



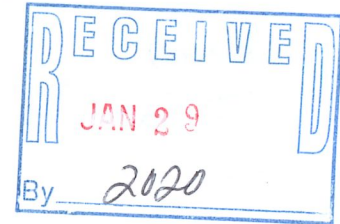
Wisconsin Public Service Corporation

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

www.wisconsinpublicservice.com

January 23, 2020

Ms. Terese Van Donsel
Project Manager
United States Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590



**RE: December 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 Ms. Van Donsel:

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 November 2019 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by December 26, 2019.
- Completed fourth quarter field-measured parameter and groundwater sampling event on December 3, 2019.

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- Groundwater analytical results summary tables from the December 3, 2019 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

- None

4) PROBLEMS OR POTENTIAL PROBLEMS ENCOUNTERED

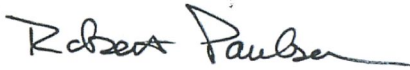
- None

5) ACTUAL OR PLANNED RESOLUTION OF PROBLEMS OR POTENTIAL PROBLEMS

- None

If you have any questions, please don't hesitate to contact me at (414) 221-3948 or robert.paulson@wecenergygroup.com.

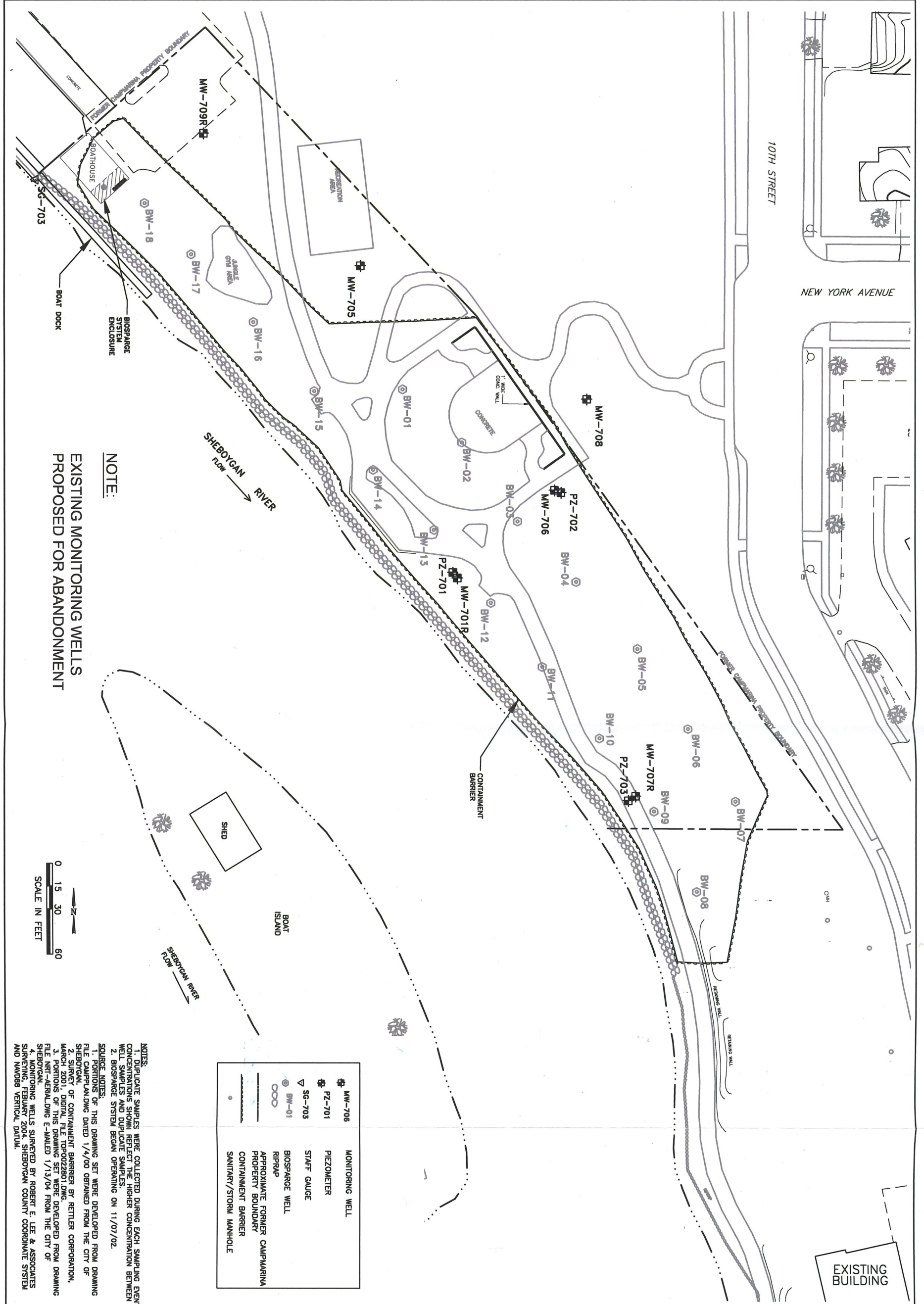
Sincerely,



Robert Paulson

Enclosures: Site Map
 December 2019 Groundwater Results Summary Tables

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



NOTE:
 EXISTING MONITORING WELLS
 PROPOSED FOR ABANDONMENT

0 15 30 60
 SCALE IN FEET

⊕ MW-706	MONITORING WELL
⊕ PZ-701	PIEZOMETER
▽ SG-703	STAFF GAUGE
⊙ BW-01	BIOSPARGE WELL
---	APPROXIMATE FORMER CAMP MARINA 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 CAMP.MARINA.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 NAVD83 VERTICAL DATUM.

MONITORING WELLS

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



PROJECT NO.
67971

FIGURE NO.
1

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	

Table 1 - December 2019 Groundwater Sample Results

Wisconsin Public Service Corp., Former Manufactured Gas Plant Site - Campmarina
 732 Water Street, Sheboygan, Wisconsin
 BRRTS#: 026000095 FID#: 460134950 USEPA#: WIN000510058

9-Digit Code	Sample Location	Sample Date	PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH																	
			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	µg/L																	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag																
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																		
WI Groundwater PAL:			NS	NS	NS	NS	600	NS	0.02	0.02	NS	NS	0.02	NS	80	80	NS	10	NS	50																		
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																		
120319001	MW-709R	12/3/2019	<0.0063	U	0.0057	J	<0.0065	U	<0.0054	U	<0.011	U	<0.0081	U	<0.011	U	<0.0062	U	0.012	J	<0.0081	U	<0.014	U	<0.011	U	<0.011	U	<0.0086	U	<0.019	U	<0.020	U	<0.015	U	0.0098	J
120319002	MW-708	12/3/2019	<0.0064	U	<0.0053	U	<0.0066	U	<0.0054	U	<0.011	U	<0.0082	U	<0.011	U	<0.0062	U	<0.0074	U	<0.0082	U	<0.014	U	<0.011	U	<0.012	U	<0.0087	U	<0.019	U	<0.020	U	<0.015	U	<0.0083	U
120319003	MW-707R	12/3/2019	5.4		0.058		4.9		0.15		0.24		0.023	J	0.017	J	0.016	J	0.016	J	0.0094	J	0.029	J	<0.010	U	0.20		1.3		<0.018	U	7.3		0.64		0.35	
120319004	PZ-703	12/3/2019	0.16		0.032		0.43		0.014	J	<0.011	U	<0.0081	U	<0.011	U	<0.0062	U	<0.0073	U	<0.0081	U	<0.014	U	<0.011	U	<0.011	U	0.083		<0.019	U	0.040	J	0.046	J	0.0084	J
120319005/120319006 (N)	MW-701R	12/3/2019	124		112		85.7		1.0	J	7.0		0.44	J	<0.55	U	<0.30	U	<0.35	U	<0.39	U	<0.68	U	<0.52	U	2.6	J	18.9		<0.92	U	821		31.6		4.0	
120319007	PZ-701	12/3/2019	0.0093	J	0.0083	J	<0.0064	U	<0.0052	U	0.017	J	<0.0079	U	<0.011	U	<0.0060	U	<0.0071	U	<0.0079	U	<0.014	U	<0.011	U	<0.011	U	<0.0084	U	<0.019	U	0.043	J	<0.015	U	<0.0081	U
120319008	PZ-702	12/3/2019	<0.0066	U	0.0056	J	<0.0067	U	<0.0055	U	<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	0.026	J	<0.015	U	<0.0085	U
120319009	MW-706	12/3/2019	154		163		7.9		111		5.3	J	<0.84	U	<1.2	U	1.3	J	0.97	J	1.3	J	4.7	J	<1.1	U	4.0	J	26.8		<2.0	U	1,280		30.8		6.7	
120319012	MW-705	12/3/2019	--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--	
120319013	SG-703	12/3/2019	--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--	
120319010	EB01	12/3/2019	--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--	
120319011	TB01	12/3/2019	--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--		--	
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		2		1		2		3		2		2		0		3		4		0		6		4		5	
Min:			0.0093		0.0056		0.43		0.014		0.017		0.023		0.017		0.016		0.012		0.0094		0.029		0.2		0.083		0		0.026		0.046		0.0084			
Max:			154		163		85.7		111		7		0.44		0.017		1.3		0.97		1.3		4.7		0		4		26.8		0		1,280		31.6		6.7	
Groundwater SL:			NS		NS		NS		3,000		NS		0.2		0.2		NS		NS		NS		0.2		NS		400		400		NS		100		3,000		250	
Number of Samples that Exceed Groundwater SL:			0		0		0		0		0		0		1		0		0		0		1		0		0		0		0		2		0		0	
WI Groundwater PAL:			NS		NS		NS		600		NS		0.02		0.02		NS		NS		NS		0.02		NS		80		80		NS		10		NS		50	
Number of Samples that Exceed WI Groundwater PAL:			0		0		0		0		0		0		1		0		0		0		2		0		0		0		0		2		0		0	
Tap Water RSL:			1		36		530		530		1,800		0.025		0.25		120		3		25		25		3		800		290		0.25		0.17		1,800		120	
Number of Samples that Exceed Tap Water RSL:			3		2		0		0		0		1		0		1		0		0		0		0		0		0		0		3		0		0	

Sorted by 9-digit Code

Analyte concentration exceeds the standard for:

Bold	exceeds Groundwater Screening Level
<u>Underlined</u>	exceeds Wisconsin Groundwater PAL
<i>Italic</i>	exceeds Tap Water RSL
Pink Highlighting	exceeds GW SL; results only exceeding the PAL and/or Tap Water criteria are not highlighted.
Yellow Highlighting	detected results exceed analyte SL in one or more samples

Statistics exclude the quality control samples (Field and Trip Blanks)

Lab comments and definitions can be found in associated laboratory report(s).

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). Since that time, five (5) revisions of the RSLs have been published by EPA through November 2019. As a result of these five 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)

PAL = Preventive Action Limit; results that attain or exceed this criteria are considered in exceedance of the PAL

MCLs = Maximum Contaminant Levels (MCL) national primary drinking water standards (U.S. EPA 2009) (<http://water.epa.gov/drink/contaminants/index.cfm>)

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

NS = No Screening Level
 NTU = Nephelometric Turbidity Unit
 PAH = Polycyclic Aromatic Hydrocarbon
 PAL = Preventive Action Limit
 RAF = Risk Assessment Framework
 RNA = Remediation by Natural Attenuation (lab and field)
 RSL = Regional Screening Level (EPA)
 s.u. = standard units
 SL = Screening Level
 U = Concentration was not detected above the reported limit
 VOC = Volatile Organic Compound

Table 1 - December 2019 Groundwater Sample Results

Wisconsin Public Service Corp., Former Manufactured Gas Plant Site - Campmarina
 732 Water Street, Sheboygan, Wisconsin
 BRRTS#: 026000095 FID#: 460134950 USEPA#: WIN000510058

9-Digit Code	Sample Location	Sample Date	BTEX		BTEX		BTEX		BTEX		Inorganic		Inorganic		Organic		RNA		RNA		RNA		RNA		RNA		RNA			
			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	
			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	mg/L	feet	millivolts	s.u.	µS/cm	Deg C	NTUs							
Reporting Units:			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
Groundwater SL:			5		700		800		2,000		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			
Tap Water RSL:			0.46		1.5		1,100		190		NS		NS		NS		NS		NS		NS		NS		NS		NS			
120319001	MW-709R	12/3/2019	<0.25	U	<0.22	U	0.22	J	<1.5	U	<59	U	8,300	J	3,750		0.14		4.20		-110.8		6.35		2036.1		15.61		8.18	
120319002	MW-708	12/3/2019	<0.25	U	<0.22	U	<0.17	U	<1.5	U	200	J	12,900		<0.66	U	5.31		8.45		45.9		6.48		1941.8		16.63		8.73	
120319003	MW-707R	12/3/2019	269		285		3.1	J	46.2		64	J	196,000		1,720		0.65		3.81		-37.5		6.40		1636.8		15.90		8.35	
120319004	PZ-703	12/3/2019	279		131		7.2	J	51.0		<59	U	800	J	2,120		0.20		3.97		-92.6		6.69		632.7		14.89		6.37	
120319005/120319006 (N)	MW-701R	12/3/2019	2,920		245		11.5	J	134		<59	U	2,900	J	10,800		0.10		5.76		-86.5		5.72		2326.1		16.35		12.98	
120319007	PZ-701	12/3/2019	<0.25	U	<0.22	U	<0.17	U	<1.5	U	110	J	112,000		11.1		0.37		4.82		-24.8		6.42		881.8		15.81		8.94	
120319008	PZ-702	12/3/2019	<0.25	U	<0.22	U	<0.17	U	<1.5	U	<59	U	1,500	J	12.7		0.53		5.71		-12.4		6.92		242.0		15.40		7.40	
120319009	MW-706	12/3/2019	2,010		437		1,430		485		260		118,000		2.6	J	0.12		7.43		-129.7		6.24		1205.8		16.79		5.74	
120319012	MW-705	12/3/2019	--		--		--		--		--		--		--		--		5.70		--		--		--		--		--	
120319013	SG-703	12/3/2019	--		--		--		--		--		--		--		--		0.45		--		--		--		--		--	
120319010	EB01	12/3/2019	<0.25	U	<0.22	U	<0.17	U	<1.5	U	--		--		--		--		--		--		--		--		--		--	
120319011	TB01	12/3/2019	<0.25	U	<0.22	U	0.21	J	<1.5	U	--		--		<0.66	U	--		--		--		--		--		--		--	

Total Number of Samples Analyzed:	8	8	8	8	8	8	8	8	8	10	8	8	8	8	8	8
Number of Detections:	4	4	5	4	4	8	7	8	8	10	8	8	8	8	8	
Min:	269	131	0.22	46.2	64	800	2.6	0.1	0.45	-129.7	5.72	242	14.89	5.74		
Max:	2,920	437	1,430	485	260	196,000	10,800	5.31	8.45	45.9	6.92	2,326	16.79	12.98		
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	0	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 Exceed WI Groundwater PAL:	4	3	1	1	0	1	0	0	0	0	0	0	0	0		
Tap Water RSL:	0.46	1.5	1100	190	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
Number of Samples that Exceed Tap Water RSL:	4	4	1	1	0	0	0	0	0	0	0	0	0	0		

[O:CMD 1/8/20, C:CMD 1/8/20, QC:AGC 1/9/20]

Sorted by 9-digit Code

Analyte concentration exceeds the standard for:

Bold	exceeds Groundwater Screening Level
<u>Underlined</u>	exceeds Wisconsin Groundwater PAL
<i>Italic</i>	exceeds Tap Water RSL
Pink Highlighting	exceeds GW SL; results only exceeding the PAL and/or Tap Water criteria are not highlighted.
Yellow Highlighting	detected results exceed analyte SL in one or more samples

Statistics exclude the quality control samples (Field and Trip Blanks)

Lab comments and definitions can be found in associated laboratory report(s).

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). Since that time, five (5) revisions of the RSLs have been published by EPA through November 2019. As a result of these five 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)

PAL = Preventive Action Limit; results that attain or exceed this criteria are considered in exceedance of the PAL

MCLs = Maximum Contaminant Levels (MCL) national primary drinking water standards (U.S. EPA 2009) (<http://water.epa.gov/drink/contaminants/index.cfm>)

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

NS = No Screening Level
 NTU = Nephelometric Turbidity Unit
 PAH = Polycyclic Aromatic Hydrocarbon
 PAL = Preventive Action Limit
 RAF = Risk Assessment Framework
 RNA = Remediation by Natural Attenuation (lab and field)
 RSL = Regional Screening Level (EPA)
 s.u. = standard units
 SL = Screening Level
 U = Concentration was not detected above the reported limit
 VOC = Volatile Organic Compound

