



Wisconsin Public Service Corporation

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

www.wisconsinpublicservice.com

January 19, 2021

Ms. Jena Sleboda Braun
Project Manager
United States Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**RE: December 2021 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. Sleboda Braun:

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 2021 Monthly Progress Report to United States Environmental Protection Agency (USEPA) by December 26, 2021.
- Fourth quarter field-measured parameter and groundwater sampling event completed December 2, 2021.

2) ANALYTICAL AND OTHER TESTING RESULTS RECEIVED

- Groundwater analytical results summary table from the December 2, 2021 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.
- Support USEPA's Five Year Review, as necessary.

USEPA Actions

- As discussed on the April 30, 2020 conference call, determine a path for deferral of site authority to the State of Wisconsin.
- Prepare Five Year Review.

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) 221-2577 or glenn.luke@wecenergygroup.com.

Sincerely,

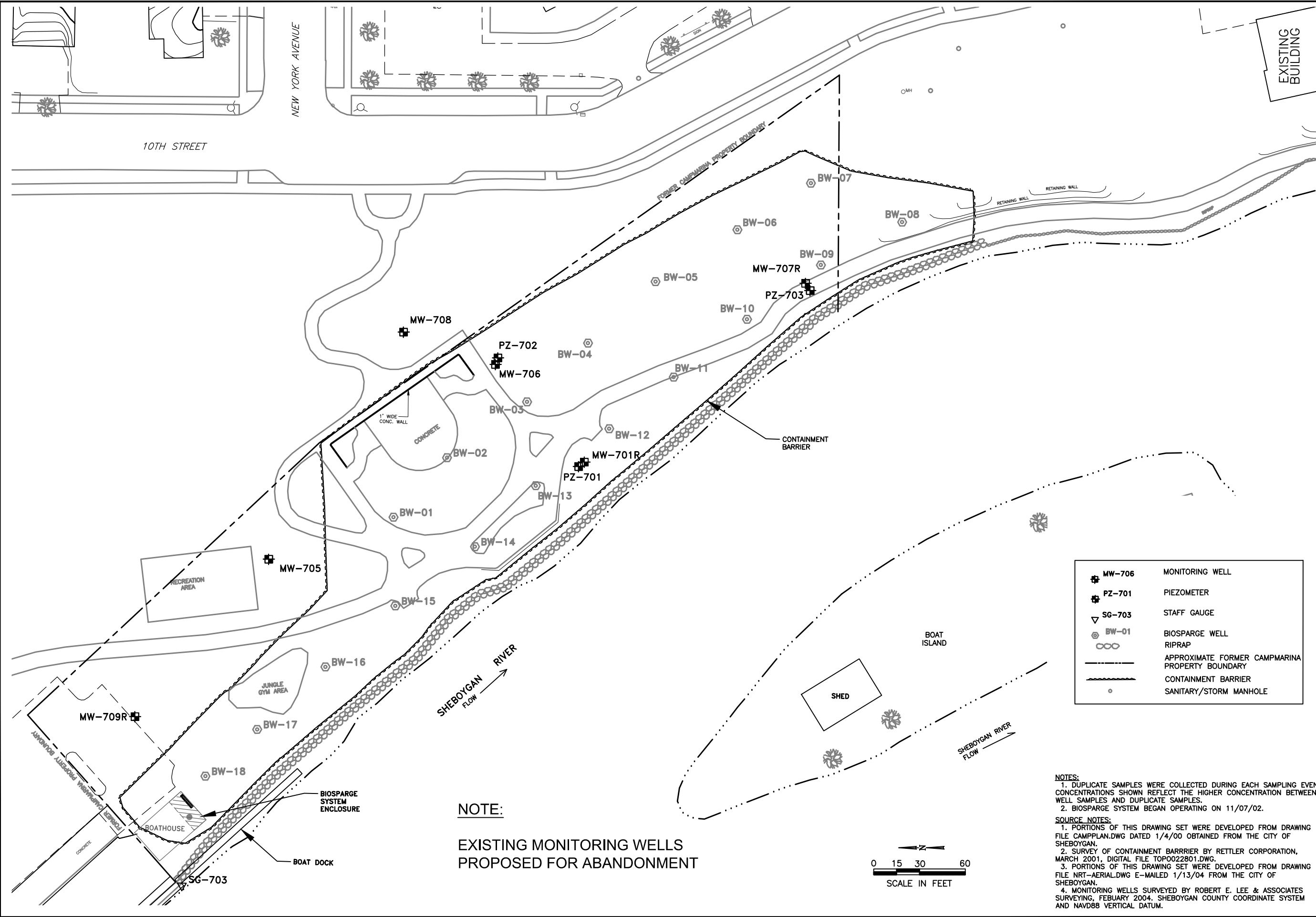


Glenn R. Luke, PE
Principal Environmental Consultant

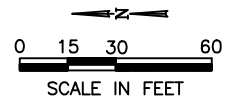
Enclosures: Site Map
 Table 1. December 2021 Groundwater Analytical Results

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

Jan 14, 2020 2:17pm PLOTTED BY: CAMRSEAG SAVED BY: ndraskovitch
 Y:\ACADData\Projects\131313\1313-B-3.d-Monitoring Wells.dwg Layout1
 IMAGES: Y:\ACADData\Projects\131313\1313-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 CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
 2. SURVEY OF CONTAINMENT BARRRIER 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			

MONITORING WELLS

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



PROJECT NO.	67971
FIGURE NO.	1

Table 1. December 2021 Groundwater Analytical Results

December 2021 Monthly Progress Report
 Wisconsin Public Service Corporation
 Former Manufactured Gas Plant Site - Campmarina
 732 Water Street, Sheboygan, Wisconsin
 BRRTS#: 026000095 | FID#: 460134950 | USEPA#: WIN00510058

9-digit Code	Sample Location	Sample Date	PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH		BTEX		BTEX		BTEX		BTEX	
			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	Benzene	Ethylbenzene	Toluene	Xylenes, Total ¹												
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	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	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	
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		0.12		1,800		120
WI Groundwater SL:		NS		NS		NS		NS		3,000		NS		0.2		0.2		NS		NS		NS		NS		400		400		NS		100		3,000		250
WI Groundwater PAL:		NS		NS		NS		NS		600		NS		0.02		0.02		NS		NS		NS		NS		80		80		NS		10		NS		50
120221005/120221006 (N)	MW-701R	12/02/2021	170	143	124	2.4 U	10 J	2.6 U	3.8 U	3.8 U	4.5 U	4.3 U	5.1 U	3.4 U	5.0 U	26.8	3.0 U	1,120		45.7	6.7 J	3,290		249		12.8 J	145.9									
120221009	MW-706	12/02/2021	241	136	22.1	139	9.4 J	3.2 U	4.6 U	4.5 U	5.4 U	5.2 U	6.2 U	4.1 U	6.2 J	39.9	3.6 U	1,630		43.6	6.5 J	2,510		235		479	283									
120221003	MW-707R	12/02/2021	90.5	14.4	41.6	1.3 J	1.7 U	1.2 U	1.8 U	1.8 U	2.1 U	2.0 U	2.4 U	1.6 U	2.4 U	11.4	1.4 U	471		12.3	2.1 U	3,100		2,340		28.7	641									
120221002	MW-708	12/02/2021	0.019 U	0.015 J	0.015 U	0.013 U	0.020 U	0.014 U	0.021 U	0.021 U	0.025 U	0.024 U	0.028 U	0.019 U	0.028 U	0.025 U	0.016 U	0.027 J		0.027 U	0.024 U	0.30 U		0.33 U	0.29 U	1.05 U										
120221001	MW-709R	12/02/2021	0.016 U	0.012 U	0.013 U	0.011 U	0.017 U	0.012 U	0.018 U	0.018 U	0.021 U	0.020 U	0.024 U	0.016 U	0.024 U	0.021 U	0.014 U	0.021 J		0.023 U	0.020 U	0.30 U		0.33 U	0.29 U	1.05 U										
120221007	PZ-701	12/02/2021	0.040 J	0.036 J	0.024 J	0.017 J	0.017 U	0.013 U	0.018 U	0.018 U	0.022 U	0.021 U	0.025 U	0.016 U	0.024 U	0.022 U	0.014 U	0.22		0.024 U	0.021 U	0.30 U		0.33 U	0.29 U	1.05 U										
120221008	PZ-702	12/02/2021	0.017 U	0.013 U	0.013 U	0.012 U	0.018 U	0.013 U	0.019 U	0.019 U	0.022 U	0.021 U	0.026 U	0.017 U	0.025 U	0.023 U	0.015 U	0.051		0.025 U	0.022 U	0.30 U		0.33 U	0.29 U	1.05 U										
120221004	PZ-703	12/02/2021	0.021 J	0.014 U	0.13	0.036 J	0.019 U	0.014 U	0.020 U	0.020 U	0.024 U	0.023 U	0.027 U	0.018 U	0.027 U	0.024 U	0.016 U	0.13		0.026 U	0.023 U	278		129		7.2	51.6									
Total Number of Samples Analyzed:		8		8		8		8		8		8		8		8		8		8		8		8		8		8		8		8		8		
Number of Detections:		5		5		5		4		2		0		0		0		1		3		0		8		3		2		4		4		4		
Min:		0.021		0.015		0.024		0.017		9.4		NA		NA		6.2		11.4		NA		0.021		12.3		6.5		6.7		278		129		7.2		51.6
Max:		241		143		124		139		10		NA		NA		6.2		39.9		NA		1,630		45.7		6.7		3,290		2,340		479		641		
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		0.12		1800		120
Number of Samples that Exceed Tap Water RSL:		3		2		0		0		0		0		0		0		0		0		5		0		0		4		4		0		2		
Groundwater SL:		NS		NS		NS		NS		3000		NS		0.2		0.2		NS		NS		NS		NS		400		400		NS		100		3000		250
Number of Samples that Exceed Groundwater SL:		0		0		0		0		0		0		0		0		0		0		3		0		0		4		1		0		0		
WI Groundwater PAL:		NS		NS		NS		NS		600		NS		0.02		0.02		NS		NS		NS		NS		80		80		NS		10		NS		50
Number of Samples that Exceed WI Groundwater PAL:		0		0		0		0		0		0		0		0		0		0		3		0		0		4		3		1		1		

Sorted by sample location
 Analyte concentration attains or exceeds the standard/screening level for:
Italic exceeds the Tap Water RSL
Bold exceeds the Groundwater SL
Underlined attains or exceeds the WI Groundwater PAL
Pink Highlighting Groundwater SL exceedance; results only attaining/exceeding the PAL and/or Tap Water criteria are not highlighted.
Yellow Highlighting analyte exceedance in statistics for one or more samples

Results & Flags:
 -- = Analysis not performed
 J = Estimated Concentration
 U = Concentration was not detected above the reported limit
 NA = Not Applicable

Acronyms:
 (N) = Normalized sample locations created from combining parent and field duplicate samples following EPA protocol
 µg/L = micrograms per liter
 µS/cm = microsiemens per centimeter (aka micromhos per centimeter)
 BRRTS = Bureau for Remediation and Redevelopment Tracking System
 BTEX = Benzene, Toluene, Ethylbenzene and Xylene
 Deg C = degrees Celsius
 EPA = Environmental Protection Agency

MCL = Maximum Contaminant Level
 mg/L = milligrams per liter
 MGP = Manufactured Gas Plant
 NO2 + NO3 = nitrite plus nitrate
 NS = No Screening Level/No Standard
 NTU = Nephelometric Turbidity Unit
 PAH = Polycyclic Aromatic Hydrocarbon
 PAL = Preventive Action Limit
 RAF = Risk Assessment Framework
 RSL = Regional Screening Level
 s.u. = standard units
 SL = Screening Level
 USEPA = United States Environmental Protection Agency
 WI = Wisconsin

Superscript Notes:
 1. Total Xylenes, when not calculated by the lab, were calculated by Ramboll as follows:
 a. Where no detections were observed, the sum of the reporting limits is presented.
 b. Where detections were observed, only the detected results were added together for the total summation.
 c. Analytes used for the calculation are Xylene-o and Xylene-m+p.

Screening Levels and Standards:
 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, nine revisions of the RSLs have been published by EPA through November 2021. As a result of these nine revisions, there were no updates to the RSLs necessary for the MGP-related constituents evaluated in this table.

Field parameters were analyzed at time of sampling using an In Situ Aquatroll multiparameter sonde.
 Lab comments, additional data qualifiers and definitions can be found in associated laboratory reports.



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9-digit Code	Sample Location	Sample Date	Inorganic		Inorganic		Organic		Field		Field		Field		Field		Field		Field			
			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		mg/L		feet		millivolts		s.u.		µS/cm		Deg C		NTUs	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tap Water RSL:			NS		NS		NS		NS		NS		NS		NS		NS		NS		NS	
WI Groundwater SL:			NS		NS		NS		NS		NS		NS		NS		NS		NS		NS	
WI Groundwater PAL:			2,000		125,000		NS		NS		NS		NS		NS		NS		NS		NS	
120221005/120221006 (N)	MW-701R	12/02/2021	59	U	2,200	U	8,670		0.10		5.52		-19.7		6.45		2,218		13.20		28.89	
120221009	MW-706	12/02/2021	59	U	7,400		99.7		--		8.73		--		--		--		--		--	
120221003	MW-707R	12/02/2021	59	U	2,200	U	4,550		0.13		4.42		-14.6		6.76		1636.80		13.23		0.00	
120221002	MW-708	12/02/2021	59	U	134,000		19.9		0.73		10.80		29.3		7.12		3637.70		14.50		506.60	
120221001	MW-709R	12/02/2021	59	U	2,200	U	850		0.10		4.92		-63.0		7.06		1806.90		13.02		3.12	
120221007	PZ-701	12/02/2021	140	J	72,600		41.6		0.15		5.34		-9.3		7.20		892.61		12.69		0.00	
120221008	PZ-702	12/02/2021	210	J	1,500	J	17.4		0.37		6.45		23.6		7.61		192.66		11.62		0.00	
120221004	PZ-703	12/02/2021	59	U	440	U	1,250		0.22		4.99		-10.0		7.26		549.16		12.20		0.00	

Total Number of Samples Analyzed:	8	8	8	7	9	7	7	7	7	7	7	7
Number of Detections:	2	4	8	7	9	7	7	7	7	7	7	7
Min:	140	1,500	17.4	0.1	4.42	-63	6.45	192.66	11.62	0		
Max:	210	134,000	8,670	0.73	10.8	29.3	7.61	3,638	14.5	506.6		
Tap Water RSL:	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Exceed Tap Water RSL:	0	0	0	0	0	0	0	0	0	0	0	0
Groundwater SL:	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Exceed Groundwater SL:	0	0	0	0	0	0	0	0	0	0	0	0
WI Groundwater PAL:	2000	125000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Number of Samples that Exceed WI Groundwater PAL:	0	1	0	0	0	0	0	0	0	0	0	0

[O:CMD 12/22/21, C: ECB 1/10/2022, QC: EGP 1/11/21]

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