmarina former manufactured gas plant site. If you have any questions, please don't hesitate to contact me at (920) 433-2643 or [bfbartoszek@integrysgroup.com](mailto:bfbartoszek@integrysgroup.com).

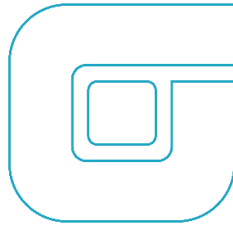
Sincerely,

A handwritten signature in black ink, appearing to read 'BBA', with a long horizontal line extending to the right.

Brian Bartoszek, P.E.  
Manager – Remediation

Enclosures as noted

cc: Mr. John Feeney, WDNR (hardcopy and email)



OBG | There's a way

February 26, 2018

**Mr. Brian Bartoszek, PE**  
**Manager – Remediation**  
**WEC Business Services, LLC**  
700 N. Adams Street  
Green Bay, WI 54307  
(via email)

RE: January 2018 Monthly Progress Report  
*Campmarina Former Manufactured Gas Plant (MGP), Sheboygan, Wisconsin*  
*Wisconsin Public Service Corporation (WPSC)*  
*CERCLA Docket No. V-W-07-C-862, EPA Site ID – B5DA, CERCLIS ID – WIN000510058*  
OBG Project No. 67971

Dear Mr. Bartoszek:

O'Brien & Gere Engineers, Inc. (OBG), is providing this Monthly Progress Report for the WPSC Campmarina Former Manufactured Gas Plant (MGP) Site.

**1) PROGRESS MADE DURING THE PAST MONTH**

- Prepared and submitted December 2017 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by January 26, 2018.

**2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED**

- December 2017 routine quarterly groundwater results and a site map have been attached to this Progress Report.

**3) PROJECTED WORK**

**WPSC Actions**

- Submit the monthly progress report to USEPA by the 26<sup>th</sup> of the month.

**USEPA Actions**

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



#### 4) ANTICIPATED SCHEDULE

For Additional details, please refer to the December 2016 Progress Report.

Deliverable or Milestone	Target Date	Actual Date
<b>Upland Operable Unit</b>		
Draft Upland Operable Unit (OU) Technical Letter – Revision 0 to USEPA	April 26, 2007	April 26, 2007
Receive USEPA Comments on Draft Upland OU Technical Letter		December 6, 2007
Upland OU Work Plan – Revision 0 to USEPA	Within 60 days of receiving USEPA’s Technical Scoping Meeting Summary	
Receive USEPA Comments on Upland OU Work Plan – Revision 0	TBD	
Submit Technical Memorandum to discontinue operation of the biosparge system		October 19, 2010
Receive USEPA Comments on TI Report		May 1, 2014
Submit TI Report - Revision 1		July 1, 2014
2016 Groundwater Levels and Natural Attenuation Parameters Sampling	March, June, September, December	March 17, June 15, September 14, December 13
2017 Groundwater Levels and Natural Attenuation Parameters Sampling	March, June, September, December	March 16, June 5, September 6, December 18
2018 Groundwater Levels and Natural Attenuation Parameters Sampling	March, June, September, December	
<b>River Operable Unit</b>		
Submit Construction Completion Report Revision 1		October 30, 2013
USEPA signs No Further Action Record of Decision for River OU		September 25, 2012
Receive USEPA Approval for Construction Completion Report Revision 1 (submitted October 30, 2013)		April 17, 2014
USEPA’s Five-Year Review Sediment Sampling	June 2017	June 6, 2017
USEPA’s Five-Year Review Data Summary Technical Memorandum	July 2017	July 5, 2017
USEPA’s Five-Year Review Site Inspection	July 2017	July 13, 2017
USEPA’s Five-Year Review (per the USEPA’s December 15, 2016 letter)	September 25, 2017	

#### 5) PROBLEMS OR POTENTIAL PROBLEMS ENCOUNTERED

- None

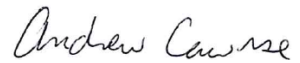
#### 6) ACTUAL OR PLANNED RESOLUTION OF PROBLEMS OR POTENTIAL PROBLEMS


- None



Please contact the undersigned if you should have any questions regarding the content of this progress report.

Very truly yours,  
O'BRIEN & GERE ENGINEERS, INC.

  
**Andrew G. Cawrse**  
Environmental Scientist

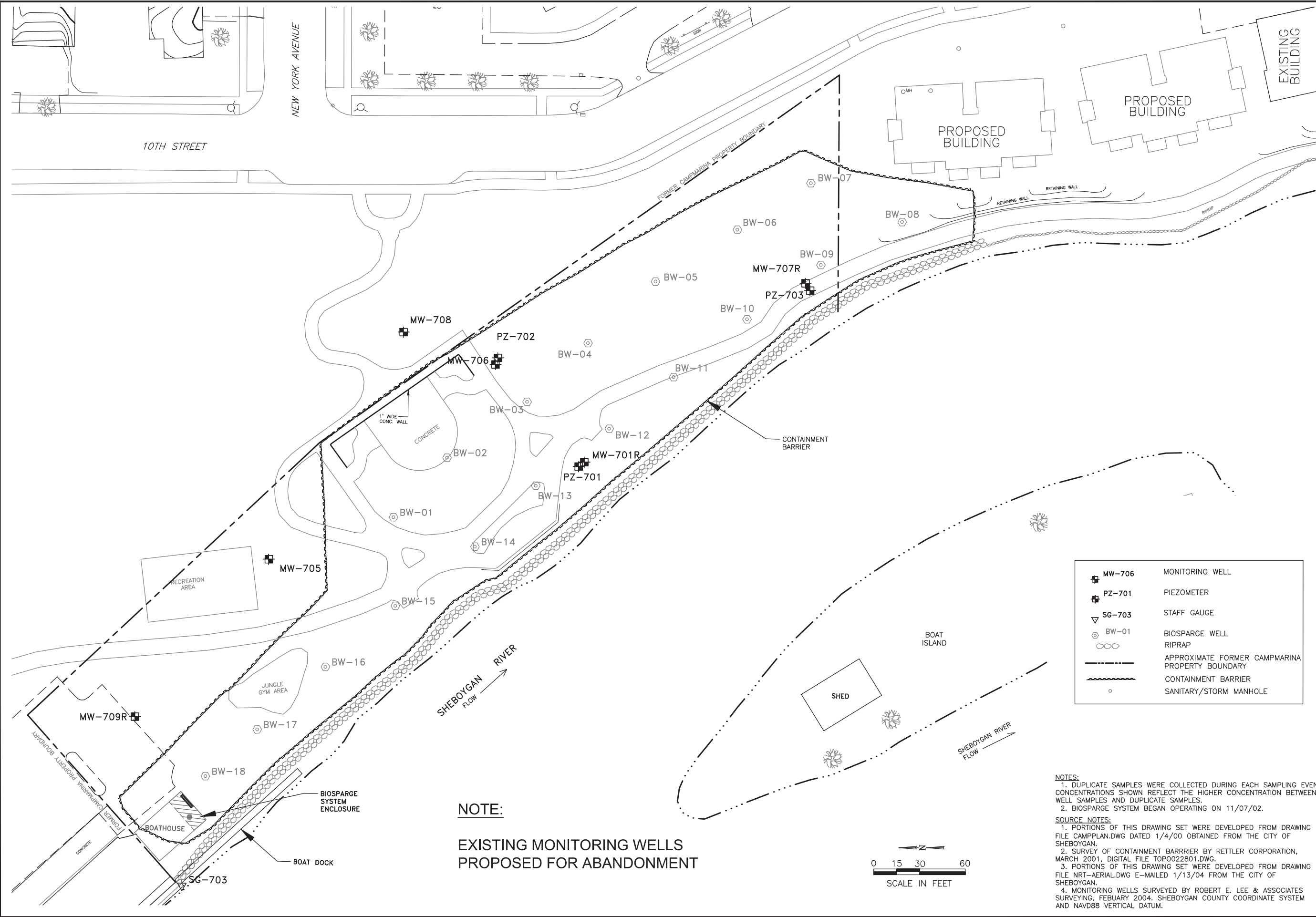
  
**Jennifer M. Hagen, PE**  
Senior Managing Engineer

Enclosures:            Site Map  
                              December 2017 Groundwater Results Summary Tables

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



May 17, 2013 10:05am PLOTTED BY: ndraskovich SAVED BY: ndraskovich  
 Y:\ACADData\Projects\131313\1313-8-B.3-d-Monitoring Wells.dwg Layout  
 IMAGES: Y:\ACADData\Projects\131313\1313-8-B.3-d-Monitoring Wells.dwg  
 ARCS:



**NOTE:**  
 EXISTING MONITORING WELLS  
 PROPOSED FOR ABANDONMENT



	MW-706	MONITORING WELL
	PZ-701	PIEZOMETER
	SG-703	STAFF GAUGE
	BW-01	BIOSPARGE WELL
		RIPRAP
		APPROXIMATE FORMER CAMPMARINA PROPERTY BOUNDARY
		CONTAINMENT BARRIER
		SANITARY/STORM MANHOLE

**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 CAMPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.  
 2. SURVEY OF CONTAINMENT BARRIER BY RETTLER CORPORATION, MARCH 2001, DIGITAL FILE TOP0022801.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, FEBRUARY 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



PROJECT NO.  
67971

FIGURE NO.  
1

**Table 1 - December 2017 Groundwater Results with Groundwater Standard and Tap Water Exceedances**

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

9-digit Code	Sample Location	Sample Date	TPAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	PAH	
			Total PAHs (Lab Calc)	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
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	
<b>MGP Groundwater Standard, WI:</b>			<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>3,000</b>	<b>NS</b>	<b>0.2</b>	<b>0.2</b>	<b>NS</b>	<b>NS</b>	<b>0.2</b>	<b>NS</b>	<b>400</b>	<b>400</b>	<b>NS</b>	<b>100</b>	<b>3,000</b>	<b>250</b>
<u>Wisconsin Groundwater PAL:</u>			<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>600</u>	<u>NS</u>	<u>0.02</u>	<u>0.02</u>	<u>NS</u>	<u>NS</u>	<u>0.02</u>	<u>NS</u>	<u>80</u>	<u>80</u>	<u>NS</u>	<u>10</u>	<u>NS</u>	<u>50</u>
<i>MGP Tap Water RSL, WI:</i>			<i>NS</i>	<i>1.1</i>	<i>36</i>	<i>530</i>	<i>530</i>	<i>1,800</i>	<i>0.03</i>	<i>0.025</i>	<i>0.25</i>	<i>120</i>	<i>2.5</i>	<i>25</i>	<i>0.025</i>	<i>800</i>	<i>290</i>	<i>0.25</i>	<i>0.17</i>	<i>1,800</i>	<i>120</i>
121817001	MW-709R	12/18/2017	0.061	<0.0059 U	<0.0049 U	<0.0061 U	<0.0050 U	0.017 J	<0.0076 U	<0.011 U	<0.0057 U	<0.0068 U	<0.0076 U	<0.013 U	<0.010 U	<0.011 U	<0.0080 U	<0.018 U	<0.018 U	<0.014 U	<0.0076 U
121817002	MW-708	12/18/2017	0.016	<0.0063 U	<0.0052 U	<0.0065 U	<0.0053 U	<0.011 U	<0.0080 U	<0.011 U	<0.0061 U	<0.0072 U	<0.0080 U	<0.014 U	<0.011 U	<0.011 U	<0.0085 U	<0.019 U	<0.020 U	<0.015 U	<0.0081 U
121817003	MW-707R	12/18/2017	497	101	1.0	30.4	1.2	2.1	<0.25 U	<0.34 U	<0.19 U	<0.22 U	<0.25 U	<0.43 U	<0.33 U	0.88 J	9.8	<0.58 U	<b>338</b>	11.2	1.0 J
121817004	PZ-703	12/18/2017	0.67	0.054	0.0064 J	0.27	0.053	0.023 J	<0.0088 U	<0.012 U	<0.0067 U	<0.0079 U	<0.0088 U	<0.015 U	<0.012 U	<0.012 U	0.095	<0.021 U	0.083 J	0.052 J	0.011 J
121817005/121817006 (N)	MW-701R	12/18/2017	1,320	150	107	93.1	1.0 J	11.9	<0.79 U	<1.1 U	<0.60 U	<0.71 U	<0.79 U	<1.4 U	<1.0 U	2.9 J	16.1	<1.8 U	<b>901</b>	35.9	4.1 J
121817007	PZ-701	12/18/2017	0.11	<0.0066 U	<0.0054 U	<0.0067 U	0.0094 J	<0.012 U	<0.0084 U	<0.012 U	<0.0064 U	<0.0075 U	<0.0084 U	<0.014 U	<0.011 U	<0.012 U	<0.0089 U	<0.020 U	0.029 J	<0.015 U	0.014 J
121817008	PZ-702	12/18/2017	0.055	0.0076 J	<0.0051 U	<0.0063 U	<0.0052 U	<0.011 U	<0.0079 U	<0.011 U	<0.0060 U	<0.0071 U	<0.0079 U	<0.014 U	<0.010 U	<0.011 U	<0.0083 U	<0.018 U	0.036 J	<0.014 U	<0.0080 U
121817009	MW-706	12/18/2017	2,100	194	53.0	11.0	102	5.1 J	<1.7 U	<2.3 U	<1.3 U	<1.5 U	<1.7 U	<2.9 U	<2.2 U	<2.4 U	20.9	<3.9 U	<b>1,680</b>	24.4	3.1 J
121817012	MW-705	12/18/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121817013	SG-703	12/18/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121817010	Equipment Blank	12/18/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
121817011	Trip Blank	12/18/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Number of Samples Analyzed:			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Detections:			8	5	4	4	5	5	0	0	0	0	0	0	0	2	4	0	6	4	5
Min:			0.016	0.0076	0.0064	0.27	0.0094	0.017	0	0	0	0	0	0	0	0.88	0.095	0	0.029	0.052	0.011
Max:			2,100	194	107	93.1	102	11.9	0	0	0	0	0	0	0	2.9	20.9	0	1,680	35.9	4.1
MGP Groundwater Standard SL:			NS	NS	NS	NS	NS	3,000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	100	3,000	250
Number of Samples that Exceed MGP Groundwater Standard SL:			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>	0	0
WI Groundwater PAL:			NS	NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50
Number of Samples that Meet or Exceed WI PAL:			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>	0	0
MGP Tap Water RSL:			NS	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
Number of Samples that Exceed Tap Water RSL:			0	<b>3</b>	<b>2</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>	0	0

Notes

**BOLD = result exceeds MGP Groundwater Standard**  
Underline = result meets or exceeds WI Groundwater PAL  
*Italic = result exceeds MGP Tap Water RSL*

-- = analysis not performed  
 < = concentration is less than reported limit  
 U = not detected  
 J = estimated concentration at or above the LOD and below the Limit of Quantification (LOQ)  
 Lab comments, additional data qualifiers and definitions can be found in associated laboratory reports.

**Yellow highlighting = one or more Exceedances reported**

**Pink highlighting = result exceeds the MGP Groundwater Standard; Tap or PAL exceedances are not highlighted if they do not exceed the MGP Groundwater Standard**

MGP SLs used on this table were presented in the Multi-Site Risk Assessment Framework Addendum Revision 6 (Exponent, July 2017).  
 The MGP Groundwater Standard 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 (February 2017)

NS = No Standard  
 MGP = Manufactured Gas Plant  
 RSL = Regional Screening Level  
 SL = Screening Level

Statistics exclude the quality control samples (Equipment and Trip blanks)  
 (N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol  
 Deg C = degrees Celsius  
 mg/L = milligrams per liter  
 µS/cm = microsiemens per centimeter  
 NTU = nephelometric turbidity unit  
 s.u. = standard units  
 µg/L = micrograms per liter  
 BTEX = Benzene, Toluene, Ethylbenzene and Xylene  
 RNA = remediation by natural attenuation  
 PAH = Polycyclic Aromatic Hydrocarbons  
 TPAH = Total PAHs  
 Total PAHs were calculated by the laboratory.



**Table 1 - December 2017 Groundwater Results with Groundwater Standard and Tap Water Exceedances**

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

9-digit Code	Sample Location	Sample Date	BTEX	BTEX	BTEX	BTEX	Organic	Inorganic	Inorganic	RNA	RNA	RNA	RNA	RNA	RNA	RNA
			Benzene	Ethylbenzene	Toluene	Xylenes, Total	Methane	Nitrogen, NO2 + NO3, Total	Sulfate, Total	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
<b>MGP Groundwater Standard, WI:</b>			<b>5</b>	<b>700</b>	<b>800</b>	<b>2,000</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>
<i>Wisconsin Groundwater PAL:</i>			<u>0.5</u>	<u>140</u>	<u>160</u>	<u>400</u>	<u>NS</u>	<u>2,000</u>	<u>125,000</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>	<u>NS</u>
<i>MGP Tap Water RSL, WI:</i>			<i>0.46</i>	<i>1.5</i>	<i>1,100</i>	<i>190</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>
121817001	MW-709R	12/18/2017	<0.50 U	<0.50 U	<0.50 U	<1.5 U	3,800	<95 U	13,600 J	0.80	4.44	-103.2	6.81	2132.1	10.42	0.99
121817002	MW-708	12/18/2017	<0.50 U	<0.50 U	<0.50 U	<1.5 U	14.4	<95 U	<u>154,000</u>	3.31	11.01	78.6	6.94	4355.8	11.00	6.27
121817003	MW-707R	12/18/2017	<b>1,720</b>	<b>2,080</b>	23.2 J	<u>458</u>	9,980	<95 U	<5,000 U	0.62	4.72	-132.3	7.00	1732.5	10.83	1.01
121817004	PZ-703	12/18/2017	<b>188</b>	31.5	4.8	71.3	985	<95 U	<1,000 U	0.33	4.73	-43.5	6.77	587.3	10.19	1.31
121817005/121817006 (N)	MW-701R	12/18/2017	<b>3,980</b>	<u>290</u>	<25.0 U	147 J	11,600	<95 U	<5,000 U	0.11	5.92	-94.2	6.39	2457.2	8.87	8.49
121817007	PZ-701	12/18/2017	<0.50 U	<0.50 U	<0.50 U	<1.5 U	<1.4 U	97 J	121,000	1.14	5.89	23.5	7.20	809.3	8.71	2.77
121817008	PZ-702	12/18/2017	<0.50 U	<0.50 U	<0.50 U	<1.5 U	<1.4 U	<95 U	1,200 J	0.67	6.69	27.7	7.54	207.1	8.36	0.67
121817009	MW-706	12/18/2017	<b>3,330</b>	<u>168</u>	<u>453</u>	286	65.0	<95 U	57,600	0.25	7.91	-119.0	7.15	1104.2	8.90	1.24
121817012	MW-705	12/18/2017	--	--	--	--	--	--	--	--	3.36	--	--	--	--	--
121817013	SG-703	12/18/2017	--	--	--	--	--	--	--	--	1.68	--	--	--	--	--
121817010	Equipment Blank	12/18/2017	<0.50 U	<0.50 U	<0.50 U	<1.5 U	--	--	--	--	--	--	--	--	--	--
121817011	Trip Blank	12/18/2017	<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	9	7	7	7	7	7	7	7
Number of Detections:	4	4	3	4	6	1	5	7	9	7	7	7	7	7	7	7
Min:	188	32	5	71	14	97	1,200	0.25	2	-132	7	207	8	1		
Max:	3,980	2,080	453	458	11,600	97	154,000	3	11	79	8	4,356	11	6		
MGP Groundwater Standard SL:	5	700	800	2,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Exceed MGP Groundwater Standard SL:	<b>4</b>	<b>1</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WI Groundwater PAL:	1	140	160	400	NS	2,000	125,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Meet or Exceed WI PAL:	<b>4</b>	<b>3</b>	<b>1</b>	<b>1</b>	0	0	<b>1</b>	0	0	0	0	0	0	0	0	0
MGP Tap Water RSL:	2	2	1,100	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Exceed Tap Water RSL:	<b>4</b>	<b>4</b>	0	<b>2</b>	0	0	0	0	0	0	0	0	0	0	0	0

[O:ECK 2/6/18, C:SGW 2/7/18, QA:AGC 2/13/18]

Notes

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PAL from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (February 2017)

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RSL = Regional Screening Level

SL = Screening Level

Statistics exclude the quality control samples (Equipment and Trip blanks)

(N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol

Deg C = degrees Celsius

mg/L = milligrams per liter

µS/cm = microsiemens per centimeter

NTU = nephelometric turbidity unit

s.u. = standard units

µg/L = micrograms per liter

BTEX = Benzene, Toluene, Ethylbenzene and Xylene

RNA = remediation by natural attenuation

PAH = Polycyclic Aromatic Hydrocarbons

TPAH = Total PAHs

Total PAHs were calculated by the laboratory.

