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Ms. Bridget Kelly
Program Coordinator – Emerging Contaminants
Bureau of Remediation and Redevelopment
Wisconsin Department of Natural Resources
101 S. Webster St
Madison, WI 53707

Subject: Potable Well Sampling PFAS Analytical Results,
Expanded Site Investigation Area,
Marinette County, Wisconsin
Data through 7/12/2021

Dear Bridget,

Attached please find the documents presenting the potable well PFAS sampling results in the Expanded Site Investigation Area through July 12, 2021. The attached documents include:

- Figure 1 presents an overview of the sampling results through 07/12/2021 colored in accordance with the Cycle 10 and Cycle 11 DHS recommended groundwater standards.
- Figures 2 through 4 present the same data at a closer scale with labels identifying each location.
- Table 1 summarizes the 36 PFAS analytical parameters by name and acronym.
- Table 2 summarizes the potable well sampling results for the 36 PFAS parameters at each location.

Please note, the data presented is lab data and still undergoing data validation as noted on the table.

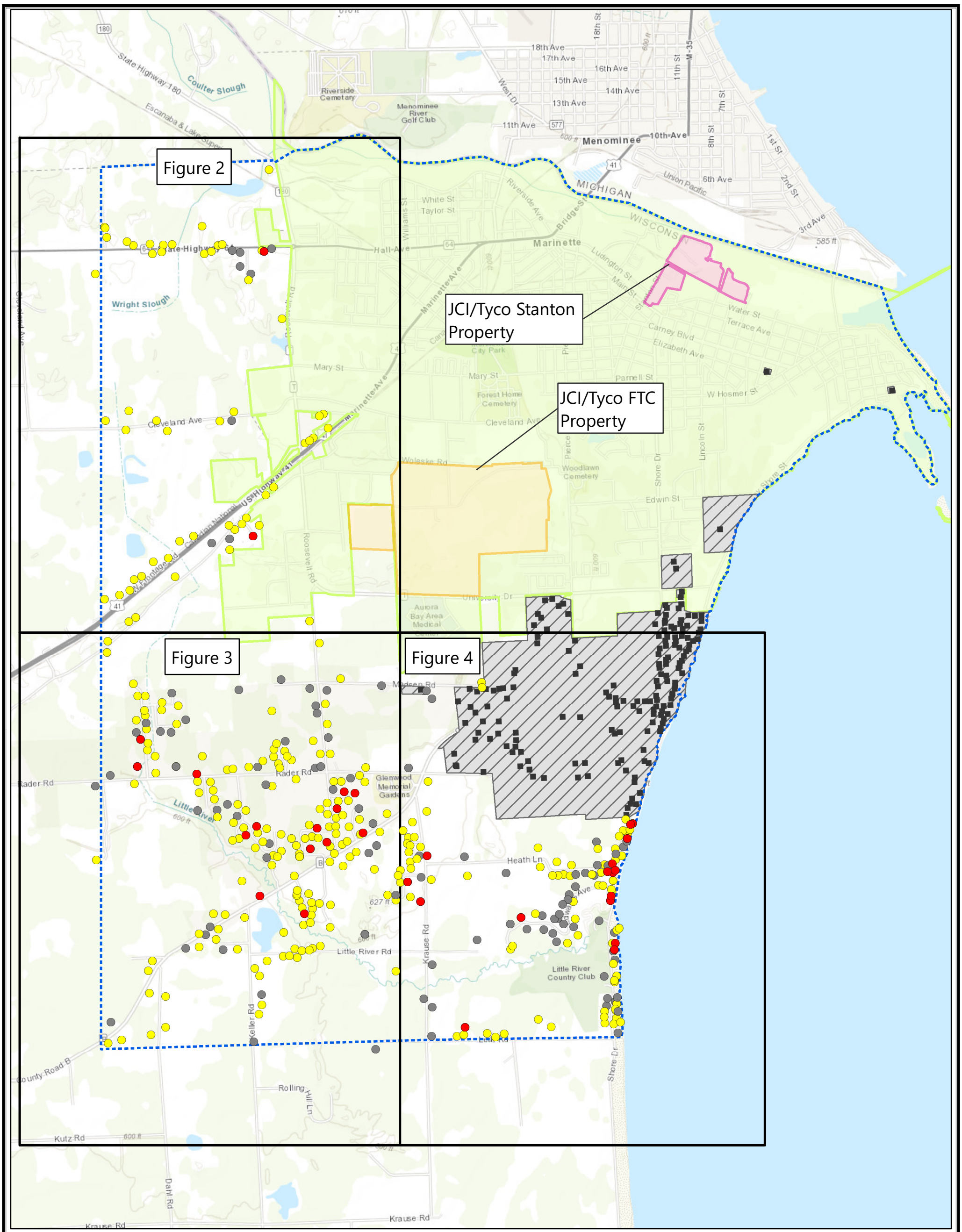
Please let us know if you have any questions or comments.

Sincerely,
Wood Environment & Infrastructure Solutions, Inc.

Emma Driver, PMP
Project Manager

Evan Thomas, PE
Assistant Project Manager

'Wood' is a trading name for John Wood Group PLC and its subsidiaries



Legend

- Expanded Site Investigation Area
- Municipality Boundary
- Approximate JCI/Tyco Sampling Area
- JCI/Tyco Sample Location

PFAS Analytical Results

- Non-detect
- Less than Recommended Enforcement Standard
- At or Above Recommended Enforcement Standard, or Hazard Index Meets or Exceeds 1

Sample results colored in accordance with Dept. of Health Services Cycle 10 and Cycle 11 recommended groundwater standards, including the sum of FOSA, NEt-FOSE, NEt-FOSA, NEtFOSAA, PFOS, PFOA.

Data presented are lab results and are still undergoing validation.

2,800 0 2,800
Feet
1:32,000

Expanded Site Investigation Area Potable Well Sampling Results

(Data Shown Through 7/12/21)

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

Date: 07/18/2021	Project No. 7311200024	Figure:
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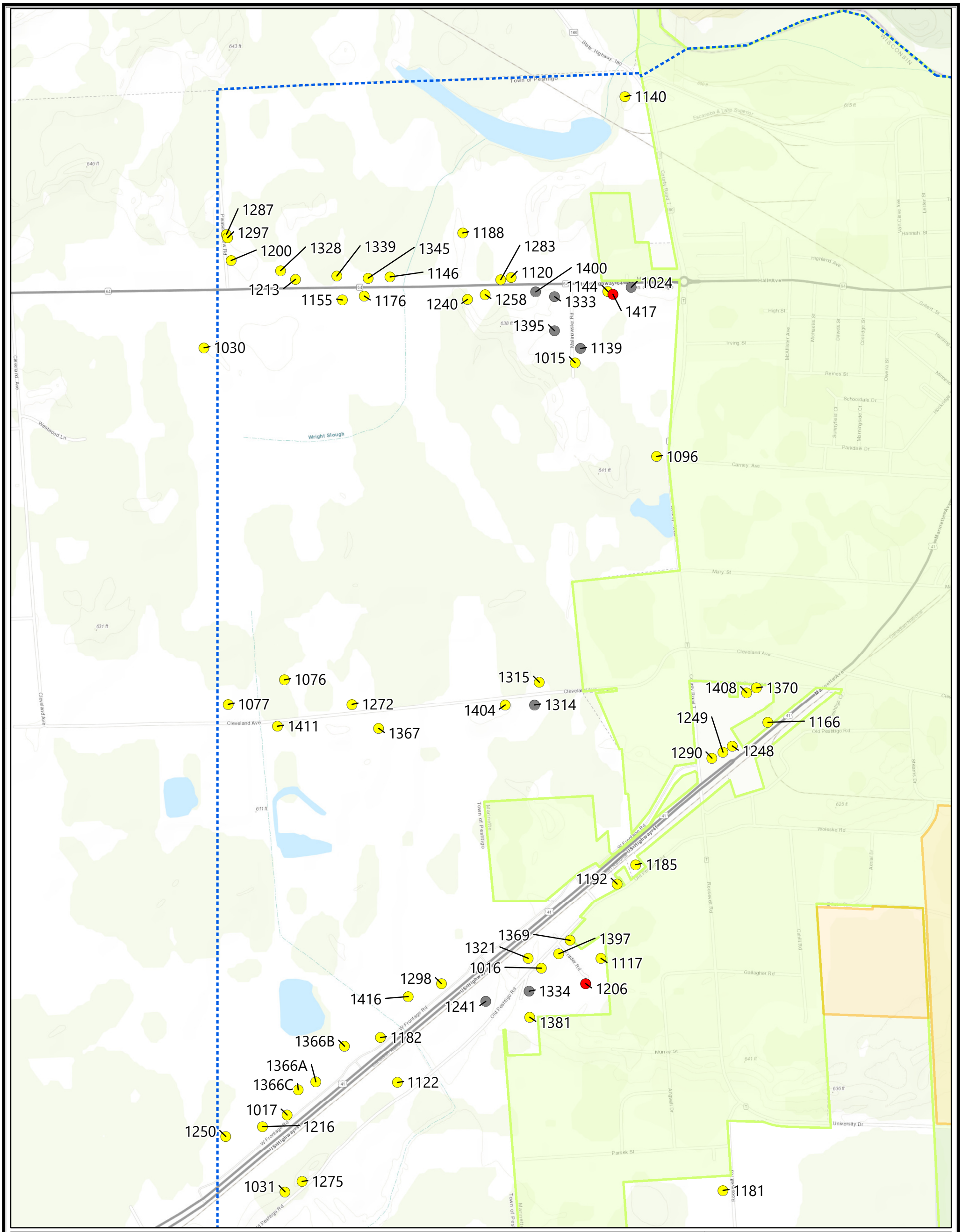
Checked: EMT		



Legend

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- Municipality Boundary
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Data presented are lab results and are still undergoing validation.

1,100 0 1,100
Feet
1:13,200

Expanded Site Investigation Area Potable Well Sampling Results

(Data Shown Through 7/12/21)

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

Date: 07/18/2021	Project No. 7311200024	Figure:
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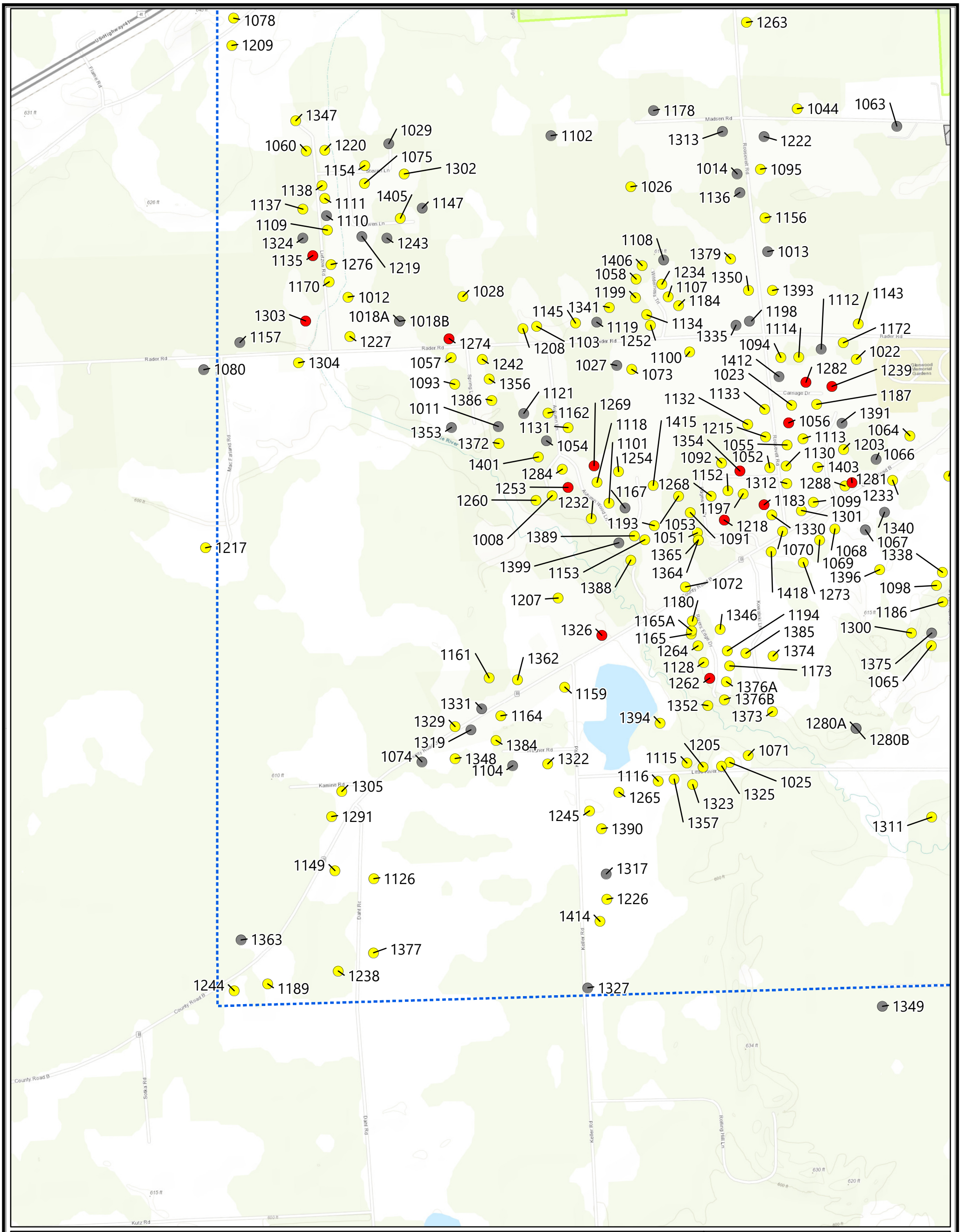
Checked: EMT		



Legend

- Expanded Site Investigation Area
- Municipality Boundary
- Approximate JCI/Tyco Sampling Area
- JCI/Tyco Sample Location

PFAS Analytical Results

- Non-detect
- Less than Recommended Enforcement Standard
- At or Above Recommended Enforcement Standard, or Hazard Index Meets or Exceeds 1

Sample results colored in accordance with Dept. of Health Services Cycle 10 and Cycle 11 recommended groundwater standards, including the sum of FOSA, NEt-FOSE, NEt-FOSA, NEtFOSAA, PFOS, PFOA.

Data presented are lab results and are still undergoing validation.

1,100 0 1,100
Feet
1:13,200

Expanded Site Investigation Area Potable Well Sampling Results

(Data Shown Through 7/12/21)

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

Date: 07/18/2021	Project No. 7311200024	Figure:
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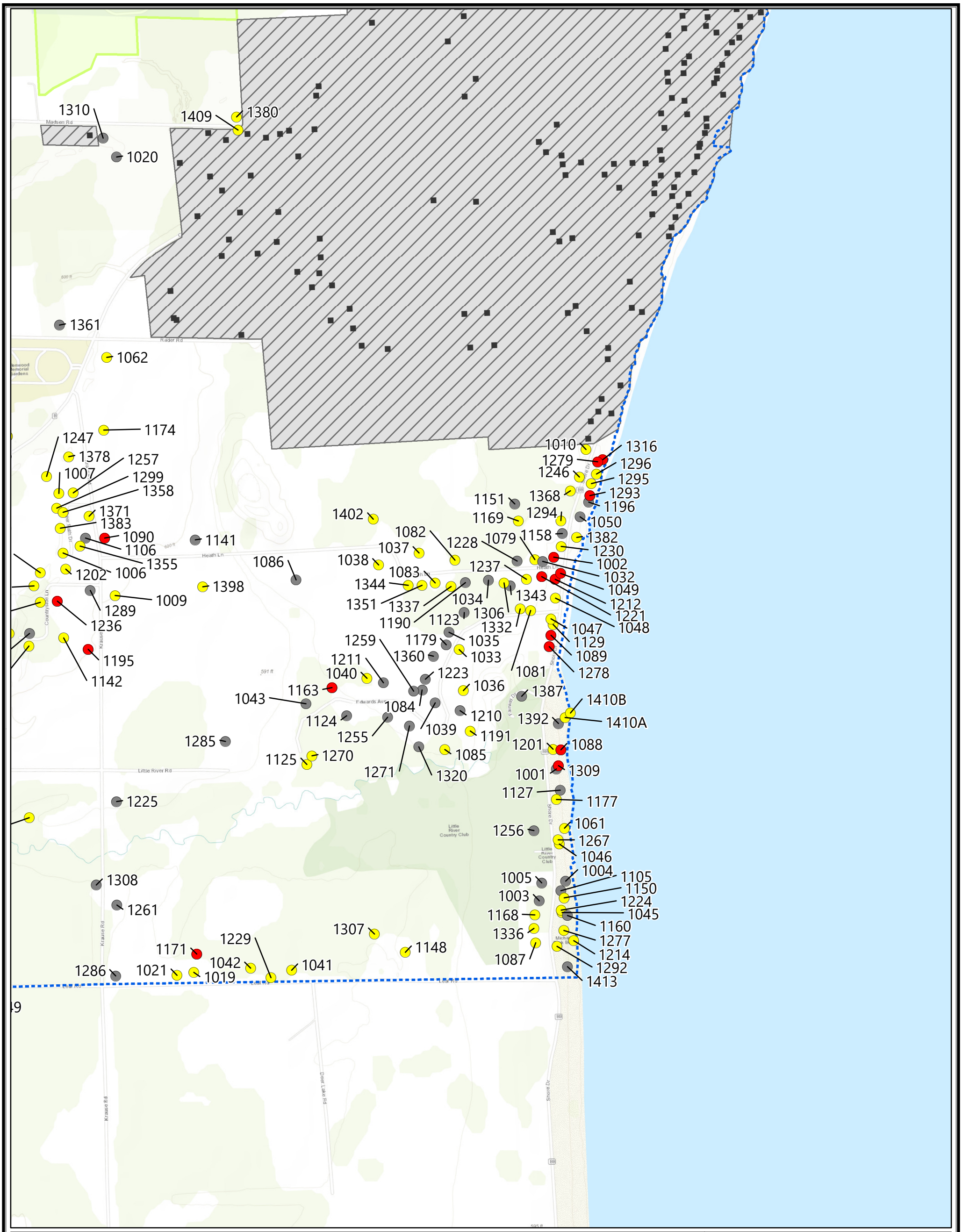
Checked: EMT		



Legend

- Expanded Site Investigation Area
- Municipality Boundary
- Approximate JCI/Tyco Sampling Area
- JCI/Tyco Sample Location

PFAS Analytical Results

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Sample results colored in accordance with Dept. of Health Services Cycle 10 and Cycle 11 recommended groundwater standards, including the sum of FOSA, NEt-FOSE, NEt-FOSA, NEtFOSAA, PFOS, PFOA.

Data presented are lab results and are still undergoing validation.

1,100 0 1,100
Feet
1:13,200

Expanded Site Investigation Area Potable Well Sampling Results

(Data Shown Through 7/12/21)

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

Date: 07/18/2021	Project No. 7311200024	Figure:
Drawn: KMC	wood.	4
Checked: EMT		

Table 1
PFAS Analytical Parameters
Expanded Site Investigation Area
Marinette County, Wisconsin

#	Acronym	Name	CAS #	Acronyms (other)
Carboxylic Acids				
1	PFBA	Perfluorobutanoic acid	375-22-4	
2	PFPeA	Perfluoropentanoic acid	2706-90-3	
3	PFHxA	Perfluorohexanoic acid	307-24-4	
4	PFHpA	Perfluoroheptanoic acid	375-85-9	
5	PFOA	Perfluorooctanoic acid	335-67-1	
6	PFNA	Perfluorononanoic acid	375-95-1	
7	PFDA	Perfluorodecanoic acid	335-76-2	
8	PFUnA	Perfluoroundecanoic acid	2058-94-8	PFUdA, PFUnDA
9	PFDoA	Perfluorododecanoic acid	307-55-1	PFDoDA
10	PFTriA	Perfluorotridecanoic acid	72629-94-8	PFTrA, PFTrDA
11	PFTeA	Perfluorotetradecanoic acid	376-06-7	PFTeDA
12	PFHxDA	Perfluorohexadecanoic acid	67905-19-5	
13	PFODA	Perfluorooctadecanoic acid	16517-11-6	
Sulfonic Acids				
14	PFBS	Perfluorobutanesulfonic acid	375-73-5	
15	PFPeS	Perfluoropentanesulfonic acid	2706-91-4	
16	PFHxS	Perfluorohexanesulfonic acid	355-46-4	
17	PFHpS	Perfluoroheptanesulfonic acid	375-92-8	
18	PFOS	Perfluorooctanesulfonic acid	1763-23-1	
19	PFNS	Perfluorononanesulfonic acid	68259-12-1	
20	PFDS	Perfluorodecanesulfonic acid	335-77-3	
21	PFDoS	Perfluorododecanesulfonic acid	79780-39-5	PFDoDS
22	4:2 FTSA	4:2 Fluorotelomer sulfonic acid	757124-72-4	
23	6:2 FTSA	6:2 Fluorotelomer sulfonic acid	27619-97-2	
24	8:2 FTSA	8:2 Fluorotelomer sulfonic acid	39108-34-4	
25	10:2 FTSA	10:2 Fluorotelomer sulfonic acid	120226-60-0	
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols				
26	FOSA	Perfluorooctane sulfonamide	754-91-6	PFOSA
27	NMeFOSA	N-Methyl perfluorooctane sulfonamide	31506-32-8	MeFOSA
28	NEtFOSA	N-Ethyl perfluorooctane sulfonamide	4151-50-2	EtFOSA
29	NMeFOSAA	N-Methyl perfluorooctane sulfonamidoacetic acid	2355-31-9	MeFOSAA
30	NEtFOSAA	N-Ethyl perfluorooctane sulfonamidoacetic acid	2991-50-6	EtFOSAA
31	NMeFOSE	N-Methyl perfluorooctane sulfonamidoethanol	24448-09-7	MeFOSE
32	NEtFOSE	N-Ethyl perfluorooctane sulfonamidoethanol	1691-99-2	EtFOSE
Replacement Chemicals				
33	HFPO-DA	Hexafluoropropylene oxide dimer acid [1]	13252-13-6	PFPrOPrA
34	DONA	4,8-Dioxa-3H-perfluorononanoic acid [2]	919005-14-4	
35	9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [3]	756426-58-1	F-53B Major
36	11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [4]	763051-92-9	F-53B Minor

NOTES

1 - Also referred to as "GenX"

2 - Also available as the ammonium salt = ADONA (Ammonium 4,8-dioxa-3H-perfluorononanoate) # 958445-44-8

3 - Also available as the potassium salt = Potassium, 9-chlorohexadecafluoro-3-oxanone-1-sulfonate # 73606-19-6

4 - Also available as the potassium salt = Potassium, 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate # 83329-89-9

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1001	1001	1002	1002	1003	1004	1005	1006	1007	1008	1009
		Sample Date	10/23/20	10/23/20	10/28/20	10/28/20	10/27/20	11/05/20	10/27/20	10/26/20	10/27/20	10/27/20	10/29/20
		Sample Number	PWS1001-OS-102320-100	PWS-FD01-102320	PWS1002-OS-102820-100	PWS-FD02-102820	PWS1003-OS-102720-100	PWS1004-OS-110520-100	PWS1005-OS-102720-100	PWS1006-OS-102620-100	PWS1007-OS-102720-100	PWS1008-OS-102720-100	PWS1009-OS-102920-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.0 U	<2.2 U	**15**	**15**	<2.2 U	<2.2 U	<2.0 U	<2.0 U	<2.2 U	<2.1 U	<2.1 U
PFPeA	ng/L	--	<0.40 U	<0.45 U	**8.1**	**8.5**	<0.45 U	<0.46 U	<0.41 U	<0.42 U	**0.52 J**	**1.1 J**	<0.43 U
PFHxA	ng/L	150,000	<0.48 U	<0.53 U	**7.7**	**7.3**	<0.53 U	<0.54 U	<0.48 U	<0.49 U	<0.54 U	**0.98 J**	<0.51 U
PFHpA	ng/L	--	<0.21 U	<0.23 U	**5.1**	**5.4**	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.23 U	**0.24 J**	<0.22 U
PFOA	ng/L	20	<0.70 U	<0.78 U	**5.0**	**4.9**	<0.77 U	<0.79 U	<0.71 U	<0.72 U	<0.78 U	<0.75 U	<0.74 U
PFNA	ng/L	30	<0.22 U	<0.25 U	**1.6 J**	**1.7 J**	<0.25 U	<0.25 U	<0.23 U	<0.23 U	<0.25 U	<0.24 U	<0.24 U
PFDA	ng/L	300	<0.26 U	<0.28 U	**3.6**	**3.5**	<0.28 U	<0.29 U	<0.26 U	<0.26 U	<0.29 U	<0.27 U	<0.27 U
PFUnA	ng/L	3,000	<0.91 U	<1.0 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<0.92 U	<0.94 U	<1.0 U	<0.97 U	<0.96 U
PFDoA	ng/L	500	<0.45 U	<0.51 U	<0.53 U	<0.54 U	<0.50 U	<0.51 U	<0.46 U	<0.47 U	<0.51 U	<0.49 U	<0.48 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.60 U	<0.67 U	<0.70 U	<0.72 U	<0.66 U	<0.68 U	<0.61 U	<0.62 U	<0.67 U	<0.65 U	<0.64 U
PFHxDA	ng/L	--	<0.73 U	<0.82 U	<0.85 U	<0.88 U	<0.81 U	<0.83 U	<0.74 U	<0.76 U	<0.82 U	<0.79 U	<0.77 U
PFODA	ng/L	400,000	<0.77 U	<0.86 U	<0.90 U	<0.93 U	<0.85 U	<0.88 U	<0.78 U	<0.80 U	<0.87 U	<0.83 U	<0.82 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.16 U	<0.18 U	**11**	**11**	<0.18 U	<0.19 U	<0.17 U	<0.17 U	<0.18 U	**0.48 J**	<0.17 U
PFPeS	ng/L	--	<0.25 U	<0.28 U	**0.34 J**	**0.35 J**	<0.27 U	<0.28 U	<0.25 U	<0.26 U	<0.28 U	<0.27 U	<0.26 U
PFHxS	ng/L	40	<0.47 U	<0.52 U	**1.4 J**	**1.5 J**	<0.52 U	<0.53 U	<0.48 U	**0.98 J**	<0.53 U	<0.50 U	<0.50 U
PFHpS	ng/L	--	<0.16 U	<0.17 U	**0.26 J**	**0.34 J**	<0.17 U	<0.18 U	<0.16 U	<0.16 U	<0.18 U	<0.17 U	<0.17 U
PFOS	ng/L	20	<0.44 U	<0.50 U	**27**	**29**	<0.49 U	<0.50 U	<0.45 U	**0.72 J**	<0.50 U	<0.48 U	<0.47 U
PFNS	ng/L	--	<0.30 U	<0.34 U	<0.35 U	<0.37 U	<0.34 U	<0.35 U	<0.31 U	<0.32 U	<0.34 U	<0.33 U	<0.32 U
PFDS	ng/L	--	<0.26 U	<0.29 U	<0.31 U	<0.32 U	<0.29 U	<0.30 U	<0.27 U	<0.27 U	<0.30 U	<0.28 U	<0.28 U
PFDoS	ng/L	--	<0.80 U	<0.89 U	<0.93 U	<0.96 U	<0.88 U	<0.91 U	<0.81 U	<0.83 U	<0.90 U	<0.86 U	<0.84 U
4:2 FTSA	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.24 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.21 U	<0.21 U
6:2 FTSA	ng/L	--	<2.1 U	<2.3 U	<2.4 U	<2.5 U	<2.3 U	<2.3 U	<2.1 U	<2.1 U	<2.3 U	**7.5**	<2.2 U
8:2 FTSA	ng/L	--	<0.38 U	<0.42 U	<0.44 U	<0.46 U	<0.42 U	<0.43 U	<0.38 U	<0.39 U	<0.42 U	<0.41 U	<0.40 U
10:2 FTSA	ng/L	--	<0.55 U	<0.62 U	<0.64 U	<0.66 U	<0.61 U	<0.63 U	<0.56 U	<0.57 U	<0.62 U	<0.59 U	<0.58 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.81 U	<0.90 U	<0.94 U	**0.98 J**	<0.89 U	<0.91 U	<0.82 U	<0.83 U	<0.90 U	<0.87 U	**1.4 J**
NMeFOSA	ng/L	--	<0.35 U	<0.40 U	<0.41 U	<0.43 U	<0.39 U	<0.40 U	<0.36 U	<0.37 U	<0.40 U	<0.38 U	<0.37 U
NEtFOSA	ng/L	20	<0.72 U	<0.80 U	<0.83 U	<0.86 U	<0.79 U	<0.81 U	<0.73 U	<0.74 U	<0.80 U	<0.77 U	<0.76 U
NMeFOSAA	ng/L	--	<0.99 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
NEtFOSE	ng/L	20	<0.70 U	<0.78 U	<0.81 U	<0.84 U	<0.77 U	<0.79 U	<0.71 U	<0.72 U	<0.78 U	<0.75 U	<0.74 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.2 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U
DONA	ng/L	3,000	<0.33 U	<0.37 U	<0.38 U	<0.40 U	<0.36 U	<0.37 U	<0.33 U	<0.34 U	<0.37 U	<0.35 U	<0.35 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.24 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.21 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.26 U	<0.29 U	<0.31 U	<0.32 U	<0.29 U	<0.30 U	<0.27 U	<0.27 U	<0.30 U	<0.28 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**32**	**33.9**	ND	ND	ND	**0.72**	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**32**	**34.88**	ND	ND	ND	**0.72**	ND	ND	**1.4**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	1.7	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica.

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1010	1011	1012	1013	1014	1015	1015	1016	1017	1018A	1018B
		Sample Date	10/29/20	03/16/21	10/28/20	03/18/21	10/28/20	11/03/20	04/12/21	11/13/20	11/09/20	04/22/21	04/22/21
		Sample Number	PWS1010-OS-102920-100	PWS1011-OS-031621-100	PWS1012-OS-102820-100	PWS1013-OS-031821-100	PWS1014-OS-102820-100	PWS1015-OS-110320-100	PWS1015-OS-041221-100	PWS1016-OS-111320-100	PWS1017-OS-110920-100	PWS1018A-IS-042221-100	PWS1018B-IS-042221-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.1 U	<2.3 U	<2.3 U	<2.3 U	**13**	**11**	**4.7**	<2.2 U	<2.1 U	<2.2 U
PFPeA	ng/L	--	**0.83 J**	<0.44 U	<0.47 U	<0.48 U	<0.47 U	**10**	**11**	**3.1**	**2.2**	<0.44 U	<0.46 U
PFHxA	ng/L	150,000	<0.51 U	<0.52 U	<0.56 U	<0.56 U	<0.56 U	**10**	**14**	**1.3 J**	**1.1 J**	<0.52 U	<0.54 U
PFHpA	ng/L	--	**0.26 J**	<0.22 U	<0.24 U	<0.24 U	<0.24 U	**5.1**	**6.4**	**0.43 J**	**0.26 J**	<0.22 U	<0.23 U
PFOA	ng/L	20	<0.74 U	<0.76 U	<0.81 U	<0.83 U	<0.82 U	**7.6**	**7.2**	<0.77 U	<0.79 U	<0.76 U	<0.79 U
PFNA	ng/L	30	<0.24 U	<0.24 U	<0.26 U	<0.26 U	<0.26 U	<0.22 U	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U
PFDA	ng/L	300	<0.27 U	<0.28 U	<0.30 U	<0.30 U	<0.30 U	<0.26 U	<0.29 U	<0.28 U	<0.29 U	<0.28 U	<0.29 U
PFUnA	ng/L	3,000	<0.96 U	<0.98 U	<1.1 U	<1.1 U	<1.1 U	<0.91 U	<1.0 U	<1.0 U	<1.0 U	<0.98 U	<1.0 U
PFDoA	ng/L	500	<0.48 U	<0.49 U	<0.53 U	<0.54 U	<0.53 U	<0.46 U	<0.51 U	<0.50 U	<0.51 U	<0.49 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.64 U	<0.65 U	<0.70 U	<0.71 U	<0.70 U	<0.61 U	<0.68 U	<0.67 U	<0.68 U	<0.65 U	<0.68 U
PFHxDA	ng/L	--	<0.78 U	<0.79 U	<0.85 U	<0.87 U	<0.86 U	<0.74 U	<0.83 U	<0.81 U	<0.82 U	<0.79 U	<0.83 U
PFODA	ng/L	400,000	<0.82 U	<0.84 U	<0.90 U	<0.91 U	<0.90 U	<0.78 U	<0.87 U	<0.86 U	<0.87 U	<0.84 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.22 J**	<0.18 U	<0.19 U	<0.19 U	<0.19 U	**0.94 J**	**0.96 J**	<0.18 U	**0.54 J**	<0.18 U	<0.19 U
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.29 U	<0.29 U	<0.29 U	<0.25 U	**0.39 J**	<0.27 U	<0.28 U	<0.27 U	<0.28 U
PFHxS	ng/L	40	<0.50 U	<0.51 U	<0.55 U	<0.55 U	<0.55 U	**4.1**	**2.7**	<0.52 U	<0.53 U	<0.51 U	<0.53 U
PFHpS	ng/L	--	<0.17 U	<0.17 U	<0.18 U	<0.18 U	<0.18 U	<0.16 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.47 U	<0.48 U+	<0.52 U	<0.53 U	<0.52 U	<0.45 U	**1.8 J**	<0.49 U	<0.50 U	<0.48 U	<0.50 U
PFNS	ng/L	--	<0.32 U	<0.33 U	<0.35 U	**0.39 J**	<0.36 U	<0.31 U	<0.34 U	<0.34 U	<0.34 U	<0.33 U	<0.35 U
PFDS	ng/L	--	<0.28 U	<0.28 U	<0.31 U	<0.31 U	<0.31 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.85 U	<0.86 U	<0.93 U	<0.94 U	<0.93 U	<0.81 U	<0.90 U	<0.88 U	<0.90 U	<0.87 U	<0.90 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.23 U	<0.23 U	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.2 U	<2.4 U	<2.4 U	<2.4 U	<2.1 U	**4.2 J**	<2.3 U	**3.3 J**	<2.2 U	<2.3 U
8:2 FTSA	ng/L	--	<0.40 U	<0.41 U	<0.44 U	<0.45 U	<0.44 U	<0.38 U	<0.43 U	<0.42 U	<0.43 U	<0.41 U	<0.43 U
10:2 FTSA	ng/L	--	<0.58 U	<0.60 U	<0.64 U	**0.89 J**	<0.64 U	<0.56 U	<0.62 U	<0.61 U	<0.62 U	<0.60 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**0.97 J**	<0.87 U	**2.0**	<0.95 U	<0.94 U	<0.81 U	<0.91 U	<0.89 U	**1.1 J**	**0.92 J**	<0.91 U
NMeFOSA	ng/L	--	<0.38 U	<0.38 U	<0.41 U	<0.42 U	<0.41 U	<0.36 U	<0.40 U	<0.39 U	<0.40 U	<0.38 U	<0.40 U
NEtFOSA	ng/L	20	<0.76 U	<0.77 U	<0.83 U	<0.85 U	<0.84 U	<0.72 U	<0.81 U	<0.79 U	<0.81 U	<0.78 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.3 U	<1.4 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.74 U	<0.76 U	<0.81 U	<0.83 U	<0.82 U	<0.71 U	<0.79 U	<0.77 U	<0.79 U	<0.76 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.4 U	<1.5 U	<1.4 U	<1.2 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.36 U	<0.38 U	<0.39 U	<0.38 U	<0.33 U	<0.37 U	<0.36 U	<0.37 U	<0.36 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.23 U	**0.40 J**	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.28 U	<0.31 U	**0.47 J**	<0.31 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	**7.6**	**9**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**0.97**	ND	**2**	ND	ND	**7.6**	**9**	ND	**1.1**	**0.92**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.1	0.0	0.0	0.5	0.5	0.0	0.1	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1019	1020	1020	1021	1022	1023	1023	1024	1025	1026	1026
		Sample Date	10/30/20	03/16/21	03/16/21	10/29/20	10/30/20	03/18/21	05/28/21	03/16/21	11/03/20	10/29/20	10/29/20
		Sample Number	PWS1019-OS-103020-100	PWS1020-OS-031621-100	PWS-FD01-031621	PWS1021-OS-102920-100	PWS1022-OS-103020-100	PWS1023-OS-031821-100	PWS1023-IS-052821-100	PWS1024-OS-031621-100	PWS1025-OS-110320-100	PWS1026-OS-102920-100	PWS-FD01-102920
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.0 U	<2.0 U	<2.2 U	<2.3 U	**4.8**	**5.9**	<2.1 U	<2.6 U	<2.1 U	<2.3 U
PFPeA	ng/L	--	**0.54 J**	<0.42 U	<0.42 U	<0.45 U	**0.69 J**	**2.4**	**3.1**	<0.42 U	<0.52 U	<0.42 U	<0.47 U
PFHxA	ng/L	150,000	<0.54 U	<0.49 U	<0.49 U	<0.53 U	<0.56 U	**2.4**	**2.9**	<0.50 U	<0.62 U	<0.50 U	<0.55 U
PFHpA	ng/L	--	**0.49 J**	<0.21 U	<0.21 U	<0.23 U	**0.33 J**	**1.3 J**	**1.1 J**	<0.21 U	<0.27 U	<0.22 U	<0.24 U
PFOA	ng/L	20	<0.79 U	<0.72 U	<0.72 U	<0.77 U	<0.81 U	**3.7**	**3.2**	<0.73 U	<0.90 U	<0.73 U	<0.81 U
PFNA	ng/L	30	**0.25 J**	<0.23 U	<0.23 U	<0.25 U	<0.26 U	<0.23 U	<0.22 U	<0.23 U	<0.29 U	<0.23 U	<0.26 U
PFDA	ng/L	300	<0.29 U	<0.26 U	<0.26 U	<0.28 U	<0.30 U	<0.26 U	<0.25 U	<0.27 U	<0.33 U	<0.27 U	<0.29 U
PFUnA	ng/L	3,000	<1.0 U	<0.93 U	<0.94 U	<1.0 U	<1.1 U	<0.94 U	<0.90 U+	<0.94 U	<1.2 U	<0.95 U	<1.0 U
PFDoA	ng/L	500	<0.51 U	<0.47 U	<0.47 U	<0.50 U	<0.53 U	<0.47 U	<0.45 U	<0.47 U	<0.58 U	<0.47 U	<0.52 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.4 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.68 U	<0.62 U	<0.62 U	<0.67 U	<0.70 U	<0.62 U	<0.60 U	<0.63 U	<0.78 U	<0.63 U	<0.69 U
PFHxDA	ng/L	--	<0.82 U	<0.75 U	<0.76 U	<0.81 U	<0.85 U	<0.76 U	<0.73 U	<0.76 U	<0.95 U	<0.77 U	<0.84 U
PFODA	ng/L	400,000	<0.87 U	<0.80 U	<0.80 U	<0.86 U	<0.90 U	<0.80 U	<0.77 U	<0.81 U	<1.0 U	<0.81 U	<0.89 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.17 U	<0.17 U	<0.18 U	<0.19 U	**2.4**	**2.7**	<0.17 U	<0.21 U	<0.17 U	<0.19 U
PFPeS	ng/L	--	<0.28 U	<0.25 U	<0.26 U	<0.27 U	<0.29 U	**0.70 J**	**0.59 J**	<0.26 U	<0.32 U	<0.26 U	<0.28 U
PFHxS	ng/L	40	<0.53 U	<0.48 U	<0.48 U	<0.52 U	<0.55 U	**5.4**	**3.7**	<0.49 U	<0.61 U	<0.49 U	<0.54 U
PFHpS	ng/L	--	<0.18 U	<0.16 U	<0.16 U	<0.17 U	<0.18 U	**0.31 J**	**0.22 J**	<0.16 U	<0.20 U	<0.16 U	<0.18 U
PFOS	ng/L	20	<0.50 U	<0.46 U+	<0.46 U+	<0.49 U	<0.52 U	**6.5**	**5.2**	<0.46 U+	<0.57 U	<0.47 U	<0.51 U
PFNS	ng/L	--	<0.34 U	<0.31 U	<0.31 U	<0.34 U	<0.35 U	<0.32 U	<0.30 U	<0.32 U	<0.39 U	<0.32 U	<0.35 U
PFDS	ng/L	--	<0.30 U	<0.27 U	<0.27 U	<0.29 U	<0.31 U	<0.27 U	<0.26 U	<0.27 U	<0.34 U	<0.28 U	<0.30 U
PFDoS	ng/L	--	<0.90 U	<0.82 U	<0.82 U	<0.88 U	<0.93 U	<0.83 U	<0.80 U	<0.83 U	<1.0 U	<0.84 U	<0.92 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.23 U	<0.20 U	<0.20 U	<0.21 U	<0.26 U	<0.21 U	<0.23 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.1 U	<2.3 U	<2.4 U	<2.1 U	<2.1 U	<2.1 U	<2.7 U	<2.2 U	<2.4 U
8:2 FTSA	ng/L	--	<0.43 U	<0.39 U	<0.39 U	<0.42 U	<0.44 U	<0.39 U	<0.38 U	<0.39 U	<0.49 U	<0.40 U	<0.44 U
10:2 FTSA	ng/L	--	<0.62 U	<0.57 U	<0.57 U	<0.61 U	<0.64 U	<0.57 U	<0.55 U	<0.58 U	<0.71 U	<0.58 U	<0.64 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.91 U	<0.83 U	<0.83 U	**1.3 J**	<0.94 U	**1.5 J**	<0.80 U	<0.84 U	<1.0 U	<0.84 U	**1.0 J**
NMeFOSA	ng/L	--	<0.40 U	<0.36 U	<0.37 U	<0.39 U	<0.41 U	<0.37 U	<0.35 U	<0.37 U	<0.46 U	<0.37 U	<0.41 U
NEtFOSA	ng/L	20	<0.81 U	<0.74 U	<0.74 U	<0.79 U	<0.83 U	<0.74 U	<0.71 U	<0.75 U	<0.93 U	<0.75 U	<0.83 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.2 U	<1.0 U	<0.98 U	<1.0 U	<1.3 U	<1.0 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.4 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.5 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.79 U	<0.72 U	<0.72 U	<0.77 U	<0.81 U	<0.73 U	<0.70 U+	<0.73 U	<0.90 U	<0.73 U	<0.81 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.2 U	<1.3 U	<1.6 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.37 U	<0.34 U	<0.34 U	<0.36 U	<0.38 U	<0.34 U	<0.33 U	<0.34 U	<0.43 U	<0.34 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.23 U	<0.20 U	<0.20 U	<0.21 U	<0.26 U	<0.21 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.27 U	<0.27 U	<0.29 U	<0.31 U	<0.27 U	<0.26 U	<0.27 U	**0.49 J**	<0.28 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	**10.2**	**8.4**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	ND	**1.3**	ND	**11.7**	**8.4**	ND	ND	ND	**1**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.0	0.1	0.0	0.7	0.5	0.0	0.0	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1027	1028	1028	1029	1030	1031	1032	1033	1034	1035	1036
		Sample Date	10/30/20	11/02/20	04/12/21	11/02/20	11/10/20	10/30/20	10/31/20	11/02/20	11/02/20	11/02/20	11/02/20
		Sample Number	PWS1027-OS-103020-100	PWS1028-OS-110220-100	PWS1028-OS-041221-100	PWS1029-OS-110220-100	PWS1030-OS-111020-100	PWS1031-OS-103020-100	PWS1032-OS-103120-100	PWS1033-OS-110220-100	PWS1034-OS-110220-100	PWS1035-OS-110220-100	PWS1036-OS-110220-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.4 U	<2.2 U	<2.2 U	<2.4 U	**6.2**	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	**4.2 J**
PFPeA	ng/L	--	<0.49 U	<0.45 U	<0.46 U	<0.49 U	**2.3**	**1.2 J**	<0.47 U	<0.46 U	<0.48 U	<0.47 U	**2.8**
PFHxA	ng/L	150,000	<0.58 U	<0.53 U	<0.54 U	<0.58 U	**1.7 J**	<0.56 U	<0.55 U	<0.55 U	<0.56 U	<0.55 U	**1.7 J**
PFHpA	ng/L	--	<0.25 U	<0.23 U	<0.23 U	<0.25 U	**2.0**	<0.24 U	<0.24 U	<0.24 U	<0.24 U	<0.24 U	**1.1 J**
PFOA	ng/L	20	<0.85 U	<0.78 U	<0.80 U	<0.84 U	**1.4 J**	<0.81 U	<0.81 U	<0.80 U	<0.83 U	<0.81 U	**1.8 J**
PFNA	ng/L	30	<0.27 U	<0.25 U	<0.25 U	<0.27 U	<0.25 U	<0.26 U	<0.26 U	<0.25 U	<0.26 U	<0.26 U	<0.26 U
PFDA	ng/L	300	<0.31 U	<0.28 U	<0.29 U	<0.31 U	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U
PFDoA	ng/L	500	<0.55 U	<0.50 U	<0.51 U	<0.55 U	<0.50 U	<0.53 U	<0.52 U	<0.52 U	<0.53 U	<0.52 U	<0.53 U
PFTriA	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.73 U	<0.67 U	<0.68 U	<0.73 U	<0.67 U	<0.70 U	<0.69 U	<0.69 U	<0.71 U	<0.69 U	<0.70 U
PFHxDA	ng/L	--	<0.89 U	<0.82 U	<0.83 U	<0.88 U	<0.82 U	<0.85 U	<0.85 U	<0.84 U	<0.87 U	<0.84 U	<0.85 U
PFODA	ng/L	400,000	<0.94 U	<0.86 U	<0.88 U	<0.93 U	<0.86 U	<0.90 U	<0.89 U	<0.88 U	<0.91 U	<0.89 U	<0.90 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.20 U	<0.18 U	<0.19 U	<0.20 U	**0.85 J**	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	**2.6**
PFPeS	ng/L	--	<0.30 U	<0.28 U	<0.28 U	<0.30 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	<0.29 U
PFHxS	ng/L	40	<0.57 U	<0.52 U	<0.53 U	<0.57 U	**0.53 J**	<0.55 U	<0.54 U	<0.54 U	<0.55 U	<0.54 U	<0.55 U
PFHpS	ng/L	--	<0.19 U	<0.17 U	<0.18 U	<0.19 U	<0.17 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U
PFOS	ng/L	20	<0.54 U	<0.50 U	<0.51 U	<0.54 U	<0.50 U	<0.52 U	<0.51 U	<0.51 U	<0.52 U	<0.51 U	<0.52 U
PFNS	ng/L	--	<0.37 U	<0.34 U	<0.35 U	<0.37 U	<0.34 U	<0.35 U	<0.35 U	<0.35 U	<0.36 U	<0.35 U	<0.35 U
PFDS	ng/L	--	<0.32 U	<0.29 U	<0.30 U	<0.32 U	<0.29 U	<0.31 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.31 U
PFDoS	ng/L	--	<0.97 U	<0.89 U	<0.91 U	<0.96 U	<0.89 U	<0.93 U	<0.92 U	<0.91 U	<0.94 U	<0.92 U	<0.93 U
4:2 FTSA	ng/L	--	<0.24 U	<0.22 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U
6:2 FTSA	ng/L	--	<2.5 U	<2.3 U	<2.3 U	<2.5 U	<2.3 U	<2.4 U	<2.4 U	<2.4 U	<2.4 U	<2.4 U	<2.4 U
8:2 FTSA	ng/L	--	<0.46 U	<0.42 U	<0.43 U	<0.46 U	<0.42 U	<0.44 U	<0.44 U	<0.43 U	<0.45 U	<0.44 U	<0.44 U
10:2 FTSA	ng/L	--	<0.67 UF2	<0.61 U	<0.63 U	<0.67 U	<0.61 U	<0.64 U	<0.64 U	<0.63 U	<0.65 U	<0.64 U	<0.64 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.98 U	**2.5**	<0.92 U	<0.97 U	<0.90 U	<0.94 U	<0.93 U	**1.3 J**	<0.95 U	<0.93 U	**1.6 J**
NMeFOSA	ng/L	--	<0.43 U	<0.39 U	<0.40 U	<0.43 U	<0.39 U	<0.41 U	<0.41 U	<0.40 U	<0.42 U	<0.41 U	<0.41 U
NEtFOSA	ng/L	20	<0.87 U	<0.80 U	<0.81 U	<0.86 U	<0.80 U	<0.83 U	<0.83 U	<0.82 U	<0.85 U	<0.83 U	<0.83 U
NMeFOSAA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.85 U	<0.78 U	<0.80 U	<0.84 U	<0.78 U	<0.81 U	<0.81 U	<0.80 U	<0.83 U	<0.81 U	<0.81 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.5 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.40 U	<0.37 U	<0.37 U	<0.40 U	<0.37 U	<0.38 U	<0.38 U	<0.38 U	<0.39 U	<0.38 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.24 U	<0.22 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.32 U	<0.29 U	<0.30 U	<0.32 U	<0.29 U	<0.31 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	**1.4**	ND	ND	ND	ND	ND	**1.8**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**2.5**	ND	ND	**1.4**	ND	ND	**1.3**	ND	ND	**3.4**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1036	1037	1038	1039	1040	1041	1042	1042	1042	1042	1043
		Sample Date	04/12/21	11/05/20	11/02/20	11/03/20	11/04/20	11/03/20	10/30/20	04/12/21	10/30/20	04/12/21	10/29/20
		Sample Number	PWS1036-OS-041221-100	PWS1037-OS-110520-100	PWS1038-OS-110220-100	PWS1039-OS-110320-100	PWS1040-OS-110420-100	PWS1041-OS-110320-100	PWS1042-OS-103020-100	PWS1042-OS-041221-100	PWS-FD02-103020	PWS-FD01-041221	PWS1043-OS-102920-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**11**	<2.2 U	<2.4 U	<2.1 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.3 U
PFPeA	ng/L	--	**5.6**	<0.45 U	<0.48 U	<0.44 U	<0.45 U	<0.45 U	<0.45 U	<0.45 U	<0.44 U	<0.44 U	<0.47 U
PFHxA	ng/L	150,000	**4.8**	<0.53 U	<0.57 U	<0.52 U	<0.53 U	<0.54 U	<0.53 U	<0.54 U	<0.52 U	<0.52 U	<0.56 U
PFHpA	ng/L	--	**3.0**	<0.23 U	<0.25 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.23 U	<0.24 U
PFOA	ng/L	20	**3.9**	<0.77 U	<0.83 U	<0.76 U	<0.77 U	<0.79 U	<0.78 U	<0.78 U	<0.76 U	<0.77 U	<0.82 U
PFNA	ng/L	30	<0.25 U	<0.25 U	<0.26 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.26 U
PFDA	ng/L	300	**0.31 J**	<0.28 U	<0.30 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U	<0.30 U
PFUnA	ng/L	3,000	<1.0 U	<1.0 U	<1.1 U	<0.98 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<0.99 U	<1.1 U
PFDoA	ng/L	500	<0.52 U	<0.50 U	<0.54 U	<0.49 U	<0.50 U	**1.4 J**	<0.50 U	<0.51 U	<0.49 U	<0.50 U	<0.53 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	**1.3 J**	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
PFTeA	ng/L	10,000	<0.69 U	<0.67 U	<0.72 U	<0.65 U	**0.68 JI**	**0.97 J**	<0.67 U	<0.67 U	<0.66 U	<0.66 U	<0.70 U
PFHxDA	ng/L	--	<0.84 U	<0.81 U	<0.87 U	<0.80 U	<0.81 U	<0.82 U	<0.81 U	<0.82 U	<0.80 U	<0.80 U	<0.86 U
PFODA	ng/L	400,000	<0.89 U	<0.86 U	<0.92 U	<0.84 U	<0.86 U	<0.87 U	<0.86 U	<0.87 U	<0.84 U	<0.85 U	<0.91 U
Sulfonic Acids													
PFBS	ng/L	450,000	**2.0**	<0.18 U	<0.20 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	<0.19 U
PFPeS	ng/L	--	<0.28 U	<0.27 U	<0.29 U	<0.27 U	<0.27 U	<0.28 U	<0.27 U	<0.28 U	<0.27 U	<0.27 U	<0.29 U
PFHxS	ng/L	40	**0.87 J**	<0.52 U	<0.56 U	<0.51 U	<0.52 U	<0.53 U	<0.52 U	<0.53 U	<0.51 U	<0.52 U	<0.55 U
PFHpS	ng/L	--	<0.18 U	<0.17 U	<0.19 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.51 U	<0.49 U	<0.53 U	<0.48 U	<0.49 U	<0.50 U	**0.56 J**	<0.50 U	<0.48 U	<0.49 U	<0.52 U
PFNS	ng/L	--	<0.35 U	<0.34 U	<0.36 U	<0.33 U	<0.34 U	**0.60 J**	<0.34 U	<0.34 U	<0.33 U	<0.33 U	<0.36 U
PFDS	ng/L	--	<0.30 U	<0.29 U	<0.31 U	<0.29 U	<0.29 U	**1.0 J**	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U
PFDoS	ng/L	--	<0.91 U	<0.88 U	<0.95 U	<0.87 U	<0.88 U	<0.90 U	<0.88 U	<0.90 U	<0.87 U	<0.88 U	<0.94 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.24 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U
6:2 FTSA	ng/L	--	<2.4 U	**4.5 J**	<2.5 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.3 U	<2.4 U
8:2 FTSA	ng/L	--	<0.43 U	<0.42 U	<0.45 U	<0.41 U	<0.42 U	<0.43 U	<0.42 U	<0.42 U	<0.41 U	<0.42 U	<0.44 U
10:2 FTSA	ng/L	--	<0.63 U	<0.61 U	<0.66 U	<0.60 U	<0.61 U	**1.2 J**	<0.61 U	<0.62 U	<0.60 U	<0.61 U	<0.65 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.92 U	<0.89 U	**2.0**	<0.88 U	**1.1 J**	<0.91 U	**1.8**	<0.90 U	**1.5 J**	<0.89 U	<0.95 U
NMeFOSA	ng/L	--	<0.41 U	<0.39 U	<0.42 U	<0.39 U	<0.39 U	<0.40 U	<0.39 U	<0.40 U	<0.39 U	<0.39 U	<0.42 U
NEtFOSA	ng/L	20	<0.82 U	<0.79 U	<0.85 U	<0.78 U	<0.79 U	<0.80 U	<0.79 U	<0.80 U	<0.78 U	<0.79 U	<0.84 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	**1.2 J**	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U
NEtFOSE	ng/L	20	<0.80 U	<0.77 U	<0.83 U	<0.76 U	<0.77 U	<0.79 U	<0.78 U	<0.78 U	<0.76 U	<0.77 U	<0.82 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.5 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.38 U	<0.36 U	<0.39 U	<0.36 U	<0.36 U	<0.37 U	<0.36 U	<0.37 U	<0.36 U	<0.36 U	<0.39 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.24 U	<0.21 U	<0.22 U	**0.34 J**	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.29 U	<0.31 U	<0.29 U	<0.29 U	**1.3 J**	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**3.9**	ND	ND	ND	ND	ND	**0.56**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.9**	ND	**2**	ND	**1.1**	**1.2**	**2.36**	ND	**1.5**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1044	1044	1045	1045	1045	1046	1047	1047	1048	1049	1049
		Sample Date	10/29/20	04/12/21	10/27/20	04/12/21	10/27/20	10/29/20	03/16/21	05/26/21	10/29/20	10/28/20	04/12/21
		Sample Number	PWS1044-OS-102920-100	PWS1044-OS-041221-100	PWS1045-OS-102720-100	PWS1045-OS-041221-100	PWS-FD02-102720	PWS1046-OS-102920-100	PWS1047-OS-031621-100	PWS1047-IS-052621-100	PWS1048-OS-102920-100	PWS1049-OS-102820-100	PWS1049-OS-041221-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.3 U	<2.0 U	<2.2 U	<2.2 U	<2.1 U	<2.1 U	<2.0 U	<2.2 U	**11**	**10**
PFPeA	ng/L	--	**0.48 J**	**0.90 J**	<0.41 U	<0.45 U	<0.45 U	<0.42 U	<0.43 U	<0.40 U	<0.44 U	**14**	**11**
PFHxA	ng/L	150,000	<0.51 U	**0.97 J**	<0.48 U	<0.53 U	<0.53 U	<0.50 U	<0.51 U	<0.48 U	<0.52 U	**12**	**10**
PFHpA	ng/L	--	<0.22 U	<0.24 U	<0.21 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	**8.1**	**7.0**
PFOA	ng/L	20	<0.74 U	<0.83 U	<0.70 U	<0.78 U	<0.78 U	<0.73 U	<0.75 U	<0.70 U	<0.76 U	**7.0**	**9.4**
PFNA	ng/L	30	<0.24 U	<0.26 U	<0.22 U	<0.25 U	<0.25 U	<0.23 U	<0.24 U	<0.22 U	<0.24 U	**1.6 J**	**2.3**
PFDA	ng/L	300	<0.27 U	**0.32 J**	<0.26 U	**0.28 J**	<0.29 U	<0.27 U	<0.27 U	<0.26 U	<0.28 U	<0.31 U	**1.3 J**
PFUnA	ng/L	3,000	<0.96 U	<1.1 U	<0.91 U	<1.0 U	<1.0 U	<0.94 U	<0.97 UF1	<0.91 U	<0.99 U	<1.1 U	<1.0 U
PFDoA	ng/L	500	<0.48 U	<0.54 U	<0.45 U	<0.50 U	<0.51 U	<0.47 U	<0.48 U	<0.45 U	<0.49 U	<0.54 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U
PFTeA	ng/L	10,000	<0.64 U	<0.71 U	<0.60 U	<0.67 U	<0.67 U	<0.63 U	<0.64 U	<0.60 U	<0.66 U	<0.72 U	<0.68 U
PFHxDA	ng/L	--	<0.78 U	<0.87 U	<0.74 U	<0.81 U	<0.82 U	<0.76 U	<0.78 U	<0.73 U	<0.80 U	<0.88 U	<0.82 U
PFODA	ng/L	400,000	<0.82 U	<0.92 U	<0.78 U	<0.86 U	<0.86 U	<0.81 U	<0.83 UF1	<0.77 U	<0.85 U	<0.93 U	<0.87 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.20 U	<0.17 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.16 U	<0.18 U	**0.52 J**	**0.30 J**
PFPeS	ng/L	--	<0.26 U	<0.29 U	<0.25 U	<0.27 U	<0.28 U	<0.26 U	<0.26 U	<0.25 U	<0.27 U	<0.30 U	<0.28 U
PFHxS	ng/L	40	<0.50 U	<0.56 U	<0.47 U	<0.52 U	<0.52 U	<0.49 U	<0.50 U	<0.47 U	<0.51 U	**0.58 J**	<0.53 U
PFHpS	ng/L	--	<0.17 U	<0.19 U	<0.16 U	<0.17 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.17 U	<0.19 U	<0.18 U
PFOS	ng/L	20	<0.47 U	<0.53 U	<0.45 U	<0.49 U	<0.50 U	<0.46 U	<0.48 U	<0.44 U	<0.49 U	**3.2**	**10**
PFNS	ng/L	--	<0.32 U	<0.36 U	<0.31 U	<0.34 U	<0.34 U	<0.32 U	<0.33 U	<0.30 U	<0.33 U	<0.36 U	<0.34 U
PFDS	ng/L	--	<0.28 U	<0.31 U	<0.26 U	<0.29 U	<0.29 U	<0.27 U	<0.28 U	<0.26 U	<0.29 U	<0.32 U	<0.30 U
PFDoS	ng/L	--	<0.85 U	<0.95 U	<0.80 U	<0.89 U	<0.89 U	<0.83 U	<0.85 U	<0.80 U	<0.87 U	<0.96 U	<0.90 U
4:2 FTSA	ng/L	--	<0.21 U	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.20 U	<0.22 U	<0.24 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.4 U	<2.1 U	<2.3 U	<2.3 U	<2.1 U	<2.2 UF1	<2.1 U	<2.2 U	<2.5 U	<2.3 U
8:2 FTSA	ng/L	--	<0.40 U	<0.45 U	<0.38 U	<0.42 U	<0.42 U	<0.39 U	<0.40 U	<0.38 U	<0.41 U	<0.45 U	<0.43 U
10:2 FTSA	ng/L	--	<0.58 U	<0.66 U	<0.55 U	<0.61 U	<0.62 U	<0.57 U	<0.59 U	<0.55 U	<0.60 U	<0.66 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**2.1**	**1.3 J**	<0.81 U	<0.90 U	**2.5**	**17**	**3.1 F1**	<0.81 U	**1.4 J**	**3.7**	<0.91 U
NMeFOSA	ng/L	--	<0.37 U	<0.42 U	<0.36 U	<0.39 U	<0.40 U	<0.37 U	<0.38 U	<0.35 U	<0.39 U	<0.42 U	<0.40 U
NEtFOSA	ng/L	20	<0.76 U	<0.85 U	<0.72 U	<0.80 U	<0.80 U	<0.75 U	<0.77 U	<0.72 U	<0.78 U	<0.86 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.2 U	<0.99 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<0.99 U	<1.1 U	<1.2 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.4 U	<1.3 U
NEtFOSE	ng/L	20	<0.74 U	<0.83 U	<0.70 U	<0.78 U	<0.78 U	<0.73 U	<0.75 U	<0.70 U	<0.76 U	<0.84 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.5 U	<1.2 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.5 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.39 U	<0.33 U	<0.37 U	<0.37 U	<0.34 U	<0.35 U	<0.33 U	<0.36 U	<0.39 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.21 U	<0.21 UF1	<0.20 U	<0.22 U	<0.24 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.31 U	<0.26 U	<0.29 U	<0.29 U	<0.27 U	<0.28 U	<0.26 U	<0.29 U	<0.32 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10.2**	**19.4**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.1**	**1.3**	ND	ND	**2.5**	**17**	**3.1**	ND	**1.4**	**13.9**	**19.4**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.1	0.0	0.0	0.1	0.9	0.2	0.0	0.1	0.8	1.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1050	1051	1052	1053	1054	1055	1056	1057	1058	1058	1060
		Sample Date	10/30/20	10/28/20	11/03/20	10/26/20	10/26/20	10/27/20	05/27/21	10/26/20	10/27/20	04/14/21	10/28/20
		Sample Number	PWS1050-OS-103020-100	PWS1051-OS-102820-100	PWS1052-OS-110320-100	PWS1053-OS-102620-100	PWS1054-OS-102620-100	PWS1055-OS-102720-100	PWS1056-IS-052721-100	PWS1057-OS-102620-100	PWS1058-OS-102720-100	PWS1058-OS-041421-100	PWS1060-OS-102820-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.3 U	**5.2**	<2.1 U	<2.2 U	<2.2 U	**5.0**	**2.4 J**	**2.3 J**	**4.5 J**	<2.4 U
PFPeA	ng/L	--	<0.46 U	<0.47 U	**2.7**	**0.46 J**	<0.45 U	**0.45 J**	**7.8**	**0.55 J**	**1.6 J**	**4.9**	**1.7 J**
PFHxA	ng/L	150,000	<0.54 U	<0.56 U	**2.4**	<0.50 U	<0.54 U	<0.53 U	**15**	**0.75 J**	**1.5 J**	**5.4**	**0.82 J**
PFHpA	ng/L	--	<0.23 U	<0.24 U	**1.4 J**	<0.22 U	<0.23 U	<0.23 U	**3.0**	**0.43 J**	**0.97 J**	**2.7**	**0.46 J**
PFOA	ng/L	20	<0.79 U	<0.82 U	**2.5**	<0.74 U	<0.79 U	<0.77 U	**10**	<0.76 U	**2.2**	**4.5**	<0.83 U
PFNA	ng/L	30	<0.25 U	<0.26 U	<0.26 U	<0.23 U	<0.25 U	<0.25 U	**1.0 J**	<0.24 U	<0.26 U	<0.25 U	<0.26 U
PFDA	ng/L	300	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.29 U	<0.28 U	**0.32 J**	<0.28 U	<0.30 U	<0.28 U	<0.30 U
PFUnA	ng/L	3,000	<1.0 U	<1.1 U	<1.1 U	<0.95 U	<1.0 U	<1.0 U	<0.99 U+	<0.98 U	<1.1 U	<1.0 U	<1.1 U
PFDoA	ng/L	500	<0.51 U	<0.53 U	**1.3 J**	<0.48 U	<0.51 U	<0.50 U	<0.50 U	<0.49 U	<0.54 U	<0.50 U	<0.54 U
PFTriA	ng/L	--	<1.2 U	<1.3 U	<1.3 UF1	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U
PFTeA	ng/L	10,000	<0.68 U	<0.71 U	**1.2 J**	<0.63 U	<0.68 U	<0.67 U	<0.66 U	<0.65 U	<0.71 U	<0.67 U	<0.72 U
PFHxDA	ng/L	--	<0.83 U	<0.86 U	<0.86 U	<0.77 U	<0.83 U	<0.81 U	<0.80 U	<0.79 U	<0.87 U	<0.82 U	<0.87 U
PFODA	ng/L	400,000	<0.88 U	<0.91 U	<0.91 U	<0.81 U	<0.87 U	<0.86 U	<0.85 U	<0.84 U	<0.92 U	<0.80 U	<0.92 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.19 U	**0.57 J**	**0.42 J**	<0.19 U	**0.42 J**	**17**	**1.3 J**	**3.5**	**4.5**	**0.20 J**
PFPeS	ng/L	--	<0.28 U	<0.29 U	<0.29 U	<0.26 U	<0.28 U	<0.27 U	**0.65 J**	<0.27 U	<0.29 U	**0.38 J**	<0.29 U
PFHxS	ng/L	40	<0.53 U	<0.55 U	**2.5**	**0.52 J**	<0.53 U	<0.52 U	**4.4**	**0.54 J**	**0.96 J**	**1.1 J**	<0.56 U
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.18 U	<0.16 U	<0.18 U	<0.17 U	**0.86 J**	<0.17 U	<0.19 U	<0.17 U	<0.19 U
PFOS	ng/L	20	<0.50 U	<0.52 U	**1.8 J**	<0.47 U	<0.50 U	<0.49 U	**48**	<0.48 U	<0.53 U	**0.81 J**	<0.53 U
PFNS	ng/L	--	<0.34 U	<0.36 U	**0.53 J**	<0.32 U	<0.34 U	<0.34 U	<0.33 U	<0.33 U	<0.36 U	<0.34 U	<0.36 U
PFDS	ng/L	--	<0.30 U	<0.31 U	**1.0 J**	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.31 U	<0.29 U	<0.31 U
PFDoS	ng/L	--	<0.90 U	<0.94 U	<0.94 U	<0.84 U	<0.90 U	<0.88 U	<0.88 U	<0.87 U	<0.95 U	<0.89 U	<0.95 U
4:2 FTSA	ng/L	--	<0.22 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.22 U	<0.24 U
6:2 FTSA	ng/L	--	<2.3 U	<2.4 U	<2.4 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.4 U	<2.3 U	<2.5 U
8:2 FTSA	ng/L	--	<0.43 U	<0.45 U	<0.44 U	<0.40 U	<0.43 U	<0.42 U	<0.42 U	<0.41 U	<0.45 U	<0.42 U	<0.45 U
10:2 FTSA	ng/L	--	<0.62 U	<0.65 U	**1.2 J**	<0.58 U	<0.62 U	<0.61 U	<0.61 U	<0.60 U	<0.65 U	<0.61 U	<0.66 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.91 U	**2.0**	<0.95 U	<0.85 U	<0.91 U	<0.89 U	<0.89 U	<0.87 U	<0.96 U	<0.90 U	<0.96 U
NMeFOSA	ng/L	--	<0.40 U	<0.42 U	<0.42 U	<0.37 U	<0.40 U	<0.39 U	<0.39 U	<0.38 U	<0.42 U	<0.39 U	<0.42 U
NEtFOSA	ng/L	20	<0.81 U	<0.84 U	<0.84 U	<0.75 U	<0.81 U	<0.79 U	<0.79 U	<0.78 U	<0.85 U	<0.80 U	<0.85 U
NMeFOSAA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U
NEtFOSAA	ng/L	20	<1.2 U	<1.3 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U
NMeFOSE	ng/L	--	<1.3 U	<1.4 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.3 U	<1.4 U
NEtFOSE	ng/L	20	<0.79 U	<0.82 U	<0.82 U	<0.74 U	<0.79 U	<0.77 U	<0.77 U	<0.76 U	<0.83 U	<0.78 U	<0.83 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.5 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.5 U	<1.4 U	<1.5 U
DONA	ng/L	3,000	<0.37 U	<0.39 U	<0.39 U	<0.35 U	<0.37 U	<0.36 U	<0.36 U	<0.36 U	<0.39 U	<0.37 U	<0.39 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.23 U	**0.34 J**	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.22 U	<0.24 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.31 U	**1.4 J**	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.31 U	<0.29 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**4.3**	ND	ND	ND	**58**	ND	**2.2**	**5.31**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**2**	**4.3**	ND	ND	ND	**58**	ND	**2.2**	**5.31**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.3	0.0	0.0	0.0	3.0	0.0	0.1	0.3	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

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U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1060	1061	1062	1062	1063	1064	1064	1065	1065	1066	1067
		Sample Date	10/28/20	10/28/20	10/28/20	04/13/21	10/30/20	10/29/20	04/12/21	10/29/20	04/12/21	11/09/20	11/03/20
		Sample Number	PWS-FD01-102820	PWS1061-OS-102820-100	PWS1062-OS-102820-100	PWS1062-OS-041321-100	PWS1063-OS-103020-100	PWS1064-OS-102920-100	PWS1064-OS-041221-100	PWS1065-OS-102920-100	PWS1065-OS-041221-100	PWS1066-OS-110920-100	PWS1067-OS-110320-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.3 U	<2.4 U	<2.2 U	<2.3 U	**4.1 J**	**5.6**	**2.5 J**	**3.4 J**	<2.3 U	<2.2 U
PFPeA	ng/L	--	**1.5 J**	<0.46 U	**0.85 J**	<0.45 U	<0.46 U	**2.1**	**2.4**	**0.73 J**	**1.5 J**	<0.46 U	<0.45 U
PFHxA	ng/L	150,000	**0.81 J**	<0.55 U	<0.58 U	<0.54 U	<0.55 U	**3.0**	**3.5**	**0.82 J**	**2.8**	<0.54 U	<0.53 U
PFHpA	ng/L	--	**0.40 J**	<0.24 U	**0.27 J**	<0.23 U	<0.24 U	**1.7 J**	**1.6 J**	**0.47 J**	**0.97 J**	<0.23 U	<0.23 U
PFOA	ng/L	20	<0.74 U	<0.81 U	<0.85 U	<0.79 U	<0.80 U	**7.1**	**8.1**	**2.6**	**3.9**	<0.80 U	<0.78 U
PFNA	ng/L	30	<0.24 U	<0.26 U	<0.27 U	<0.25 U	<0.26 U	<0.24 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U
PFDA	ng/L	300	<0.27 U	<0.29 U	<0.31 U	<0.29 U	<0.29 U	<0.27 U	<0.29 U	<0.27 U	<0.29 U	<0.29 U	<0.28 U
PFUnA	ng/L	3,000	<0.96 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.97 U	<1.0 U	<0.97 U	<1.0 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.48 U	<0.52 U	<0.55 U	<0.51 U	<0.52 U	<0.49 U	<0.51 U	<0.48 U	<0.51 U	<0.52 U	<0.50 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.64 U	<0.69 U	<0.73 U	<0.68 U	<0.69 U	<0.64 U	<0.68 U	<0.64 U	<0.68 U	<0.69 U	<0.67 U
PFHxDA	ng/L	--	<0.78 U	<0.84 U	<0.89 U	<0.83 U	<0.84 U	<0.78 U	<0.83 U	<0.78 U	<0.83 U	<0.84 U	<0.82 U
PFODA	ng/L	400,000	<0.82 U	<0.89 U	<0.94 U	<0.80 U	<0.89 U	<0.83 U	<0.87 U	<0.83 U	<0.88 U	<0.88 U	<0.86 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.17 J**	<0.19 U	**0.41 J**	**0.20 J**	<0.19 U	**3.0**	**3.3**	**0.90 J**	**1.2 J**	<0.19 U	<0.18 U
PFPeS	ng/L	--	<0.26 U	<0.28 U	<0.30 U	<0.28 U	<0.28 U	<0.26 U	<0.28 U	**0.74 J**	**0.61 J**	<0.28 U	<0.28 U
PFHxS	ng/L	40	<0.50 U	<0.54 U	<0.57 U	<0.53 U	<0.54 U	**4.2**	**4.4**	**4.4**	**3.9**	<0.54 U	<0.52 U
PFHpS	ng/L	--	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.17 U
PFOS	ng/L	20	<0.47 U	<0.51 U	<0.54 U	<0.50 U	<0.51 U	**0.67 J**	**0.59 J**	**2.4 I**	<0.50 U	<0.51 U	<0.50 U
PFNS	ng/L	--	<0.32 U	<0.35 U	<0.37 U	<0.34 U	<0.35 U	<0.33 U	<0.34 U	<0.33 U	<0.35 U	<0.35 U	<0.34 U
PFDS	ng/L	--	<0.28 U	<0.30 U	<0.32 U	<0.30 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.30 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.85 U	<0.92 U	<0.97 U	<0.90 U	<0.92 U	<0.86 U	<0.90 U	<0.85 U	<0.91 U	<0.91 U	<0.89 U
4:2 FTSA	ng/L	--	<0.21 U	<0.23 U	<0.24 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.4 U	<2.5 U	<2.3 U	<2.4 U	<2.2 U	<2.3 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.40 U	<0.44 U	<0.46 U	<0.43 U	<0.43 U	<0.41 U	<0.43 U	<0.40 U	<0.43 U	<0.43 U	<0.42 U
10:2 FTSA	ng/L	--	<0.58 U	<0.64 U	<0.67 U	<0.62 U	<0.63 U	<0.59 U	<0.62 U	<0.59 U	<0.63 U	<0.63 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.85 U	**1.2 J**	**2.2**	<0.91 U	<0.93 U	**2.5**	**1.4 J**	**2.9**	<0.92 U	<0.92 U	<0.90 U
NMeFOSA	ng/L	--	<0.37 U	<0.41 U	<0.43 U	<0.40 U	<0.41 U	<0.38 U	<0.40 U	<0.38 U	<0.40 U	<0.40 U	<0.39 U
NEtFOSA	ng/L	20	<0.76 U	<0.82 U	<0.87 U	<0.81 U	<0.82 U	<0.77 U	<0.81 U	<0.77 U	<0.81 U	<0.82 U	<0.80 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.74 U	<0.81 U	<0.85 U	<0.79 U	<0.80 U	<0.75 U	<0.79 U	<0.75 U	<0.79 U	<0.80 U	<0.78 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.38 U	<0.40 U	<0.37 U	<0.38 U	<0.35 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.23 U	<0.24 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.30 U	<0.32 U	<0.30 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.30 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	**7.77**	**8.69**	**5**	**3.9**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**1.2**	**2.2**	ND	ND	**10.27**	**10.09**	**7.9**	**3.9**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.1	0.0	0.0	0.6	0.6	0.5	0.3	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1068	1068	1069	1069	1070	1071	1071	1072	1072	1072	1073
		Sample Date	03/17/21	05/26/21	10/30/20	04/13/21	10/30/20	10/30/20	04/13/21	10/30/20	04/13/21	10/30/20	10/29/20
		Sample Number	PWS1068-OS-031721-100	PWS1068-IS-052621-100	PWS1069-OS-103020-100	PWS1069-OS-041321-100	PWS1070-OS-103020-100	PWS1071-OS-103020-100	PWS1071-OS-041321-100	PWS1072-OS-103020-100	PWS1072-OS-041321-100	PWS-FD01-103020	PWS1073-OS-102920-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**2.7 J**	**2.4 J**	**7.8**	**5.6**	**6.6**	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	**9.7**
PFPeA	ng/L	--	**0.71 J**	**0.59 J**	**12**	**4.5**	**1.4 J**	**0.71 J**	<0.45 U	**0.79 J**	<0.46 U	**0.84 J**	**6.9**
PFHxA	ng/L	150,000	**0.82 J**	**0.88 J**	**9.0**	**4.1**	**0.78 J**	<0.53 U	<0.54 U	**0.55 J**	<0.54 U	**0.57 J**	**4.1**
PFHpA	ng/L	--	**0.39 J**	**0.45 J**	**4.6**	**3.1**	**0.46 J**	**0.47 J**	**0.27 J**	**0.26 J**	<0.23 U	**0.31 J**	**3.9**
PFOA	ng/L	20	**1.7**	**1.7**	**3.4**	**2.8**	<0.74 U	<0.78 U	<0.79 U	**1.4 J**	<0.79 U	**1.6 J**	**3.1**
PFNA	ng/L	30	<0.23 U	<0.21 U	<0.25 U	<0.26 U	<0.24 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	**0.61 J**
PFDA	ng/L	300	<0.26 U	<0.25 U	<0.29 U	**0.29 J**	<0.27 U	<0.28 U	**0.30 J**	<0.28 U	**0.29 J**	<0.29 U	<0.27 U
PFUnA	ng/L	3,000	<0.94 U	<0.87 U	<1.0 U	<1.0 U	<0.96 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.97 U
PFDoA	ng/L	500	<0.47 U	<0.44 U	<0.52 U	<0.52 U	<0.48 U	<0.50 U	<0.51 U	<0.50 U	<0.51 U	<0.51 U	<0.48 U
PFTriA	ng/L	--	<1.1 U	<1.0 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.62 U	<0.58 U	<0.69 U	<0.69 U	<0.64 U	<0.67 U	<0.68 U	<0.66 U	<0.68 U	<0.67 U	<0.64 U
PFHxDA	ng/L	--	<0.76 U	<0.71 U	<0.84 U	<0.84 U	<0.78 U	<0.82 U	<0.83 U	<0.81 U	<0.83 U	<0.82 U	<0.78 U
PFODA	ng/L	400,000	<0.80 U	<0.75 U	<0.88 U	<0.80 U	<0.82 U	<0.86 U	<0.87 U	<0.85 U	<0.84 U	<0.87 U	<0.83 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.4 J**	**1.2 J**	**2.1**	**2.5**	**0.99 J**	**0.50 J**	**0.23 J**	**0.46 J**	**0.84 J**	**0.50 J**	**1.7 J**
PFPeS	ng/L	--	**0.42 J**	**0.30 J**	<0.28 U	**0.28 J**	<0.26 U	<0.27 U	<0.28 U	<0.27 U	<0.28 U	<0.28 U	<0.26 U
PFHxS	ng/L	40	**1.7**	**1.3 J**	**1.3 J**	**1.2 J**	**0.65 J**	<0.52 U	<0.53 U	<0.52 U	**0.80 J**	<0.53 U	**0.74 J**
PFHpS	ng/L	--	<0.16 U	<0.15 U	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.17 U
PFOS	ng/L	20	**1.7 I**	**1.6**	<0.51 U	<0.51 U	<0.47 U	**1.8**	**0.59 J**	**3.1**	<0.50 U	**2.9**	**0.65 J**
PFNS	ng/L	--	<0.32 U	<0.29 U	<0.35 U	<0.35 U	<0.32 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.34 U	<0.33 U
PFDS	ng/L	--	<0.27 U	<0.25 U	<0.30 U	<0.30 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.28 U
PFDoS	ng/L	--	<0.83 U	<0.77 U	<0.91 U	<0.92 U	<0.85 U	<0.89 U	<0.90 U	<0.88 U	<0.90 U	<0.90 U	<0.85 U
4:2 FTSA	ng/L	--	<0.20 U	<0.19 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U
6:2 FTSA	ng/L	--	<2.1 U	<2.0 U	<2.4 U	<2.4 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	**2.2 J**
8:2 FTSA	ng/L	--	<0.39 U	<0.36 U	<0.43 U	<0.44 U	<0.40 U	<0.42 U	<0.43 U	<0.42 U	<0.43 U	<0.43 U	<0.41 U
10:2 FTSA	ng/L	--	<0.57 U	<0.53 U	<0.63 U	<0.64 U	<0.58 U	<0.61 U	<0.62 U	<0.61 U	<0.62 U	<0.62 U	<0.59 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.83 U	<0.78 U	**1.2 J**	**3.0**	<0.86 U	**1.6 J**	<0.91 U	<0.89 U	**1.3 J**	<0.91 U	<0.86 U
NMeFOSA	ng/L	--	<0.37 U	<0.34 U	<0.40 U	<0.41 U	<0.38 U	<0.39 U	<0.40 U	<0.39 U	<0.40 U	<0.40 U	<0.38 U
NEtFOSA	ng/L	20	<0.74 U	<0.69 U	<0.82 U	<0.83 U	<0.76 U	<0.80 U	<0.81 U	<0.79 U	<0.81 U	<0.80 U	<0.77 U
NMeFOSAA	ng/L	--	<1.0 U	<0.95 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.0 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.1 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.72 U	<0.67 U	<0.80 U	<0.81 U	<0.74 U	<0.78 U	<0.79 U	<0.77 U	<0.79 U	<0.79 U	<0.75 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.2 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.34 U	<0.32 U	<0.38 U	<0.38 U	<0.35 U	<0.37 U	<0.37 U	<0.36 U	<0.37 U	<0.37 U	<0.35 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.19 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.25 U	<0.30 U	<0.30 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**3.4**	**3.3**	**3.4**	**2.8**	ND	**1.8**	**0.59**	**4.5**	ND	**4.5**	**3.75**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.4**	**3.3**	**4.6**	**5.8**	ND	**3.4**	**0.59**	**4.5**	**1.3**	**4.5**	**3.75**
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.2	0.3	0.3	0.0	0.2	0.0	0.2	0.1	0.2	0.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

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Laboratory Qualifiers

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to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1073	1073	1074	1075	1076	1077	1078	1079	1079	1080	1081
		Sample Date	04/13/21	10/29/20	03/19/21	10/29/20	10/30/20	10/31/20	10/30/20	10/29/20	04/13/21	10/30/20	11/06/20
		Sample Number	PWS1073-OS-041321-100	PWS-FD02-102920	PWS1074-OS-031921-100	PWS1075-OS-102920-100	PWS1076-OS-103020-100	PWS1077-OS-103120-100	PWS1078-OS-103020-100	PWS1079-OS-102920-100	PWS1079-OS-041321-100	PWS1080-OS-103020-100	PWS1081-OS-110620-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**5.3**	**9.5**	<2.3 U	<2.1 U	**3.3 J**	**2.6 J**	<2.3 U	<2.3 U	<2.2 U	<2.2 U	<1.9 U
PFPeA	ng/L	--	**2.7**	**7.0**	<0.47 U	<0.43 U	**0.87 J**	**0.71 J**	**2.2**	<0.46 U	<0.45 U	<0.46 U	<0.39 U
PFHxA	ng/L	150,000	**1.8 J**	**4.6**	<0.56 U	<0.50 U	**0.66 J**	<0.55 U	**0.95 J**	<0.55 U	<0.53 U	<0.54 U	<0.47 U
PFHpA	ng/L	--	**1.4 J**	**4.0**	<0.24 U	<0.22 U	**0.23 J**	<0.24 U	**0.37 J**	<0.24 U	<0.23 U	<0.23 U	<0.20 U
PFOA	ng/L	20	**1.5 J**	**3.2**	<0.82 U	<0.74 U	<0.79 U	<0.81 U	<0.83 U	<0.80 U	<0.78 U	<0.79 U	<0.68 U
PFNA	ng/L	30	<0.25 U	**0.61 J**	<0.26 U	<0.23 U	<0.25 U	<0.26 U	<0.26 U	<0.26 U	<0.25 U	<0.25 U	<0.22 U
PFDA	ng/L	300	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.29 U	<0.30 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.25 U
PFUnA	ng/L	3,000	<1.0 U	<1.1 U	<1.1 U	<0.96 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<0.88 U
PFDoA	ng/L	500	<0.51 U	<0.54 U	<0.53 U	<0.48 U	<0.51 U	<0.52 U	<0.54 U	<0.52 U	<0.51 U	<0.51 U	**2.5**
PFTriA	ng/L	--	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	**6.1**
PFTeA	ng/L	10,000	<0.68 U	<0.72 U	<0.70 U	<0.63 U	<0.68 U	<0.69 U	<0.71 U	<0.69 U	<0.67 U	<0.68 U	**6.4**
PFHxDA	ng/L	--	<0.83 U	<0.87 U	<0.86 U	<0.77 U	<0.82 U	<0.85 U	<0.87 U	<0.84 U	<0.82 U	<0.83 U	**3.9**
PFODA	ng/L	400,000	<0.83 U	<0.92 U	<0.90 U	<0.82 U	<0.87 U	<0.89 U	<0.92 U	<0.89 U	<0.86 U	<0.87 U	**1.6**
Sulfonic Acids													
PFBS	ng/L	450,000	**0.62 J**	**1.7 J**	<0.19 U	<0.17 U	<0.19 U	<0.19 U	<0.20 U	<0.19 U	<0.18 U	<0.19 U	<0.16 U
PFPeS	ng/L	--	<0.28 U	<0.29 U	<0.29 U	<0.26 U	<0.28 U	<0.29 U	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.24 U
PFHxS	ng/L	40	<0.53 U	**0.73 J**	<0.55 U	<0.50 U	<0.53 U	<0.54 U	<0.56 U	<0.54 U	<0.52 U	<0.53 U	<0.46 U
PFHpS	ng/L	--	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.19 U	<0.18 U	<0.17 U	<0.18 U	<0.15 U
PFOS	ng/L	20	<0.50 U	**0.78 J**	<0.52 U	<0.47 U	<0.50 U	<0.51 U	<0.53 U	<0.51 U	<0.50 U	<0.50 U	<0.43 U
PFNS	ng/L	--	<0.35 U	<0.36 U	<0.36 U	<0.32 U	<0.34 U	<0.35 U	<0.36 U	<0.35 U	<0.34 U	<0.34 U	<0.30 U
PFDS	ng/L	--	<0.30 U	<0.31 U	<0.31 U	<0.28 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.30 U	**1.9**
PFDoS	ng/L	--	<0.90 U	<0.95 U	<0.93 U	<0.84 U	<0.90 U	<0.92 U	<0.95 U	<0.92 U	<0.89 U	<0.90 U	**8.0**
4:2 FTSA	ng/L	--	<0.22 U	<0.24 U	<0.23 U	<0.21 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.19 U
6:2 FTSA	ng/L	--	<2.3 U	**2.8 J**	<2.4 U	<2.2 U	<2.3 U	<2.4 U	<2.4 U	<2.4 U	<2.3 U	<2.3 U	<2.0 U
8:2 FTSA	ng/L	--	<0.43 U	<0.45 U	<0.44 U	<0.40 U	<0.43 U	<0.44 U	<0.45 U	<0.44 U	<0.42 U	<0.43 U	<0.37 U
10:2 FTSA	ng/L	--	<0.62 U	<0.66 U	<0.64 U	<0.58 U	<0.62 U	<0.64 U	<0.65 U	<0.63 U	<0.62 U	<0.62 U	**4.5**
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.91 U	<0.96 U	<0.94 U	**1.7**	<0.91 U	<0.93 U	<0.96 U	**7.0**	<0.90 U	<0.91 U	**0.81 J**
NMeFOSA	ng/L	--	<0.40 U	<0.42 U	<0.41 U	<0.37 U	<0.40 U	<0.41 U	<0.42 U	<0.41 U	<0.40 U	<0.40 U	<0.34 U
NEtFOSA	ng/L	20	<0.81 U	<0.85 U	<0.84 U	<0.76 U	<0.81 U	<0.83 U	<0.85 U	<0.82 U	<0.80 U	<0.81 U	<0.70 U
NMeFOSAA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.0 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	**1.3 J**
NEtFOSAA	ng/L	20	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	**2.3 J**
NMeFOSE	ng/L	--	<1.3 U	<1.4 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.1 U
NEtFOSE	ng/L	20	<0.79 U	<0.83 U	<0.82 U	<0.74 U	<0.79 U	<0.81 U	<0.83 U	<0.80 U	<0.78 U	<0.79 U	<0.68 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.5 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.4 U	<1.2 U
DONA	ng/L	3,000	<0.37 U	<0.39 U	<0.38 U	<0.35 U	<0.37 U	<0.38 U	<0.39 U	<0.38 U	<0.37 U	<0.37 U	<0.32 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.24 U	<0.23 U	<0.21 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.19 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.31 U	<0.31 U	<0.28 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.30 U	**3.0**
Chemical Sum													
PFOS+PFOA	ng/L	20	**1.5**	**3.98**	ND	ND	ND	ND	ND	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**1.5**	**3.98**	ND	**1.7**	ND	ND	ND	**7**	ND	ND	**3.11**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1081	1082	1083	1084	1085	1086	1087	1088	1089	1089	1090
		Sample Date	05/26/21	10/30/20	11/02/20	10/30/20	10/31/20	03/16/21	10/31/20	11/05/20	10/31/20	04/12/21	10/31/20
		Sample Number	PWS1081-OS-052621-100	PWS1082-OS-103020-100	PWS1083-OS-110220-100	PWS1084-OS-103020-100	PWS1085-OS-103120-100	PWS1086-OS-031621-100	PWS1087-OS-103120-100	PWS1088-OS-110520-100	PWS1089-OS-103120-100	PWS1089-OS-041221-100	PWS1090-OS-103120-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.0 U	<2.2 U	<2.3 U	<2.2 U	<2.3 U	<2.1 U	<2.3 U	**16**	**5.5**	**8.6**	**3.5 J**
PFPeA	ng/L	--	<0.41 U	<0.45 U	<0.47 U	<0.45 U	<0.46 U	<0.43 U	**0.47 J**	**16**	**4.8**	**8.1**	**1.7 J**
PFHxA	ng/L	150,000	<0.49 U	<0.54 U	<0.56 U	<0.53 U	<0.55 U	<0.51 U	<0.56 U	**18**	**6.7**	**8.7**	**0.84 J**
PFHpA	ng/L	--	<0.21 U	<0.23 U	<0.24 U	<0.23 U	<0.24 U	<0.22 U	<0.24 U	**14**	**3.2**	**6.1**	**0.79 J**
PFOA	ng/L	20	<0.72 U	<0.79 U	<0.82 U	<0.78 U	<0.80 U	<0.74 U	<0.82 U	**38**	**8.0**	**16**	**3.0**
PFNA	ng/L	30	<0.23 U	<0.25 U	<0.26 U	<0.25 U	<0.26 U	<0.24 U	<0.26 U	**0.53 J**	**0.62 J**	**0.92 J**	**0.53 J**
PFDA	ng/L	300	<0.26 U	<0.29 U	<0.30 U	<0.28 U	<0.29 U	<0.27 U	<0.30 U	**2.6**	<0.29 U	<0.30 U	**0.63 J**
PFUnA	ng/L	3,000	<0.93 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.96 U	<1.1 U	<0.98 U	<1.0 U	<1.1 U	<1.0 U
PFDoA	ng/L	500	<0.46 U	<0.51 U	<0.53 U	<0.50 U	<0.52 U	<0.48 U	<0.53 U	<0.49 U	<0.51 U	<0.53 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.62 U	<0.68 U	<0.71 U	<0.67 U	<0.69 U	<0.64 U	<0.71 U	<0.65 U	<0.68 U	<0.70 U	<0.68 U
PFHxDA	ng/L	--	<0.75 U	<0.82 U	<0.86 U	<0.81 U	<0.84 U	<0.78 U	<0.86 U	<0.79 U	<0.83 U	<0.85 U	<0.83 U
PFODA	ng/L	400,000	<0.79 U	<0.87 U	<0.91 U	<0.86 U	<0.89 U	<0.82 U	<0.91 U	<0.84 U	<0.87 U	<0.90 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.17 U	<0.19 U	**43**	**1.5 J**	**2.9**	**2.0**
PFPeS	ng/L	--	<0.25 U	<0.28 U	<0.29 U	<0.27 U	<0.28 U	<0.26 U	<0.29 U	**0.74 J**	<0.28 U	**0.40 J**	**0.37 J**
PFHxS	ng/L	40	<0.48 U	<0.53 U	<0.55 U	<0.52 U	<0.54 U	<0.50 U	<0.55 U	**4.1**	**1.0 J**	**1.7 J**	**2.1**
PFHpS	ng/L	--	<0.16 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	**0.40 J**	<0.18 U	**0.25 J**	**0.36 J**
PFOS	ng/L	20	<0.46 U	<0.50 U	<0.52 U	<0.49 U	**0.54 J**	<0.47 U+	<0.52 U	**5.5**	**3.1 I**	**9.6**	**20**
PFNS	ng/L	--	<0.31 U	<0.34 U	<0.36 U	<0.34 U	<0.35 U	<0.32 U	<0.36 U	<0.33 U	<0.34 U	<0.35 U	<0.35 U
PFDS	ng/L	--	<0.27 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U	<0.28 U	<0.31 U	<0.28 U	<0.30 U	<0.31 U	<0.30 U
PFDoS	ng/L	--	<0.82 U	<0.90 U	<0.94 U	<0.89 U	<0.92 U	<0.85 U	<0.94 U	<0.86 U	<0.90 U	<0.93 U	<0.91 U
4:2 FTSA	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.21 U	<0.23 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.1 U	<2.3 U	<2.4 U	<2.3 U	**3.7 J**	<2.2 U	<2.4 U	<2.2 U	<2.3 U	<2.4 U	<2.3 U
8:2 FTSA	ng/L	--	<0.39 U	**0.44 J**	<0.44 U	<0.42 U	<0.43 U	<0.40 U	<0.45 U	<0.41 U	<0.43 U	<0.44 U	<0.43 U
10:2 FTSA	ng/L	--	<0.57 U	<0.62 U	<0.65 U	<0.61 U	<0.63 U	<0.58 U	<0.65 U	<0.60 U	<0.62 U	<0.64 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.83 U	<0.91 U	**1.5 J**	<0.90 U	<0.93 U	<0.85 U	<0.95 U	<0.87 U	<0.91 U	<0.94 U	<0.92 U
NMeFOSA	ng/L	--	<0.36 U	<0.40 U	<0.42 U	<0.39 U	<0.41 U	<0.38 U	<0.42 U	<0.38 U	<0.40 U	<0.41 U	<0.40 U
NEtFOSA	ng/L	20	<0.73 U	<0.80 U	<0.84 U	<0.80 U	<0.82 U	<0.76 U	<0.84 U	<0.77 U	<0.81 U	<0.83 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.72 U	<0.79 U	<0.82 U	<0.78 U	<0.80 U	<0.74 U	<0.82 U	<0.76 U	<0.79 U	<0.81 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.5 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.34 U	<0.37 U	<0.39 U	<0.37 U	<0.38 U	<0.35 U	<0.39 U	<0.36 U	<0.37 U	<0.38 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.21 U	<0.23 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U	<0.28 U	<0.31 U	<0.28 U	<0.30 U	<0.31 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	**0.54**	ND	ND	**43.5**	**11.1**	**25.6**	**23**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**1.5**	ND	**0.54**	ND	ND	**43.5**	**11.1**	**25.6**	**23**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.3	0.6	1.4	1.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1091	1091	1091	1092	1092	1093	1093	1093	1094	1095	1096
		Sample Date	11/02/20	04/13/21	11/02/20	10/29/20	04/13/21	11/09/20	04/21/21	11/09/20	11/02/20	11/06/20	11/04/20
		Sample Number	PWS1091-OS-110220-100	PWS1091-IS-041321-100	PWS-FD02-110220	PWS1092-OS-102920-100	PWS1092-OS-041321-100	PWS1093-OS-110920-100	PWS-1093-OS-042121-100	PWS-FD02-110920	PWS1094-OS-110220-100	PWS1095-OS-110620-100	PWS1096-OS-110420-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	<2.2 U	<2.3 U	<2.2 U	<2.2 U	**2.7 J**	**3.2 J**	**2.7 J**	<2.3 U	<2.2 U	<2.1 U
PFPeA	ng/L	--	<0.47 U	<0.45 U	<0.46 U	<0.44 U	<0.45 U	**2.5**	**2.9**	**2.4**	**0.60 J**	**0.50 J**	**0.81 J**
PFHxA	ng/L	150,000	<0.55 U	<0.54 U	<0.55 U	<0.52 U	<0.54 U	**1.6 J**	**2.5**	**1.5 J**	<0.55 U	<0.52 U	**0.78 J**
PFHpA	ng/L	--	<0.24 U	<0.23 U	<0.24 U	<0.23 U	<0.23 U	**1.1 J**	**1.6 J**	**1.2 J**	<0.24 U	<0.23 U	**0.69 J**
PFOA	ng/L	20	<0.81 U	<0.79 U	<0.80 U	<0.77 U	<0.79 U	**2.3**	**3.1**	**2.2**	<0.81 U	<0.77 U	**0.74 J**
PFNA	ng/L	30	<0.26 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.23 U	<0.25 U	<0.26 U	<0.24 U	<0.23 U
PFDA	ng/L	300	<0.29 U	**0.29 J**	<0.29 U	<0.28 U	**0.31 J**	<0.29 U	<0.26 U	<0.28 U	<0.29 U	<0.28 U	<0.27 U
PFUnA	ng/L	3,000	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<1.0 U	<0.92 U	<1.0 U	<1.0 U	<0.99 U	<0.95 U
PFDoA	ng/L	500	<0.52 U	<0.51 U	<0.52 U	<0.50 U	<0.51 U	<0.52 U	<0.46 U	<0.50 U	<0.52 U	<0.50 U	<0.48 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.69 U	<0.68 U	<0.69 U	<0.66 U	<0.68 U	<0.69 U	<0.61 U	<0.66 U	<0.69 U	<0.66 U	<0.63 U
PFHxDA	ng/L	--	<0.85 U	<0.82 U	<0.84 U	<0.80 U	<0.82 U	<0.84 U	<0.74 U	<0.81 U	<0.85 U	<0.80 U	<0.77 U
PFODA	ng/L	400,000	<0.89 U	<0.87 U	<0.88 U	<0.85 U	<0.87 U	<0.89 U	<0.78 U	<0.85 U	<0.89 U	<0.85 U	<0.82 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.19 U	<0.19 U	<0.18 U	<0.19 U	**0.82 J**	**1.6 J**	**0.81 J**	<0.19 U	<0.18 U	<0.17 U
PFPeS	ng/L	--	<0.28 U	<0.28 U	<0.28 U	<0.27 U	<0.28 U	<0.28 U	<0.25 U	<0.27 U	<0.29 U	<0.27 U	<0.26 U
PFHxS	ng/L	40	<0.54 U	<0.53 U	<0.54 U	<0.51 U	<0.53 U	**0.66 J**	**0.77 J**	**0.55 J**	<0.54 U	<0.51 U	<0.49 U
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
PFOS	ng/L	20	<0.51 U	<0.50 U	<0.51 U	<0.49 U	<0.50 U	<0.51 U	<0.45 U	<0.49 U	<0.51 U	<0.49 U	<0.47 U
PFNS	ng/L	--	<0.35 U	<0.34 U	<0.35 U	<0.33 U	<0.34 U	<0.35 U	<0.31 U	<0.34 U	<0.35 U	<0.33 U	<0.32 U
PFDS	ng/L	--	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U
PFDoS	ng/L	--	<0.92 U	<0.90 U	<0.91 U	<0.87 U	<0.90 U	<0.92 U	<0.81 U	<0.88 U	<0.92 U	<0.88 U	<0.84 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.21 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	<2.4 U	<2.3 U	<2.3 U	<2.4 U	<2.1 U	<2.3 U	<2.4 U	<2.3 U	<2.2 U
8:2 FTSA	ng/L	--	<0.44 U	<0.43 U	<0.43 U	<0.41 U	<0.43 U	<0.43 U	<0.38 U	<0.42 U	<0.44 U	<0.42 U	<0.40 U
10:2 FTSA	ng/L	--	<0.64 U	<0.62 U	<0.63 U	<0.60 U	<0.62 U	<0.63 U	<0.56 U	<0.61 U	<0.64 U	<0.61 U	<0.58 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**4.9**	**5.1**	**8.1**	**2.8**	<0.91 U	**2.8**	**0.95 J**	**2.6**	<0.93 U	<0.89 U	**2.6**
NMeFOSA	ng/L	--	<0.41 U	<0.40 U	<0.40 U	<0.39 U	<0.40 U	<0.41 U	<0.36 U	<0.39 U	<0.41 U	<0.39 U	<0.37 U
NEtFOSA	ng/L	20	<0.83 U	<0.81 U	<0.82 U	<0.78 U	<0.81 U	<0.82 U	<0.73 U	<0.79 U	<0.83 U	<0.79 U	<0.76 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.81 U	<0.79 U	<0.80 U	<0.77 U	<0.79 U	<0.80 U	<0.71 U	<0.77 U	<0.81 U	<0.77 U	<0.74 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.38 U	<0.37 U	<0.38 U	<0.36 U	<0.37 U	<0.38 U	<0.33 U	<0.36 U	<0.38 U	<0.36 U	<0.35 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	**2.3**	**3.1**	**2.2**	ND	ND	**0.74**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**4.9**	**5.1**	**8.1**	**2.8**	ND	**5.1**	**4.05**	**4.8**	ND	ND	**3.34**
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.3	0.4	0.1	0.0	0.3	0.2	0.3	0.0	0.0	0.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1098	1098	1099	1099	1100	1101	1101	1102	1103	1104	1104
		Sample Date	11/02/20	05/25/21	11/05/20	04/13/21	11/03/20	10/26/20	04/13/21	10/26/20	05/28/21	10/26/20	10/26/20
		Sample Number	PWS1098-OS-110220-100	PWS1098-OS-052521-100	PWS1099-OS-110520-100	PWS1099-OS-041321-100	PWS1100-OS-110320-100	PWS1101-OS-102620-100	PWS1101-OS-041321-100	PWS1102-OS-102620-100	PWS1103-OS-052821-100	PWS1104-OS-102620-100	PWS-FD02-102620
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	**4.6**	<2.2 U	<2.2 U	**3.2 J**	**21**	**24**	<2.2 U	<2.0 U	<2.1 U	<2.0 U
PFPeA	ng/L	--	<0.46 U	**1.7**	**1.5 J**	**1.6 J**	**2.6**	**16**	**20**	<0.46 U	<0.41 U	<0.42 U	<0.42 U
PFHxA	ng/L	150,000	<0.55 U	**1.9**	**1.5 J**	**2.3**	**2.9**	**12**	**14**	<0.54 U	<0.49 U	<0.50 U	<0.49 U
PFHpA	ng/L	--	<0.24 U	**1.8**	**0.96 J**	**1.0 J**	**1.1 J**	**16**	**14**	<0.23 U	<0.21 U	<0.21 U	<0.21 U
PFOA	ng/L	20	**2.4**	**7.0**	**3.5**	**4.3**	**1.7 J**	**3.6**	**5.1**	<0.79 U	<0.72 U	<0.73 U	<0.72 U
PFNA	ng/L	30	<0.26 U	<0.22 U	<0.25 U	<0.25 U	<0.25 U	**0.90 J**	**1.1 J**	<0.25 U	<0.23 U	<0.23 U	<0.23 U
PFDA	ng/L	300	<0.29 U	<0.25 U	<0.28 U	<0.29 U	<0.29 U	<0.28 U	**0.32 J**	<0.29 U	<0.26 U	<0.27 U	<0.26 U
PFUnA	ng/L	3,000	<1.0 U	<0.90 U	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<1.0 U	<0.93 U+	<0.94 U	<0.94 U
PFDoA	ng/L	500	<0.52 U	<0.45 U	<0.50 U	<0.51 U	<0.51 U	<0.49 U	<0.52 U	<0.51 U	<0.46 U	<0.47 U	<0.47 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U
PFTeA	ng/L	10,000	<0.69 U	<0.60 U	<0.67 U	<0.68 U	<0.68 U	<0.66 U	<0.69 U	<0.68 U	<0.61 U	<0.63 U	<0.62 U
PFHxDA	ng/L	--	<0.84 U	<0.73 U	<0.81 U	<0.83 U	<0.82 U	<0.80 U	<0.84 U	<0.83 U	<0.75 U	<0.76 U	<0.76 U
PFODA	ng/L	400,000	<0.89 U	<0.77 U	<0.86 U	<0.80 U	<0.87 U	<0.84 U	<0.89 U	<0.88 U	<0.79 U	<0.80 U	<0.80 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.31 J**	**0.35 J**	**1.4 J**	**1.5 J**	**0.82 J**	**1.1 J**	**1.5 J**	<0.19 U	<0.17 U	<0.17 U	<0.17 U
PFPeS	ng/L	--	<0.28 U	**0.24 J**	**0.49 J**	**0.47 J**	**0.43 J**	<0.27 U	<0.28 U	<0.28 U	<0.25 U	<0.26 U	<0.26 U
PFHxS	ng/L	40	**0.61 J**	**0.73 J**	**3.0**	**3.0**	**0.66 J**	**0.67 J**	<0.54 U	<0.53 U	<0.48 U	<0.49 U	<0.49 U
PFHpS	ng/L	--	<0.18 U	<0.15 U	**0.27 J**	**0.20 J**	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.16 U	<0.16 U	<0.16 U
PFOS	ng/L	20	<0.51 U	<0.44 U	**5.9**	**5.6**	<0.50 U	**1.4 JI**	**1.9**	<0.50 U	<0.45 U	<0.46 U	<0.46 U
PFNS	ng/L	--	<0.35 U	<0.30 U	<0.34 U	<0.34 U	<0.34 U	<0.33 U	<0.35 U	<0.34 U	<0.31 U	<0.32 U	<0.31 U
PFDS	ng/L	--	<0.30 U	<0.26 U	<0.29 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.27 U	<0.27 U
PFDoS	ng/L	--	<0.92 U	<0.79 U	<0.89 U	<0.90 U	<0.90 U	<0.87 U	<0.92 U	<0.90 U	<0.82 U	<0.83 U	<0.83 U
4:2 FTSA	ng/L	--	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.20 U	<0.21 U	<0.20 U
6:2 FTSA	ng/L	--	<2.4 U	<2.0 U	<2.3 U	<2.3 U	<2.3 U	**2.3 J**	**2.7 J**	<2.3 U	<2.1 U	<2.1 U	<2.1 U
8:2 FTSA	ng/L	--	<0.44 U	<0.37 U	<0.42 U	<0.43 U	<0.43 U	<0.41 U	<0.44 U	<0.43 U	<0.39 U	<0.39 U	<0.39 U
10:2 FTSA	ng/L	--	<0.63 U	<0.55 U	<0.61 U	<0.62 U	<0.62 U	<0.60 U	<0.63 U	<0.62 U	<0.56 U	<0.57 U	<0.57 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**1.3 J**	<0.80 U	<0.90 U	<0.91 U	<0.91 U	<0.88 U	<0.93 U	<0.91 U	**1.6 J**	<0.84 U	<0.83 U
NMeFOSA	ng/L	--	<0.41 U	<0.35 U	<0.39 U	<0.40 U	<0.40 U	<0.39 U	<0.41 U	<0.40 U	<0.36 U	<0.37 U	<0.37 U
NEtFOSA	ng/L	20	<0.82 U	<0.71 U	<0.80 U	<0.81 U	<0.81 U	<0.78 U	<0.82 U	<0.81 U	<0.73 U	<0.74 U	<0.74 U
NMeFOSAA	ng/L	--	<1.1 U	<0.98 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.1 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
NEtFOSE	ng/L	20	<0.80 U	<0.69 U	<0.78 U	<0.79 U	<0.79 U	<0.76 U	<0.80 U	<0.79 U	<0.72 U	<0.73 U	<0.72 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.2 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U
DONA	ng/L	3,000	<0.38 U	<0.33 U	<0.37 U	<0.37 U	<0.37 U	<0.36 U	<0.38 U	<0.37 U	<0.34 U	<0.34 U	<0.34 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.20 U	<0.21 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.26 U	<0.29 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.27 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**2.4**	**7**	**9.4**	**9.9**	**1.7**	**5**	**7**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.7**	**7**	**9.4**	**9.9**	**1.7**	**5**	**7**	ND	**1.6**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.4	0.5	0.6	0.1	0.3	0.4	0.0	0.1	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1105	1106	1107	1107	1107	1108	1109	1110	1111	1112	1113
		Sample Date	10/26/20	10/26/20	03/18/21	05/26/21	03/18/21	10/26/20	10/28/20	10/28/20	10/27/20	10/27/20	05/25/21
		Sample Number	PWS1105-OS-102620-100	PWS1106-OS-102620-100	PWS1107-OS-031821-100	PWS1107-OS-052621-100	PWS-FD01-031821	PWS1108-OS-102620-100	PWS1109-OS-102820-100	PWS1110-OS-102820-100	PWS1111-OS-102720-100	PWS1112-OS-102720-100	PWS1113-OS-052521-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.0 U	<2.2 U	**9.3**	**4.4**	**7.8**	<2.1 U	<2.3 U	<2.3 U	<2.7 U	<2.0 U	<1.9 U
PFPeA	ng/L	--	<0.42 U	<0.44 U	**10**	**5.2**	**10**	<0.42 U	**0.59 J**	<0.47 U	**1.2 J**	<0.42 U	<0.40 U
PFHxA	ng/L	150,000	<0.49 U	<0.52 U	**10**	**7.2**	**11**	<0.50 U	<0.55 U	<0.56 U	**0.96 J**	<0.49 U	<0.47 U
PFHpA	ng/L	--	<0.21 U	<0.23 U	**2.8**	**2.0**	**3.0**	<0.22 U	<0.24 U	<0.24 U	**0.42 J**	<0.21 U	<0.20 U
PFOA	ng/L	20	<0.72 U	<0.77 U	**7.3**	**6.0**	**7.5**	<0.73 U	<0.81 U	<0.82 U	<0.94 U	<0.72 U	<0.69 U
PFNA	ng/L	30	<0.23 U	<0.24 U	<0.25 U	<0.22 U	<0.25 U	<0.23 U	<0.26 U	<0.26 U	<0.30 U	<0.23 U	<0.22 U
PFDA	ng/L	300	<0.26 U	<0.28 U	<0.29 U	<0.26 U	<0.29 U	<0.27 U	<0.30 U	<0.30 U	<0.34 U	<0.26 U	**0.26 J**
PFUnA	ng/L	3,000	<0.94 U	<1.0 U	<1.0 U	<0.91 U	<1.0 U	<0.95 U	<1.1 U	<1.1 U	<1.2 U	<0.94 U	<0.89 U
PFDoA	ng/L	500	<0.47 U	<0.50 U	<0.52 U	<0.45 U	<0.51 U	<0.47 U	<0.53 U	<0.53 U	<0.61 U	<0.47 U	<0.44 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.3 U	<1.4 U	<1.1 U	<1.0 U
PFTeA	ng/L	10,000	<0.62 U	<0.66 U	<0.69 U	<0.60 U	<0.67 U	<0.63 U	<0.70 U	<0.71 U	<0.81 U	<0.62 U	<0.59 U
PFHxDA	ng/L	--	<0.76 U	<0.81 U	<0.84 U	<0.74 U	<0.82 U	<0.77 U	<0.85 U	<0.86 U	<0.98 U	<0.76 U	<0.72 U
PFODA	ng/L	400,000	<0.80 U	<0.85 U	<0.88 U	<0.78 U	<0.86 U	<0.81 U	<0.90 U	<0.91 U	<1.0 U	<0.80 U	<0.76 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.18 U	**4.0**	**3.5**	**3.2**	<0.17 U	**0.23 J**	<0.19 U	**0.39 J**	<0.17 U	<0.16 U
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.28 U	**0.32 J**	**0.43 J**	<0.26 U	<0.29 U	<0.29 U	<0.33 U	<0.26 U	<0.24 U
PFHxS	ng/L	40	<0.49 U	<0.52 U	**1.2 JI**	**1.8**	**1.3 J**	<0.49 U	<0.54 U	<0.55 U	<0.63 U	<0.49 U	<0.46 U
PFHpS	ng/L	--	<0.16 U	<0.17 U	<0.18 U	<0.16 U	<0.17 U	<0.16 U	<0.18 U	<0.18 U	<0.21 U	<0.16 U	<0.15 U
PFOS	ng/L	20	<0.46 U	<0.49 U	<0.51 U	<0.45 U	<0.50 U	<0.47 U	<0.52 U	<0.52 U	<0.60 U	<0.46 U	<0.44 U
PFNS	ng/L	--	<0.32 U	<0.33 U	<0.35 U	<0.31 U	<0.34 U	<0.32 U	<0.35 U	<0.36 U	<0.41 U	<0.32 U	<0.30 U
PFDS	ng/L	--	<0.27 U	<0.29 U	<0.30 U	<0.26 U	<0.29 U	<0.28 U	<0.31 U	<0.31 U	<0.35 U	<0.27 U	<0.26 U
PFDoS	ng/L	--	<0.83 U	<0.88 U	<0.91 U	<0.80 U	<0.89 U	<0.84 U	<0.93 U	<0.94 U	<1.1 U	<0.83 U	<0.78 U
4:2 FTSA	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.20 U	<0.22 U	<0.21 U	<0.23 U	<0.23 U	<0.27 U	<0.20 U	<0.19 U
6:2 FTSA	ng/L	--	<2.1 U	<2.3 U	<2.4 U	<2.1 U	<2.3 U	<2.2 U	<2.4 U	<2.4 U	<2.8 U	<2.1 U	<2.0 U
8:2 FTSA	ng/L	--	<0.39 U	<0.42 U	<0.43 U	<0.38 U	<0.42 U	<0.40 U	<0.44 U	<0.45 U	<0.51 U	<0.39 U	<0.37 U
10:2 FTSA	ng/L	--	<0.57 U	<0.61 U	<0.63 U	<0.55 U	<0.62 U	<0.58 U	<0.64 U	<0.65 U	<0.74 U	<0.57 U	<0.54 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.84 U	<0.89 U	<0.92 U	<0.81 U	<0.90 U	<0.85 U	<0.94 U	<0.95 U	<1.1 U	<0.83 U	<0.79 U
NMeFOSA	ng/L	--	<0.37 U	<0.39 U	<0.40 U	<0.36 U	<0.40 U	<0.37 U	<0.41 U	<0.42 U	<0.47 U	<0.37 U	<0.35 U
NEtFOSA	ng/L	20	<0.74 U	<0.79 U	<0.82 U	<0.72 U	<0.80 U	<0.75 U	<0.83 U	<0.84 U	<0.96 U	<0.74 U	<0.70 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.1 U	<0.99 U	<1.1 U	<1.0 U	<1.1 U	<1.2 U	<1.3 U	<1.0 U	<0.97 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.3 U	<1.4 U	<1.1 U	<1.0 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.4 U	<1.5 U	<1.2 U	<1.1 U
NEtFOSE	ng/L	20	<0.72 U	<0.77 U	<0.80 U	<0.70 U	<0.78 U	<0.73 U	<0.81 U	<0.82 U	<0.94 U	<0.72 U	<0.69 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.2 U	<1.4 U	<1.3 U	<1.4 U	<1.5 U	<1.7 U	<1.3 U	<1.2 U
DONA	ng/L	3,000	<0.34 U	<0.36 U	<0.38 U	<0.33 U	<0.37 U	<0.34 U	<0.38 U	<0.39 U	<0.44 U	<0.34 U	<0.32 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.20 U	<0.22 U	<0.21 U	<0.23 U	<0.23 U	<0.27 U	<0.20 U	<0.19 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.29 U	<0.30 U	<0.26 U	<0.29 U	<0.28 U	<0.31 U	<0.31 U	<0.35 U	<0.27 U	<0.26 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**7.3**	**6**	**7.5**	ND	ND	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**7.3**	**6**	**7.5**	ND	ND	ND	ND	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.4	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1114	1115	1116	1117	1118	1118	1119	1120	1120	1120	1121
		Sample Date	10/27/20	10/29/20	11/09/20	05/27/21	10/27/20	04/14/21	10/27/20	10/27/20	04/20/21	10/27/20	10/30/20
		Sample Number	PWS1114-OS-102720-100	PWS1115-OS-102920-100	PWS1116-OS-110920-100	PWS1117-IS-052721-100	PWS1118-OS-102720-100	PWS1118-OS-041421-100	PWS1119-OS-102720-100	PWS1120-OS-102720-100	PWS-1120-OS-042021-100	PWS-FD01-102720	PWS1121-OS-103020-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.0 U	<2.3 U	<2.3 U	**2.6 J**	**19**	**22**	<2.2 U	**13**	**9.7**	**13**	<2.2 U
PFPeA	ng/L	--	**0.50 J**	<0.47 U	<0.46 U	**2.3**	**17**	**17**	<0.44 U	**2.7**	**5.0**	**2.7**	<0.46 U
PFHxA	ng/L	150,000	<0.50 U	<0.56 U	<0.55 U	**2.0**	**11**	**12**	<0.53 U	**1.0 J**	**2.4**	**1.0 J**	<0.54 U
PFHpA	ng/L	--	<0.21 U	<0.24 U	<0.24 U	**0.81 J**	**11**	**13**	<0.23 U	**0.57 J**	**1.4 J**	**0.56 J**	<0.23 U
PFOA	ng/L	20	<0.73 U	<0.82 U	<0.80 U	**0.99 J**	**5.1**	**6.5**	<0.77 U	**4.2**	**7.0**	**4.5**	<0.79 U
PFNA	ng/L	30	<0.23 U	<0.26 U	<0.26 U	<0.23 U	**1.1 J**	**1.2 J**	<0.24 U	**0.30 J**	<0.26 U	**0.33 J**	<0.25 U
PFDA	ng/L	300	<0.26 U	<0.30 U	<0.29 U	<0.27 U	<0.27 U	**0.37 J**	<0.28 U	<0.28 U	<0.29 U	<0.31 U	<0.29 U
PFUnA	ng/L	3,000	<0.94 U	<1.1 U	<1.0 U	<0.94 U+	<0.97 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U
PFDoA	ng/L	500	<0.47 U	<0.53 U	<0.52 U	<0.47 U	<0.48 U	<0.51 U	<0.50 U	<0.50 U	<0.52 U	<0.56 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U
PFTeA	ng/L	10,000	<0.62 U	<0.70 U	<0.69 U	<0.63 U	<0.64 U	<0.68 U	<0.66 U	<0.67 U	<0.69 U	<0.74 U	<0.68 U
PFHxDA	ng/L	--	<0.76 U	<0.86 U	<0.84 U	<0.76 U	<0.78 U	<0.83 U	<0.81 U	<0.81 U	<0.85 U	<0.90 U	<0.83 U
PFODA	ng/L	400,000	<0.80 U	<0.90 U	<0.89 U	<0.81 U	<0.83 U	<0.85 U	<0.85 U	<0.86 U	<0.89 U	<0.95 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.19 U	**0.19 J**	**0.23 J**	**1.5 J**	**1.5 J**	<0.18 U	**2.3**	**2.5**	**2.3**	<0.19 U
PFPeS	ng/L	--	<0.26 U	<0.29 U	<0.28 U	<0.26 U	<0.26 U	<0.28 U	<0.27 U	**0.39 J**	**0.41 J**	**0.50 J**	<0.28 U
PFHxS	ng/L	40	<0.49 U	**1.2 J**	<0.54 U	<0.49 U	**0.76 J**	**0.82 J**	<0.52 U	**1.4 J**	**2.0**	**1.4 J**	<0.53 U
PFHpS	ng/L	--	<0.16 U	<0.18 U	<0.18 U	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U	<0.19 U	<0.18 U
PFOS	ng/L	20	<0.46 U	<0.52 U	<0.51 U	<0.46 U	**2.0**	**2.3**	<0.49 U	**0.84 J**	**1.1 J**	<0.55 U	<0.50 U
PFNS	ng/L	--	<0.32 U	<0.36 U	<0.35 U	<0.32 U	<0.33 U	<0.35 U	<0.34 U	<0.34 U	<0.35 U	<0.37 U	<0.35 U
PFDS	ng/L	--	<0.27 U	<0.31 U	<0.30 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.32 U	<0.30 U
PFDoS	ng/L	--	<0.83 U	<0.93 U	<0.92 U	<0.83 U	<0.85 U	<0.91 U	<0.88 U	<0.89 U	<0.92 U	<0.98 U	<0.90 U
4:2 FTSA	ng/L	--	<0.20 U	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.24 U	<0.22 U
6:2 FTSA	ng/L	--	<2.1 U	<2.4 U	<2.4 U	**2.1 J**	**2.6 J**	**3.7 J**	<2.3 U	<2.3 U	<2.4 U	<2.5 U	<2.3 U
8:2 FTSA	ng/L	--	<0.39 U	<0.44 U	<0.44 U	<0.39 U	<0.40 U	<0.43 U	<0.42 U	<0.42 U	<0.44 U	<0.47 U	<0.43 U
10:2 FTSA	ng/L	--	<0.57 U	<0.64 U	<0.63 U	<0.57 U	<0.59 U	<0.63 U	<0.61 U	<0.61 U	<0.64 U	<0.68 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.84 U	**1.4 J**	**1.4 J**	<0.84 U	<0.86 U	<0.91 U	<0.89 U	<0.89 U	**1.1 J**	<0.99 U	<0.91 U
NMeFOSA	ng/L	--	<0.37 U	<0.41 U	<0.41 U	<0.37 U	<0.38 U	<0.40 U	<0.39 U	<0.39 U	<0.41 U	<0.44 U	<0.40 U
NEtFOSA	ng/L	20	<0.74 U	<0.84 U	<0.82 U	<0.75 U	<0.77 U	<0.81 U	<0.79 U	<0.79 U	<0.83 U	<0.88 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.2 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U
NEtFOSE	ng/L	20	<0.73 U	<0.82 U	<0.80 U	<0.73 U	<0.75 U	<0.79 U	<0.77 U	<0.78 U	<0.81 U	<0.86 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U
DONA	ng/L	3,000	<0.34 U	<0.38 U	<0.38 U	<0.34 U	<0.35 U	<0.37 U	<0.36 U	<0.37 U	<0.38 U	<0.41 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.24 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.31 U	<0.30 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.32 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	**0.99**	**7.1**	**8.8**	ND	**5.04**	**8.1**	**4.5**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**1.4**	**1.4**	**0.99**	**7.1**	**8.8**	ND	**5.04**	**9.2**	**4.5**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.1	0.0	0.4	0.5	0.0	0.3	0.5	0.3	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1122	1123	1124	1125	1126	1127	1128	1128	1129	1130	1131
		Sample Date	10/31/20	11/02/20	10/30/20	11/10/20	11/12/20	11/11/20	10/31/20	04/14/21	10/31/20	11/03/20	11/04/20
		Sample Number	PWS1122-OS-103120-100	PWS1123-OS-110220-100	PWS1124-OS-103020-100	PWS1125-OS-111020-100	PWS1126-OS-111220-100	PWS1127-OS-111120-100	PWS1128-OS-103120-100	PWS1128-OS-041421-100	PWS1129-OS-103120-100	PWS1130-OS110320-100	PWS1131-OS-110420-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.2 U	**2.9 J**	**3.6 J**	**3.0 J**	**7.2**	<2.1 U
PFPeA	ng/L	--	**1.7 J**	<0.47 U	<0.46 U	<0.47 U	**0.58 J**	<0.45 U	**1.3 J**	**2.3**	**1.6 J**	**1.0 J**	**0.59 J**
PFHxA	ng/L	150,000	**0.61 J**	<0.56 U	<0.55 U	<0.55 U	<0.53 U	<0.54 U	**1.2 J**	**2.3**	**1.9**	<0.55 U	<0.50 U
PFHpA	ng/L	--	<0.23 U	<0.24 U	<0.24 U	<0.24 U	<0.23 U	<0.23 U	**0.55 J**	**0.89 J**	**1.2 J**	**0.25 J**	<0.21 U
PFOA	ng/L	20	<0.78 U	<0.81 U	<0.80 U	<0.81 U	<0.78 U	<0.79 U	**2.2**	**3.6**	**1.1 J**	**0.95 J**	<0.73 U
PFNA	ng/L	30	<0.25 U	<0.26 U	<0.26 U	<0.26 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	**0.37 J**	<0.26 U	<0.23 U
PFDA	ng/L	300	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.28 U	<0.29 U	<0.28 U	**0.29 J**	<0.28 U	<0.29 U	<0.27 U
PFUnA	ng/L	3,000	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<1.0 U	<1.0 U	<0.94 U
PFDoA	ng/L	500	<0.50 U	<0.53 U	<0.52 U	<0.53 U	<0.50 U	<0.51 U	<0.50 U	<0.51 U	<0.50 U	<0.52 U	<0.47 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.67 U	<0.70 U	<0.69 U	**0.83 J**	<0.67 U	<0.68 U	<0.66 U	<0.67 U	<0.67 U	<0.69 U	<0.63 U
PFHxDA	ng/L	--	<0.82 U	<0.85 U	<0.84 U	<0.85 U	<0.82 U	<0.83 U	<0.80 U	<0.82 U	<0.81 U	<0.84 U	<0.76 U
PFODA	ng/L	400,000	<0.86 U	<0.90 U	<0.89 U	<0.90 U	<0.86 U	<0.87 U	<0.85 U	<0.85 U	<0.86 U	<0.89 U	<0.81 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	<0.19 U	<0.19 U	<0.19 U	**1.5 JI**	<0.19 U	**0.95 J**	**0.95 J**	**2.4**	**0.83 J**	<0.17 U
PFPeS	ng/L	--	<0.28 U	<0.29 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U	**0.27 J**	<0.28 U	<0.27 U	<0.28 U	<0.26 U
PFHxS	ng/L	40	<0.52 U	<0.55 U	<0.54 U	<0.54 U	<0.52 U	<0.53 U	**1.6 J**	**1.3 J**	**0.60 J**	**0.75 J**	**0.82 J**
PFHpS	ng/L	--	<0.17 U	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.16 U
PFOS	ng/L	20	<0.50 U	<0.52 U	<0.51 U	<0.52 U	<0.50 U	<0.50 U	**1.7 J**	**1.8**	**0.59 J**	<0.51 U	<0.46 U
PFNS	ng/L	--	<0.34 U	<0.35 U	<0.35 U	<0.35 U	<0.34 U	<0.34 U	<0.33 U	<0.34 U	<0.34 U	<0.35 U	<0.32 U
PFDS	ng/L	--	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.27 U
PFDoS	ng/L	--	<0.89 U	<0.93 U	<0.92 U	<0.93 U	<0.89 U	<0.90 U	<0.88 U	<0.90 U	<0.88 U	<0.92 U	<0.83 U
4:2 FTSA	ng/L	--	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.21 U
6:2 FTSA	ng/L	--	<2.3 U	<2.4 U	<2.4 U	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.4 U	<2.1 U
8:2 FTSA	ng/L	--	<0.42 U	<0.44 U	<0.43 U	<0.44 U	<0.42 U	<0.43 U	<0.42 U	<0.42 U	<0.42 U	<0.44 U	<0.39 U
10:2 FTSA	ng/L	--	<0.61 U	<0.64 U	<0.63 U	<0.64 U	<0.61 U	<0.62 U	<0.61 U	<0.62 U	<0.61 U	<0.63 U	<0.57 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.90 U	<0.94 U	<0.93 U	<0.94 U	<0.90 U	<0.91 U	<0.89 U	<0.91 U	<0.89 U	<0.93 U	**1.3 J**
NMeFOSA	ng/L	--	<0.39 U	<0.41 U	<0.41 U	<0.41 U	<0.39 U	<0.40 U	<0.39 U	<0.40 U	<0.39 U	<0.41 U	<0.37 U
NEtFOSA	ng/L	20	<0.80 U	<0.83 U	<0.82 U	<0.83 U	<0.80 U	<0.81 U	<0.79 U	<0.80 U	<0.79 U	<0.82 U	<0.75 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.78 U	<0.81 U	<0.80 U	<0.81 U	<0.78 U	<0.79 U	<0.77 U	<0.79 U	<0.77 U	<0.80 U	<0.73 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.37 U	<0.38 U	<0.38 U	<0.38 U	<0.37 U	<0.37 U	<0.36 U	<0.37 U	<0.36 U	<0.38 U	<0.34 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	ND	**3.9**	**5.4**	**1.69**	**0.95**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	ND	**3.9**	**5.4**	**1.69**	**0.95**	**1.3**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.1	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1132	1133	1134	1135	1135	1136	1137	1138	1139	1140	1141
		Sample Date	11/06/20	11/02/20	11/04/20	11/10/20	05/28/21	03/18/21	11/03/20	11/03/20	11/03/20	11/05/20	11/05/20
		Sample Number	PWS1132-OS-110620-100	PWS1133-OS-110220-100	PWS1134-OS-110420-100	PWS1135-OS-111020-100	PWS1135-OS-052821-100	PWS1136-OS-031821-100	PWS1137-OS-110320-100	PWS1138-OS-110320-100	PWS1139-OS-110320-100	PWS1140-OS-110520-100	PWS1141-OS-110520-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.4 U	<2.3 U	**2.1 J**	**3.2 J**	**4.2 J**	<2.3 U	<2.1 U	<2.2 U	<2.0 U	**2.6 J**	<2.3 U
PFPeA	ng/L	--	**1.0 J**	<0.47 U	**2.5**	**4.3**	**5.7**	<0.46 U	**0.98 J**	**0.53 J**	<0.41 U	**1.5 J**	<0.46 U
PFHxA	ng/L	150,000	**0.89 J**	<0.56 U	**3.2**	**8.7**	**12**	<0.55 U	**0.62 J**	**0.63 J**	<0.49 U	<0.53 U	<0.54 U
PFHpA	ng/L	--	**0.38 J**	<0.24 U	**1.8**	**3.4**	**4.4**	<0.24 U	**0.26 J**	<0.23 U	<0.21 U	<0.23 U	<0.23 U
PFOA	ng/L	20	<0.83 U	<0.82 U	**6.9**	**7.2**	**12**	<0.80 U	<0.74 U	<0.78 U	<0.72 U	<0.78 U	<0.80 U
PFNA	ng/L	30	<0.26 U	<0.26 U	<0.24 U	**0.36 J**	**5.5**	<0.26 U	<0.24 U	<0.25 U	<0.23 U	<0.25 U	<0.25 U
PFDA	ng/L	300	<0.30 U	<0.30 U	<0.28 U	<0.28 U	**0.83 J**	<0.29 U	<0.27 U	<0.29 U	<0.26 U	<0.28 U	<0.29 U
PFUnA	ng/L	3,000	<1.1 U	<1.1 U	<0.98 U	<0.98 U	<0.97 U+	<1.0 U	<0.96 U	<1.0 U	<0.93 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.54 U	<0.53 U	<0.49 U	<0.49 U	<0.49 U	<0.52 U	<0.48 U	<0.51 U	<0.46 U	<0.50 U	<0.52 U
PFTriA	ng/L	--	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.72 U	<0.70 U	<0.65 U	<0.65 U	<0.65 U	<0.69 U	<0.64 U	<0.67 U	<0.62 U	<0.67 U	<0.69 U
PFHxDA	ng/L	--	<0.87 U	<0.86 U	<0.79 U	<0.79 U	<0.79 U	<0.84 U	<0.78 U	<0.82 U	<0.75 U	<0.82 U	<0.84 U
PFODA	ng/L	400,000	<0.92 U	<0.91 U	<0.84 U	<0.84 U	<0.83 U	<0.89 U	<0.82 U	<0.87 U	<0.79 U	<0.86 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.1 J**	<0.19 U	**0.67 J**	**12**	**33**	<0.19 U	<0.17 U	**0.21 J**	<0.17 U	<0.18 U	<0.19 U
PFPeS	ng/L	--	<0.29 U	<0.29 U	<0.27 U	<0.27 U	**0.35 J**	<0.28 U	<0.26 U	<0.28 U	<0.25 U	<0.28 U	<0.28 U
PFHxS	ng/L	40	**2.0**	<0.55 U	**0.65 J**	**3.1**	**4.3**	<0.54 U	<0.50 U	<0.53 U	<0.48 U	<0.52 U	<0.53 U
PFHpS	ng/L	--	<0.19 U	<0.18 U	<0.17 U	<0.17 U	**0.52 J**	<0.18 U	<0.17 U	<0.18 U	<0.16 U	<0.17 U	<0.18 U
PFOS	ng/L	20	**0.69 J**	<0.52 U	<0.48 U	**3.2**	**60**	<0.51 U	<0.47 U	<0.50 U	<0.46 U	<0.50 U	<0.51 U
PFNS	ng/L	--	<0.36 U	<0.36 U	<0.33 U	<0.33 U	<0.33 U	<0.35 U	<0.32 U	<0.34 U	<0.31 U	<0.34 U	<0.35 U
PFDS	ng/L	--	<0.31 U	<0.31 U	<0.28 U	<0.28 U	<0.28 U	<0.30 U	<0.28 U	<0.30 U	<0.27 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.95 U	<0.94 U	<0.86 U	<0.86 U	<0.86 U	<0.92 U	<0.85 U	<0.89 U	<0.82 U	<0.89 U	<0.91 U
4:2 FTSA	ng/L	--	<0.24 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.23 U	<0.21 U	<0.22 U	<0.20 U	<0.22 U	<0.23 U
6:2 FTSA	ng/L	--	<2.4 U	<2.4 U	<2.2 U	<2.2 U	<2.2 U	<2.4 U	<2.2 U	<2.3 U	<2.1 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.45 U	<0.44 U	<0.41 U	<0.41 U	<0.41 U	<0.43 U	<0.40 U	<0.42 U	<0.39 U	<0.42 U	<0.43 U
10:2 FTSA	ng/L	--	<0.66 U	<0.65 U	<0.60 U	<0.60 U	<0.59 U	<0.63 U	<0.58 U	<0.62 U	<0.56 U	<0.61 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.96 U	**1.3 J**	**3.7**	<0.87 U	<0.87 U	<0.93 U	<0.86 U	<0.90 U	<0.83 U	<0.90 U	<0.92 U
NMeFOSA	ng/L	--	<0.42 U	<0.41 U	<0.38 U	<0.38 U	<0.38 U	<0.41 U	<0.38 U	<0.40 U	<0.36 U	<0.39 U	<0.40 U
NEtFOSA	ng/L	20	<0.85 U	<0.84 U	<0.77 U	<0.77 U	<0.77 U	<0.82 U	<0.76 U	<0.80 U	<0.73 U	<0.80 U	<0.82 U
NMeFOSAA	ng/L	--	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.4 U	<1.4 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.83 U	<0.82 U	<0.76 U	<0.76 U	<0.75 U+	<0.80 U	<0.74 U	<0.78 U	<0.72 U	<0.78 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.5 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.39 U	<0.39 U	<0.36 U	<0.36 U	<0.35 U	<0.38 U	<0.35 U	<0.37 U	<0.34 U	<0.37 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.24 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.23 U	<0.21 U	<0.22 U	<0.20 U	<0.22 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.31 U	<0.28 U	<0.28 U	<0.28 U	<0.30 U	<0.28 U	<0.30 U	<0.27 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**0.69**	ND	**6.9**	**10.4**	**72**	ND	ND	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**0.69**	**1.3**	**10.6**	**10.4**	**72**	ND	ND	ND	ND	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.1	0.5	0.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1141	1142	1143	1144	1145	1145	1145	1146	1146	1147	1147
		Sample Date	11/05/20	11/06/20	11/07/20	12/16/20	11/07/20	04/14/21	04/14/21	11/07/20	04/14/21	12/16/20	12/16/20
		Sample Number	PWS-FD03-110520	PWS1142-OS-110620-100	PWS1143-OS-110720-100	PWS1144-OS-121620-100	PWS1145-OS-110720-100	PWS1145-OS-041421-100	PWS-FD01-041421	PWS1146-OS-110720-100	PWS1146-OS-041421-100	PWS1147-OS-121620-100	PWS-FD01-121620
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	<2.0 U	<2.2 U	<2.1 U	<2.2 U	<2.2 U	<2.2 U	**15**	**12**	<2.2 U	<2.1 U
PFPeA	ng/L	--	<0.46 U	<0.41 U	**0.64 J**	**0.98 J**	<0.46 U	<0.45 U	<0.46 U	**34**	**29**	<0.44 U	<0.44 U
PFHxA	ng/L	150,000	<0.55 U	<0.49 U	<0.54 U	<0.52 U	<0.54 U	<0.54 U	<0.54 U	**17**	**15**	<0.52 U	<0.52 U
PFHpA	ng/L	--	<0.24 U	<0.21 U	**0.24 J**	<0.22 U	<0.23 U	<0.23 U	<0.23 U	**8.9**	**6.6**	<0.22 U	<0.22 U
PFOA	ng/L	20	<0.80 U	<0.72 U	<0.79 U	<0.76 U	<0.79 U	<0.79 U	<0.79 U	**4.1**	**3.1**	<0.76 U	<0.76 U
PFNA	ng/L	30	<0.25 U	<0.23 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	**0.93 J**	**0.66 J**	<0.24 U	<0.24 U
PFDA	ng/L	300	<0.29 U	<0.26 U	<0.29 U	<0.28 U	<0.29 U	<0.29 U	<0.29 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U
PFUnA	ng/L	3,000	<1.0 U	<0.93 U	<1.0 U	<0.98 U	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<0.99 U	<0.98 U
PFDoA	ng/L	500	<0.52 U	<0.47 U	<0.51 U	<0.49 U	<0.51 U	<0.51 U	<0.51 U	<0.50 U	<0.51 U	<0.49 U	<0.49 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.69 U	<0.62 U	<0.68 U	<0.65 U	<0.68 U	<0.67 U	<0.68 U	<0.66 U	<0.68 U	<0.66 U	<0.65 U
PFHxDA	ng/L	--	<0.84 U	<0.75 U	<0.82 U	<0.79 U	<0.83 U	<0.82 U	<0.83 U	<0.80 U	<0.83 U	<0.80 U	<0.79 U
PFODA	ng/L	400,000	<0.89 U	<0.80 U	<0.87 U	<0.84 U	<0.88 U	<0.84 U	<0.80 U	<0.85 U	<0.83 U	<0.84 U	<0.84 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.17 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U	<0.19 U	**2.6**	**1.7 J**	<0.18 U	<0.18 U
PFPeS	ng/L	--	<0.28 U	<0.25 U	<0.28 U	<0.27 U	<0.28 U	<0.28 U	<0.28 U	<0.27 U	<0.28 U	<0.27 U	<0.27 U
PFHxS	ng/L	40	<0.54 U	**0.55 J**	<0.53 U	<0.51 U	<0.53 U	<0.53 U	<0.53 U	<0.51 U	<0.53 U	<0.51 U	<0.51 U
PFHpS	ng/L	--	<0.18 U	<0.16 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U
PFOS	ng/L	20	<0.51 U	<0.46 U	<0.50 U	<0.48 U	<0.50 U	<0.50 U	<0.50 U	<0.49 U	<0.50 U	<0.49 U	<0.48 U
PFNS	ng/L	--	<0.35 U	<0.31 U	<0.34 U	<0.33 U	<0.35 U	<0.34 U	<0.34 U	<0.33 U	<0.35 U	<0.33 U	<0.33 U
PFDS	ng/L	--	<0.30 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U
PFDoS	ng/L	--	<0.92 U	<0.82 U	<0.90 U	<0.87 U	<0.91 U	<0.90 U	<0.90 U	<0.88 U	<0.91 U	<0.87 U	<0.86 U
4:2 FTSA	ng/L	--	<0.23 U	<0.20 U	<0.22 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U
6:2 FTSA	ng/L	--	<2.4 U	<2.1 U	<2.3 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	**6.2**	**5.9**	<2.2 U	<2.2 U
8:2 FTSA	ng/L	--	<0.43 U	<0.39 U	<0.43 U	<0.41 U	<0.43 U	<0.43 U	<0.43 U	<0.42 U	<0.43 U	<0.41 U	<0.41 U
10:2 FTSA	ng/L	--	<0.63 U	<0.57 U	<0.62 U	<0.60 U+	<0.63 U	<0.62 U	<0.62 U	<0.61 U	<0.63 U	<0.60 U+	<0.60 U+
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.92 U	<0.83 U	<0.91 U	**1.1 J**	**4.1**	<0.91 U	<0.91 U	<0.89 U	<0.92 U	<0.88 U	<0.87 U
NMeFOSA	ng/L	--	<0.41 U	<0.36 U	<0.40 U	<0.38 U	<0.40 U	<0.40 U	<0.40 U	<0.39 U	<0.40 U	<0.39 U	<0.38 U
NEtFOSA	ng/L	20	<0.82 U	<0.74 U	<0.80 U	<0.78 U	<0.81 U	<0.80 U	<0.81 U	<0.79 U	<0.81 U	<0.78 U	<0.77 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.80 U	**0.96 J**	<0.79 U	<0.76 U	<0.79 U	<0.79 U	<0.79 U	<0.77 U	<0.79 U	<0.76 U	<0.76 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U
DONA	ng/L	3,000	<0.38 U	<0.34 U	<0.37 U	<0.36 U	<0.37 U	<0.37 U	<0.37 U	<0.36 U	<0.37 U	<0.36 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.20 U	<0.22 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	ND	ND	**4.1**	**3.1**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**0.96**	ND	**1.1**	**4.1**	ND	ND	**4.1**	**3.1**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.2	0.2	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1148	1148	1149	1149	1150	1151	1152	1153	1153	1154	1154
		Sample Date	03/16/21	05/27/21	11/07/20	05/26/21	10/28/20	10/27/20	10/29/20	11/10/20	06/22/21	10/28/20	04/14/21
		Sample Number	PWS1148-OS-031621-100	PWS1148-IS-052721-100	PWS1149-OS-110720-100	PWS1149-OS-052621-100	PWS1150-OS-102820-100	PWS1151-OS-102720-100	PWS1152-OS-102920-100	PWS1153-OS-111020-100	PWS1153-OS-062221-100	PWS1154-OS-102820-100	PWS1154-OS-041421-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**3.5 J**	**3.1 J**	<2.2 U	**2.8 J**	<2.4 U	<2.0 U	<2.1 U	<2.3 U	<2.2 U	<2.3 U	<2.2 U
PFPeA	ng/L	--	**1.3 J**	**1.1 J**	**1.4 J**	**2.0**	<0.48 U	<0.41 U	<0.42 U	<0.46 U	<0.45 U	<0.46 U	<0.45 U
PFHxA	ng/L	150,000	**1.8 J**	**1.4 J**	**1.5 J**	**2.3**	<0.57 U	<0.49 U	<0.50 U	<0.55 U	<0.53 U	<0.55 U	<0.53 U
PFHpA	ng/L	--	**1.3 J**	**1.2 J**	**0.90 J**	**1.3 J**	<0.25 U	<0.21 U	<0.22 U	<0.24 U	<0.23 U	<0.24 U	<0.23 U
PFOA	ng/L	20	**1.1 J**	**1.6 J**	**2.6**	**3.3**	<0.84 U	<0.71 U	<0.74 U	<0.80 U	<0.77 U	<0.80 U	<0.78 U
PFNA	ng/L	30	<0.26 U	**0.43 J**	<0.24 U	<0.22 U	<0.27 U	<0.23 U	<0.23 U	<0.25 U	<0.25 U	<0.26 U	<0.25 U
PFDA	ng/L	300	<0.29 U	**0.28 J**	<0.28 U	<0.25 U	<0.30 U	<0.26 U	<0.27 U	<0.29 U	<0.28 U	<0.29 U	**0.30 J**
PFUnA	ng/L	3,000	<1.0 U	<0.96 U+	<1.0 U	<0.89 U	<1.1 U	<0.92 U	<0.95 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.52 U	<0.48 U	<0.50 U	<0.45 U	<0.54 U	<0.46 U	<0.48 U	<0.52 U	<0.50 U	<0.52 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.69 U	<0.64 U	<0.66 U	<0.59 U	<0.72 U	<0.61 U	<0.63 U	<0.69 U	<0.66 U	<0.69 U	<0.67 U
PFHxDA	ng/L	--	<0.84 U	<0.78 U	<0.81 U	<0.72 U	<0.87 U	<0.75 U	<0.77 U	<0.84 U	<0.81 U	<0.84 U	<0.81 U
PFODA	ng/L	400,000	<0.89 U	<0.82 U	<0.85 U	<0.76 U	<0.92 U	<0.79 U	<0.81 U	<0.88 U	<0.85 U	<0.89 U	<0.80 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.4 J**	**1.4 J**	**5.3**	**5.2**	<0.20 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.19 U	<0.18 U
PFPeS	ng/L	--	<0.28 U	<0.26 U	**0.42 J**	**0.34 J**	<0.29 U	<0.25 UF1	<0.26 U	<0.28 U	<0.27 U	<0.28 U	<0.27 U
PFHxS	ng/L	40	<0.54 U	<0.50 U	**2.7**	**2.0**	<0.56 U	<0.48 U	<0.49 U	<0.54 U	<0.52 U	<0.54 U	<0.52 U
PFHpS	ng/L	--	<0.18 U	<0.17 U	<0.17 U	<0.15 U	<0.19 U	<0.16 U	<0.16 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U
PFOS	ng/L	20	**1.2 J**	**1.5 J**	**2.6**	**2.7**	<0.53 U	<0.45 U	<0.47 U	<0.51 U	<0.49 U	<0.51 U	<0.49 U
PFNS	ng/L	--	<0.35 U	<0.32 U	<0.33 U	<0.30 U	<0.36 U	<0.31 U	<0.32 U	<0.35 U	<0.34 U	<0.35 U	<0.34 U
PFDS	ng/L	--	<0.30 U	<0.28 U	<0.29 U	<0.26 U	<0.31 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.92 U	<0.85 U	<0.88 U	<0.79 U	<0.95 U	<0.81 U	<0.84 U	<0.91 U	<0.88 U	<0.92 U	<0.89 U
4:2 FTSA	ng/L	--	<0.23 U	<0.21 U	<0.22 U	<0.19 U	<0.24 U	<0.20 U	<0.21 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.4 U	<2.2 U	<2.3 U	<2.0 U	<2.5 U	<2.1 U	<2.2 U	<2.4 U	<2.3 U	<2.4 U	<2.3 U
8:2 FTSA	ng/L	--	<0.44 U	<0.40 U	<0.42 U	<0.37 U	<0.45 U	<0.39 U	<0.40 U	<0.43 U	<0.42 U	<0.44 U	<0.42 U
10:2 FTSA	ng/L	--	<0.63 U	<0.58 U	<0.61 U	<0.54 U	<0.66 U	<0.56 U	<0.58 U	<0.63 U	<0.61 U	<0.63 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.93 U	<0.86 U	<0.89 U	<0.80 U	**1.6 J**	<0.82 U	**1.6 J**	**3.1**	**2.1**	**2.3**	**1.1 J**
NMeFOSA	ng/L	--	<0.41 U	<0.38 U	<0.39 U	<0.35 U	<0.42 U	<0.36 U	<0.37 U	<0.40 U	<0.39 U	<0.41 U	<0.39 U
NEtFOSA	ng/L	20	<0.82 U	<0.76 U	<0.79 U	<0.71 U	<0.85 U	<0.73 U	<0.75 U	<0.82 U	<0.79 U	<0.82 U	<0.79 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U	<0.97 U	<1.2 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.3 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.1 U	<1.4 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.80 U	<0.74 U+	<0.77 U	<0.69 U	<0.84 U	<0.71 U	<0.74 U	<0.80 U	<0.77 U	<0.80 U	<0.78 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.4 U	<1.2 U	<1.5 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.38 U	<0.35 U	<0.36 U	<0.32 U	<0.39 U	<0.34 U	<0.35 U	<0.38 U	<0.36 U	<0.38 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.21 U	<0.22 U	<0.19 U	<0.24 U	<0.20 U	<0.21 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.28 U	<0.29 U	<0.26 U	<0.31 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**2.3**	**3.1**	**5.2**	**6**	ND	ND	ND	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.3**	**3.1**	**5.2**	**6**	**1.6**	ND	**1.6**	**3.1**	**2.1**	**2.3**	**1.1**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.2	0.3	0.4	0.1	0.0	0.1	0.2	0.1	0.1	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1155	1155	1156	1157	1158	1159	1159	1160	1161	1161	1162
		Sample Date	11/04/20	11/04/20	11/10/20	11/02/20	05/28/21	10/28/20	04/17/21	12/17/20	10/28/20	04/20/21	11/02/20
		Sample Number	PWS1155-OS-110420-100	PWS-FD02-110420	PWS1156-OS-111020-100	PWS1157-OS-110220-100	PWS1158-OS-052821-100	PWS1159-OS-102820-100	PWS1159-OS-041721-100	PWS1160-OS-121720-100	PWS1161-OS-102820-100	PWS-1161-OS-042021-100	PWS1162-OS-110220-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**37**	**39**	**5.3**	<2.3 U	<2.1 U	<2.2 U	**2.3 J**	<2.1 U	**3.2 J**	<2.1 U	<2.3 U
PFPeA	ng/L	--	**130**	**120**	**9.8**	<0.48 U	<0.42 U	<0.45 U	**2.2**	<0.43 U	**1.6 J**	<0.43 U	<0.46 U
PFHxA	ng/L	150,000	**63**	**64**	**6.8**	<0.56 U	<0.50 U	<0.54 U	**2.4**	<0.51 U	**0.98 J**	<0.51 U	<0.55 U
PFHpA	ng/L	--	**2.6**	**2.7**	**2.7**	<0.24 U	<0.22 U	<0.23 U	**1.6 J**	<0.22 U	**1.2 J**	<0.22 U	<0.24 U
PFOA	ng/L	20	<0.72 U	<0.71 U	**1.6 J**	<0.83 U	<0.73 U	<0.79 U	**2.6**	<0.75 U	**1.4 J**	<0.74 U	<0.80 U
PFNA	ng/L	30	<0.23 U	<0.23 U	<0.26 U	<0.26 U	<0.23 U	<0.25 U	<0.25 U	<0.24 U	<0.27 U	<0.24 U	<0.25 U
PFDA	ng/L	300	<0.26 U	<0.26 U	<0.30 U	<0.30 U	<0.27 U	<0.29 U	<0.28 U	<0.27 U	<0.30 U	<0.27 U	<0.29 U
PFUnA	ng/L	3,000	<0.93 U	<0.92 U	<1.1 U	<1.1 U	<0.95 U+	<1.0 U	<1.0 U	<0.98 U	<1.1 U	<0.96 U	<1.0 U
PFDoA	ng/L	500	<0.46 U	<0.46 U	<0.53 U	<0.54 U	<0.47 U	<0.51 U	<0.50 U	<0.49 U	<0.54 U	<0.48 U	<0.52 U
PFTriA	ng/L	--	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.62 U	<0.61 U	<0.70 U	<0.71 U	<0.63 U	<0.68 U	<0.67 U	<0.65 U	<0.72 U	<0.64 U	<0.69 U
PFHxDA	ng/L	--	<0.75 U	<0.75 U	<0.85 U	<0.87 U	<0.77 U	<0.83 U	<0.81 U	<0.79 U	<0.87 U	<0.78 U	<0.84 U
PFODA	ng/L	400,000	<0.79 U	<0.79 U	<0.90 U	<0.92 U	<0.81 U	<0.87 U	<0.86 U	<0.83 U	<0.92 U	<0.82 U	<0.89 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.17 U	**0.46 J**	<0.19 U	<0.17 U	**0.56 J**	**2.3**	<0.18 U	**0.38 J**	<0.17 U	<0.19 U
PFPeS	ng/L	--	<0.25 U	<0.25 U	<0.29 U	<0.29 U	<0.26 U	<0.28 U	**0.34 J**	<0.27 U	<0.29 UF1	<0.26 U	<0.28 U
PFHxS	ng/L	40	<0.48 U	<0.48 U	<0.55 U	<0.55 U	<0.49 U	<0.53 U	**2.2**	<0.51 U	**0.56 J**	<0.50 U	<0.54 U
PFHpS	ng/L	--	<0.16 U	<0.16 U	<0.18 U	<0.18 U	<0.16 U	<0.18 U	<0.17 U	<0.17 U	<0.19 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.46 U	<0.45 U	<0.52 U	<0.53 U	<0.47 U	**1.8 J**	**0.61 J**	<0.48 U	**0.85 JI**	**1.3 J**	<0.51 U
PFNS	ng/L	--	<0.31 U	<0.31 U	<0.36 U	<0.36 U	<0.32 U	<0.34 U	<0.34 U	<0.33 U	<0.36 U	<0.32 U	<0.35 U
PFDS	ng/L	--	<0.27 U	<0.27 U	<0.31 U	<0.31 U	<0.28 U	<0.30 U	<0.29 U	<0.28 U	<0.31 U	<0.28 U	<0.30 U
PFDoS	ng/L	--	<0.82 U	<0.82 U	<0.93 U	<0.94 U	<0.84 U	<0.90 U	<0.89 U	<0.86 U	<0.95 U	<0.85 U	<0.91 U
4:2 FTSA	ng/L	--	**0.22 J**	<0.20 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.21 U	<0.24 U	<0.21 U	<0.23 U
6:2 FTSA	ng/L	--	<2.1 U	<2.1 U	<2.4 U	<2.4 U	<2.2 U	<2.3 U	<2.3 U	<2.2 U	<2.5 U	<2.2 U	<2.4 U
8:2 FTSA	ng/L	--	<0.39 U	<0.39 U	<0.44 U	<0.45 U	<0.40 U	<0.43 U	<0.42 U	<0.41 U	<0.45 U	<0.40 U	<0.43 U
10:2 FTSA	ng/L	--	<0.56 U	<0.56 U	<0.64 U	<0.65 U	<0.58 U	<0.62 U	<0.61 U	<0.59 U+	<0.66 U	<0.59 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.83 U	<0.82 U	<0.94 U	<0.95 U	<0.85 U	**6.8**	<0.90 U	<0.87 U	**1.1 J**	<0.86 U	**1.9**
NMeFOSA	ng/L	--	<0.36 U	<0.36 U	<0.41 U	<0.42 U	<0.37 U	<0.40 U	<0.39 U	<0.38 U	<0.42 U	<0.38 U	<0.41 U
NEtFOSA	ng/L	20	<0.73 U	<0.73 U	<0.84 U	<0.85 U	<0.75 U	<0.81 U	<0.79 U	<0.77 U	<0.85 U	<0.76 U	<0.82 U
NMeFOSAA	ng/L	--	<1.0 U	<1.0 U	<1.2 U	<1.2 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.0 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.3 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.72 U	<0.71 U	<0.82 U	<0.83 U	<0.73 U	<0.79 U	<0.78 U	<0.75 U	<0.83 U	<0.74 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.4 U	<1.5 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.5 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.34 U	<0.34 U	<0.38 U	<0.39 U	<0.35 U	<0.37 U	<0.37 U	<0.35 U	<0.39 U	<0.35 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.20 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.21 U	<0.24 U	<0.21 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.27 U	<0.31 U	<0.31 U	<0.28 U	<0.30 U	<0.29 U	<0.28 U	<0.31 U	<0.28 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**1.6**	ND	ND	**1.8**	**3.21**	ND	**2.25**	**1.3**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**1.6**	ND	ND	**8.6**	**3.21**	ND	**3.35**	**1.3**	**1.9**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.1	0.0	0.0	0.4	0.2	0.0	0.2	0.1	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

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Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1163	1163	1164	1164	1165	1165	1165A	1166	1166	1167	1168
		Sample Date	11/02/20	11/02/20	11/02/20	04/22/21	11/02/20	04/16/21	04/16/21	03/17/21	05/26/21	11/04/20	11/02/20
		Sample Number	PWS1163-OS-110220-100	PWS-FD01-110220	PWS1164-OS-110220-100	PWS1164-OS-042221-100	PWS1165-OS-110220-100	PWS1165-OS-041621-100	PWS1165A-IS-041621-100	PWS1166-OS-031721-100	PWS1166-IS-052621-100	PWS1167-OS-110420-100	PWS1168-OS-110220-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.4 U	<2.3 U	<2.3 U	**2.8 J**	**4.8**	**4.2 J**	<2.2 U	**7.2**	**8.8**	<2.1 U	<2.3 U
PFPeA	ng/L	--	**0.80 J**	**1.0 J**	**0.97 J**	**1.4 J**	**4.1**	**4.0**	**1.7 J**	**12**	**10**	<0.43 U	<0.46 U
PFHxA	ng/L	150,000	**2.7**	**2.2**	**0.93 J**	**2.4**	**3.9**	**3.8**	**2.2**	**6.2**	**7.1**	<0.51 U	<0.54 U
PFHpA	ng/L	--	**1.4 J**	**1.6 J**	**0.36 J**	**0.45 J**	**1.9**	**2.5**	**0.98 J**	**5.8**	**4.2**	<0.22 U	<0.23 U
PFOA	ng/L	20	**110**	**110**	**1.0 J**	**1.4 J**	**5.1**	**9.3**	**3.5**	**4.1**	**3.4**	<0.75 U	<0.80 U
PFNA	ng/L	30	<0.27 U	<0.26 U	<0.25 U	<0.25 U	**0.63 J**	**0.60 J**	<0.25 U	<0.23 U	<0.23 U	<0.24 U	<0.25 U
PFDA	ng/L	300	<0.31 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U	<0.27 U	<0.27 U	<0.27 U	<0.29 U
PFUnA	ng/L	3,000	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.95 U	<0.95 U	<0.97 U	<1.0 U
PFDoA	ng/L	500	<0.55 U	<0.53 U	<0.52 U	<0.51 U	<0.53 U	<0.51 U	<0.50 U	<0.48 U	<0.48 U	<0.48 U	<0.52 U
PFTriA	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.72 U	<0.70 U	<0.68 U	<0.67 U	<0.70 U	<0.68 U	<0.67 U	<0.63 U	<0.63 U	<0.64 U	<0.68 U
PFHxDA	ng/L	--	<0.88 U	<0.85 U	<0.83 U	<0.82 U	<0.86 U	<0.83 U	<0.81 U	<0.77 U	<0.77 U	<0.78 U	<0.83 U
PFODA	ng/L	400,000	<0.93 U	<0.90 U	<0.88 U	<0.87 U	<0.91 U	<0.87 U	<0.86 U	<0.81 U	<0.82 U	<0.83 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.63 J**	**0.59 J**	**0.72 J**	**1.1 J**	**1.4 J**	**1.2 J**	**0.73 J**	**0.96 J**	**2.2**	<0.18 U	<0.19 U
PFPeS	ng/L	--	**1.1 J**	**1.2 J**	<0.28 U	<0.28 U	**0.70 J**	**0.51 J**	**0.30 J**	<0.26 U	<0.26 U	<0.26 U	<0.28 U
PFHxS	ng/L	40	**1.7 J**	**1.6 J**	<0.53 U	<0.53 U	**4.9**	**4.7**	**1.6 J**	<0.49 U	**0.59 J**	<0.50 U	<0.53 U
PFHpS	ng/L	--	<0.19 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	**0.41 J**	<0.17 U	<0.16 U	<0.16 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.54 U	<0.52 U	**1.3 JI**	**1.5 J**	**2.1**	**4.4 I**	<0.49 U	<0.47 U+	<0.47 U	<0.47 U	<0.51 U
PFNS	ng/L	--	<0.37 U	<0.35 U	<0.35 U	<0.34 U	<0.36 U	<0.34 U	<0.34 U	<0.32 U	<0.32 U	<0.33 U	<0.35 U
PFDS	ng/L	--	<0.32 U	<0.31 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.30 U
PFDoS	ng/L	--	<0.96 U	<0.93 U	<0.91 U	<0.90 U	<0.93 U	<0.90 U	<0.88 U	<0.84 U	<0.84 U	<0.85 U	<0.91 U
4:2 FTSA	ng/L	--	<0.24 U	<0.23 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.23 U
6:2 FTSA	ng/L	--	<2.5 U	<2.4 U	<2.3 U	<2.3 U	<2.4 U	<2.3 U	<2.3 U	**4.0 J**	**2.4 J**	<2.2 U	<2.3 U
8:2 FTSA	ng/L	--	<0.46 U	<0.44 U	<0.43 U	<0.42 U	<0.44 U	<0.43 U	<0.42 U	<0.40 U	<0.40 U	<0.40 U	<0.43 U
10:2 FTSA	ng/L	--	<0.66 U	<0.64 U	<0.63 U	<0.62 U	<0.65 U	<0.62 U	<0.61 U	<0.58 U	<0.58 U	<0.59 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.97 U	<0.94 U	**2.7**	**1.1 J**	**2.7**	<0.91 U	**1.3 J**	<0.85 U	<0.85 U	<0.86 U	**1.1 J**
NMeFOSA	ng/L	--	<0.43 U	<0.41 U	<0.40 U	<0.40 U	<0.41 U	<0.40 U	<0.39 U	<0.37 U	<0.37 U	<0.38 U	<0.40 U
NEtFOSA	ng/L	20	<0.86 U	<0.83 U	<0.82 U	<0.80 U	<0.84 U	<0.81 U	<0.79 U	<0.75 U	<0.75 U	<0.76 U	<0.82 U
NMeFOSAA	ng/L	--	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	**1.5 J**	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.84 U	<0.81 U	<0.80 U	<0.78 U	<0.82 U	<0.79 U	<0.77 U	<0.74 U	<0.74 U	<0.75 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.5 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.40 U	<0.38 U	<0.38 U	<0.37 U	<0.39 U	<0.37 U	<0.36 U	<0.35 U	<0.35 U	<0.35 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.24 U	<0.23 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.21 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.32 U	<0.31 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**110**	**110**	**2.3**	**2.9**	**7.2**	**13.7**	**3.5**	**4.1**	**3.4**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**110**	**110**	**5**	**4**	**9.9**	**15.2**	**4.8**	**4.1**	**3.4**	ND	**1.1**
Hazard Index (HI)													
HI	ng/L	1.0	5.5	5.5	0.3	0.2	0.6	0.9	0.3	0.2	0.2	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1169	1169	1170	1171	1172	1173	1173	1174	1176	1177	1177
		Sample Date	11/09/20	04/14/21	11/04/20	12/17/20	11/05/20	11/04/20	04/14/21	11/07/20	05/25/21	11/05/20	04/14/21
		Sample Number	PWS1169-OS-110920-100	PWS1169-OS-041421-100	PWS1170-OS-110420-100	PWS1171-OS-121720-100	PWS1172-OS-110520-100	PWS1173-OS-110420-100	PWS1173-OS-041421-100	PWS1174-OS-110720-100	PWS1176-IS-052521-100	PWS1177-OS-110520-100	PWS1177-OS-041421-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.4 U	<2.3 U	<2.2 U	**16**	<2.2 U	**2.1 J**	<2.2 U	<2.0 U	**14**	**7.6**	**11**
PFPeA	ng/L	--	<0.48 U	<0.47 U	<0.45 U	**6.4**	**0.51 J**	**0.98 J**	**0.96 J**	**0.65 J**	**36**	**3.5**	**5.6**
PFHxA	ng/L	150,000	<0.57 U	<0.55 U	<0.53 U	**6.1**	<0.53 U	**0.88 J**	**1.3 J**	<0.49 U	**16**	**2.4**	**4.0**
PFHpA	ng/L	--	<0.24 U	<0.24 U	<0.23 U	**6.1**	<0.23 U	**0.33 J**	**0.29 J**	**0.26 J**	**0.73 J**	**2.6**	**2.3**
PFOA	ng/L	20	<0.83 U	<0.81 U	<0.78 U	**20**	**1.0 J**	**1.3 J**	**0.80 J**	<0.72 U	<0.70 U	**7.3**	**5.6**
PFNA	ng/L	30	<0.26 U	<0.26 U	<0.25 U	**0.55 J**	<0.24 U	<0.24 U	<0.25 U	<0.23 U	<0.22 U	<0.26 U	<0.25 U
PFDA	ng/L	300	<0.30 U	<0.30 U	<0.29 U	<0.26 U	<0.28 U	<0.27 U	<0.29 U	<0.26 U	<0.25 U	<0.29 U	<0.28 U
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<1.0 U	<0.93 U	<1.0 U	<0.97 U	<1.0 U	<0.94 UF1	<0.90 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.54 U	<0.52 U	<0.51 U	<0.46 U	<0.50 U	<0.48 U	<0.51 U	<0.47 U	<0.45 U	<0.52 U	<0.50 U
PFTriA	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.71 U	<0.70 U	<0.67 U	<0.62 U	<0.66 U	<0.64 U	<0.68 U	<0.62 U	<0.60 U	<0.69 U	<0.66 U
PFHxDA	ng/L	--	<0.87 U	<0.85 U	<0.82 U	<0.75 U	<0.81 U	<0.78 U	<0.83 U	<0.76 U	<0.73 U	<0.84 U	<0.81 U
PFODA	ng/L	400,000	<0.92 U	<0.82 U	<0.86 U	<0.79 U	<0.85 U	<0.83 U	<0.83 U	<0.80 U	<0.77 U	<0.89 U	<0.82 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.80 J**	<0.19 U	<0.18 U	**4.0**	**0.20 J**	**0.86 J**	**1.3 J**	<0.17 U	<0.16 U	**2.3**	**3.3**
PFPeS	ng/L	--	<0.29 U	<0.29 U	<0.28 U	**0.99 J**	<0.27 U	<0.26 U	<0.28 U	<0.26 U	<0.25 U	**0.59 J**	**0.59 J**
PFHxS	ng/L	40	<0.56 U	<0.54 U	<0.52 U	**2.8**	<0.52 U	**0.52 J**	**0.56 J**	<0.48 U	<0.47 U	**3.1**	**2.6**
PFHpS	ng/L	--	<0.19 U	<0.18 U	<0.17 U	**0.57 J**	<0.17 U	<0.17 U	<0.18 U	<0.16 U	<0.16 U	<0.18 U	<0.17 U
PFOS	ng/L	20	<0.53 U	<0.51 U	<0.50 U	**5.1 I**	<0.49 U	<0.48 U	<0.50 U	**1.2 J**	<0.44 U	**3.3 I**	<0.49 U
PFNS	ng/L	--	<0.36 U	<0.35 U	<0.34 U	<0.31 U	<0.34 U	<0.33 U	<0.34 U	<0.31 U	<0.30 U	<0.35 U	<0.34 U
PFDS	ng/L	--	<0.31 U	<0.30 U	<0.29 U	<0.27 U	<0.29 U	<0.28 U	<0.30 U	<0.27 U	<0.26 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.95 U	<0.92 U	<0.89 U	<0.82 U	<0.88 U	<0.85 U	<0.90 U	<0.82 U	<0.79 U	<0.92 U	<0.88 U
4:2 FTSA	ng/L	--	<0.24 U	<0.23 U	<0.22 U	<0.20 U	<0.22 U	<0.21 U	<0.22 U	<0.20 U	<0.20 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.4 U	<2.4 U	<2.3 U	<2.1 U	<2.3 U	<2.2 U	<2.3 U	<2.1 U	<2.0 U	<2.4 U	<2.3 U
8:2 FTSA	ng/L	--	<0.45 U	<0.44 U	<0.42 U	<0.39 U	<0.42 U	<0.41 U	<0.43 U	<0.39 U	<0.38 U	<0.44 U	<0.42 U
10:2 FTSA	ng/L	--	<0.66 U	<0.64 U	<0.62 U	<0.57 U+	<0.61 U	<0.59 U	<0.62 U	<0.57 U	<0.55 U	<0.64 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**2.3**	**1.1 J**	**1.4 J**	<0.83 U	<0.89 U	**3.4**	<0.91 U	<0.83 U	<0.80 U	<0.93 U	<0.89 U
NMeFOSA	ng/L	--	<0.42 U	<0.41 U	<0.40 U	<0.36 U	<0.39 U	<0.38 U	<0.40 U	<0.37 U	<0.35 U	<0.41 U	<0.39 U
NEtFOSA	ng/L	20	<0.85 U	<0.83 U	<0.80 U	<0.73 U	<0.79 U	<0.77 U	<0.81 U	<0.74 U	<0.71 U	<0.82 U	<0.79 U
NMeFOSAA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<0.98 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.83 U	<0.81 U	<0.78 U	<0.72 U	<0.77 U	<0.75 U	<0.79 U	<0.72 U	<0.70 U	<0.81 U	<0.77 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.5 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.2 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.39 U	<0.38 U	<0.37 U	<0.34 U	<0.36 U	<0.35 U	<0.37 U	<0.34 U	<0.33 U	<0.38 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.24 U	<0.23 U	<0.22 U	<0.20 U	<0.22 U	<0.21 U	<0.22 U	<0.20 U	<0.20 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.30 U	<0.29 U	<0.27 U	<0.29 U	<0.28 U	<0.30 U	<0.27 U	<0.26 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	**25.1**	**1**	**1.3**	**0.8**	**1.2**	ND	**10.6**	**5.6**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.3**	**1.1**	**1.4**	**25.1**	**1**	**4.7**	**0.8**	**1.2**	ND	**10.6**	**5.6**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.1	0.1	1.3	0.1	0.2	0.1	0.1	0.0	0.6	0.3

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1178	1179	1180	1180	1181	1182	1183	1184	1185	1185	1186
		Sample Date	11/07/20	11/05/20	11/05/20	04/21/21	05/28/21	11/06/20	11/09/20	11/05/20	03/17/21	03/17/21	11/05/20
		Sample Number	PWS1178-OS-110720-100	PWS1179-OS-110520-100	PWS1180-OS-110520-100	PWS-1180-OS-042121-100	PWS1181-IS-052821-100	PWS1182-OS-110620-100	PWS1183-OS-110920-100	PWS1184-OS-110520-100	PWS1185-OS-031721-100	PWS-FD01-031721	PWS1186-OS-110520-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.2 U	**2.5 J**	<2.0 U	<2.3 U	**2.6 J**	**9.6**	**3.9 J**	**7.0**	**7.2**	<2.2 U
PFPeA	ng/L	--	<0.44 U	<0.46 U	**3.1**	**1.6 J**	**1.7 J**	**2.2**	**8.7**	**3.2**	**8.8**	**9.1**	<0.44 U
PFHxA	ng/L	150,000	<0.52 U	<0.54 U	**2.5**	**1.9**	**1.5 J**	**1.3 J**	**10**	**2.3**	**4.6 B**	**4.0 B**	<0.52 U
PFHpA	ng/L	--	<0.22 U	<0.23 U	**1.4 J**	**0.85 J**	**0.30 J**	**0.44 J**	**6.0**	**1.3 J**	**1.1 J**	**1.1 J**	<0.22 U
PFOA	ng/L	20	<0.76 U	<0.79 U	**1.2 J**	**1.5 J**	<0.80 U	**0.88 J**	**19**	**1.9**	**0.92 J**	**0.98 J**	<0.76 U
PFNA	ng/L	30	<0.24 U	<0.25 U	**0.27 J**	**0.27 J**	<0.25 U	<0.25 U	**0.85 J**	<0.25 U	<0.26 U	<0.25 U	<0.24 U
PFDA	ng/L	300	<0.28 U	<0.29 U	<0.29 U	<0.26 U	<0.29 U	<0.29 U	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U
PFUnA	ng/L	3,000	<0.98 U	<1.0 U	<1.0 U	<0.93 U	<1.0 U+	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<0.99 U
PFDoA	ng/L	500	<0.49 U	<0.51 U	<0.51 U	<0.46 U	<0.52 U	<0.51 U	<0.51 U	<0.51 U	<0.53 U	<0.51 U	<0.49 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.65 U	<0.68 U	<0.68 U	<0.62 U	<0.69 U	<0.67 U	<0.68 U	<0.68 U	<0.70 U	<0.68 U	<0.66 U
PFHxDA	ng/L	--	<0.79 U	<0.83 U	<0.82 U	<0.75 U	<0.84 U	<0.82 U	<0.83 U	<0.83 U	<0.86 U	<0.83 U	<0.80 U
PFODA	ng/L	400,000	<0.84 U	<0.87 U	<0.87 U	<0.79 U	<0.88 U	<0.87 U	<0.88 U	<0.88 U	<0.90 U	<0.88 U	<0.84 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	<0.19 U	**0.83 J**	**0.44 J**	<0.19 U	<0.18 U	**1.3 J**	**0.81 J**	<0.19 U	<0.19 U	**0.18 J**
PFPeS	ng/L	--	<0.27 U	<0.28 U	<0.28 U	<0.25 U	<0.28 U	<0.28 U	**1.0 J**	<0.28 U	<0.29 U	<0.28 U	<0.27 U
PFHxS	ng/L	40	<0.51 U	<0.53 U	**0.64 J**	**0.82 J**	<0.53 U	<0.52 U	**13**	**0.68 J**	<0.55 U	<0.53 U	**0.72 J**
PFHpS	ng/L	--	<0.17 U	<0.18 U	<0.18 U	<0.16 U	<0.18 U	<0.17 U	**0.93 J**	<0.18 U	<0.18 U	<0.18 U	<0.17 U
PFOS	ng/L	20	<0.48 U	<0.50 U	**1.6 J**	**1.1 J**	<0.51 U	<0.50 U	**19**	<0.50 U	<0.52 U	<0.50 U	<0.49 U
PFNS	ng/L	--	<0.33 U	<0.34 U	<0.34 U	<0.31 U	<0.35 U	<0.34 U	<0.35 U	<0.35 U	<0.36 U	<0.35 U	<0.33 U
PFDS	ng/L	--	<0.28 U	<0.30 U	<0.30 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.86 U	<0.90 U	<0.90 U	<0.82 U	<0.91 U	<0.89 U	<0.91 U	<0.91 U	<0.93 U	<0.90 U	<0.87 U
4:2 FTSA	ng/L	--	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.3 U	<2.3 U	<2.1 U	<2.3 U	<2.3 U	**2.3 J**	<2.3 U	<2.4 U	<2.3 U	<2.2 U
8:2 FTSA	ng/L	--	<0.41 U	<0.43 U	<0.43 U	<0.39 U	<0.43 U	<0.42 U	<0.43 U	<0.43 U	<0.44 U	<0.43 U	<0.41 U
10:2 FTSA	ng/L	--	<0.60 U	<0.62 U	<0.62 U	<0.57 U	<0.63 U	<0.62 U	<0.63 U	<0.63 U	<0.64 U	<0.62 U	<0.60 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.87 U	<0.91 U	<0.91 U	**1.9**	<0.92 U	<0.90 U	**2.2**	<0.92 U	<0.94 U	<0.91 U	<0.88 U
NMeFOSA	ng/L	--	<0.38 U	<0.40 U	<0.40 U	<0.36 U	<0.40 U	<0.40 U	<0.40 U	<0.40 U	<0.41 U	<0.40 U	<0.39 U
NEtFOSA	ng/L	20	<0.77 U	<0.81 U	<0.81 U	<0.74 U	<0.82 U	<0.80 U	<0.81 U	<0.81 U	<0.84 U	<0.81 U	<0.78 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.76 U	<0.79 U	<0.79 U	<0.72 U	<0.80 U	<0.78 U	<0.79 U	<0.79 U	<0.82 U	<0.79 U	<0.76 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.36 U	<0.37 U	<0.37 U	<0.34 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.38 U	<0.37 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.30 U	<0.30 U	<0.27 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**2.8**	**2.6**	ND	**0.88**	**38**	**1.9**	**0.92**	**0.98**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**2.8**	**4.5**	ND	**0.88**	**40.2**	**1.9**	**0.92**	**0.98**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.2	0.3	0.0	0.0	2.4	0.1	0.0	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1187	1187	1187	1188A	1188B	1189	1190	1191	1192	1193	1194
		Sample Date	11/06/20	04/14/21	11/06/20	11/06/20	11/06/20	11/09/20	11/04/20	11/04/20	11/11/20	11/06/20	11/07/20
		Sample Number	PWS1187-OS-110620-100	PWS1187-OS-041421-100	PWS-FD01-110620	PWS1188A-OS-110620-100	PWS1188B-OS-110620-100	PWS1189-OS-110920-100	PWS1190-OS-110420-100	PWS1191-OS-110420-100	PWS1192-OS-111120-100	PWS1193-OS-110620-100	PWS1194-OS-110720-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**2.6 J**	<2.2 U	**2.4 J**	<2.1 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	**3.3 J**	<2.3 U	<2.1 U
PFPeA	ng/L	--	**1.5 J**	**1.4 J**	**1.5 J**	<0.43 U	<0.44 U	<0.45 U	<0.45 U	<0.44 U	**1.6 J**	<0.47 U	**2.4**
PFHxA	ng/L	150,000	**3.3**	**2.3**	**3.2**	<0.51 U	<0.52 U	<0.54 U	<0.53 U	<0.52 U	**0.90 J**	<0.55 U	**2.7**
PFHpA	ng/L	--	**2.0**	**1.1 J**	**2.1**	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.22 U	**0.36 J**	<0.24 U	**1.4 J**
PFOA	ng/L	20	**2.4**	**2.4**	**2.6**	<0.75 U	<0.77 U	<0.79 U	<0.77 U	<0.76 U	<0.83 U	<0.81 U	**6.9**
PFNA	ng/L	30	<0.26 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U	<0.25 U	<0.25 U	<0.24 U	<0.26 U	<0.26 U	<0.24 U
PFDA	ng/L	300	<0.30 U	**0.54 J**	<0.27 U	<0.27 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U	<0.30 U	<0.30 U	<0.28 U
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<0.97 U	<0.98 U	<0.99 U	<1.0 U	<1.0 U	<0.99 U	<1.1 U	<1.1 U	<0.98 U
PFDoA	ng/L	500	<0.53 U	<0.51 U	<0.49 U	<0.49 U	<0.50 U	<0.51 U	<0.50 U	<0.49 U	<0.54 U	<0.53 U	<0.49 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.70 U	<0.68 U	<0.65 U	<0.65 U	<0.66 U	<0.68 U	<0.66 U	<0.65 U	<0.71 U	<0.70 U	<0.65 U
PFHxDA	ng/L	--	<0.85 U	<0.83 U	<0.79 U	<0.79 U	<0.80 U	<0.82 U	<0.81 U	<0.80 U	<0.87 U	<0.85 U	<0.79 U
PFODA	ng/L	400,000	<0.90 U	<0.82 U	<0.83 U	<0.83 U	<0.85 U	<0.87 U	<0.86 U	<0.84 U	<0.92 U	<0.90 U	<0.84 U
Sulfonic Acids													
PFBS	ng/L	450,000	**6.0**	**0.33 JI**	**5.8**	<0.18 U	<0.18 U	**0.76 J**	<0.18 U	**0.40 J**	<0.19 U	<0.19 U	**1.4 J**
PFPeS	ng/L	--	**0.58 J**	<0.28 U	**0.58 J**	<0.27 U	<0.27 U	<0.28 U	<0.27 U	<0.27 U	<0.29 U	<0.29 U	**0.29 J**
PFHxS	ng/L	40	**2.7**	**0.89 J**	**2.7**	<0.51 U	<0.52 U	**0.56 J**	<0.52 U	<0.51 U	<0.56 U	**0.69 J**	**2.6**
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	**0.26 J**
PFOS	ng/L	20	**2.3**	<0.50 U	**2.6**	<0.48 U	<0.49 U	<0.50 U	<0.49 U	<0.48 U	<0.53 U	<0.52 U	**3.4**
PFNS	ng/L	--	<0.35 U	<0.34 U	<0.33 U	<0.33 U	<0.33 U	<0.34 U	<0.34 U	<0.33 U	<0.36 U	<0.35 U	<0.33 U
PFDS	ng/L	--	<0.31 U	<0.30 U	<0.28 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U	<0.31 U	<0.28 U
PFDoS	ng/L	--	<0.93 U	<0.90 U	<0.86 U	<0.86 U	<0.88 U	<0.90 U	<0.88 U	<0.87 U	<0.95 U	<0.93 U	<0.86 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.23 U	<0.21 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	<2.2 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.4 U	<2.4 U	<2.2 U
8:2 FTSA	ng/L	--	<0.44 U	<0.43 U	<0.41 U	<0.41 U	<0.42 U	<0.43 U	<0.42 U	<0.41 U	<0.45 U	<0.44 U	<0.41 U
10:2 FTSA	ng/L	--	<0.64 U	<0.62 U	<0.59 U	<0.59 U	<0.61 U	<0.62 U	<0.61 U	<0.60 U	<0.65 U	<0.64 U	<0.60 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.94 U	<0.91 U	**5.9**	**1.6 J**	**0.89 J**	**1.2 J**	<0.89 U	<0.88 U	<0.95 U	<0.94 U	**2.7**
NMeFOSA	ng/L	--	<0.41 U	<0.40 U	<0.38 U	<0.38 U	<0.39 U	<0.40 U	<0.39 U	<0.39 U	<0.42 U	<0.41 U	<0.38 U
NEtFOSA	ng/L	20	<0.83 U	<0.81 U	<0.77 U	<0.77 U	<0.79 U	<0.81 U	<0.79 U	<0.78 U	<0.85 U	<0.83 U	<0.77 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.81 U	<0.79 U	<0.75 U	<0.75 U	<0.77 U	<0.79 U	<0.77 U	<0.76 U	<0.83 U	<0.81 U	<0.76 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.5 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.38 U	<0.37 U	<0.35 U	<0.35 U	<0.36 U	<0.37 U	<0.36 U	<0.36 U	<0.39 U	<0.38 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.23 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.30 U	<0.28 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U	<0.31 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**4.7**	**2.4**	**5.2**	ND	ND	ND	ND	ND	ND	ND	**10.3**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**4.7**	**2.4**	**11.1**	**1.6**	**0.89**	**1.2**	ND	ND	ND	ND	**13**
Hazard Index (HI)													
HI	ng/L	1.0	0.3	0.1	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.7

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1194	1195	1196	1197	1197	1198	1199	1200	1200	1201	1202
		Sample Date	04/15/21	11/06/20	11/07/20	11/09/20	04/19/21	11/06/20	11/04/20	11/09/20	11/09/20	10/28/20	10/27/20
		Sample Number	PWS1194-OS-041521-100	PWS1195-OS-110620-100	PWS1196-OS-110720-100	PWS1197-OS-110920-100	PWS1197-OS-041921-100	PWS1198-OS-110620-100	PWS1199-OS-110420-100	PWS1200-OS-110920-100	PWS-FD01-110920	PWS1201-OS-102820-100	PWS1202-OS-102720-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.0 U	<2.0 U	**4.4 J**	<2.2 U	<2.4 U	<2.2 U	**5.5**	**5.5**	<2.3 U	<2.1 U
PFPeA	ng/L	--	**1.4 J**	**0.68 J**	<0.40 U	**8.5**	**3.2**	<0.49 U	<0.45 U	**2.4**	**2.5**	**0.48 J**	<0.43 U
PFHxA	ng/L	150,000	**1.8**	**0.63 J**	<0.48 U	**11**	**4.1**	<0.58 U	<0.53 U	**1.5 J**	**1.4 J**	<0.57 U	<0.51 U
PFHpA	ng/L	--	**0.85 J**	**0.38 J**	<0.21 U	**2.7**	**1.2 J**	<0.25 U	<0.23 U	**0.45 J**	**0.44 J**	<0.24 U	<0.22 U
PFOA	ng/L	20	**5.9**	**30**	<0.70 U	**11**	**5.3**	<0.85 U	<0.78 U	<0.81 U	**0.80 J**	<0.83 U	<0.75 U
PFNA	ng/L	30	**0.32 J**	<0.22 U	<0.22 U	<0.25 U	<0.25 U	<0.27 U	<0.25 U	<0.26 U	<0.25 U	<0.26 U	<0.24 U
PFDA	ng/L	300	<0.29 U	<0.26 U	<0.26 U	<0.28 U	<0.29 U	<0.31 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.27 U
PFUnA	ng/L	3,000	<1.0 U	<0.91 U	<0.91 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<0.97 U
PFDoA	ng/L	500	<0.51 U	<0.45 U	<0.45 U	<0.50 U	<0.51 U	<0.55 U	<0.51 U	<0.53 U	<0.52 U	<0.54 U	<0.49 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U
PFTeA	ng/L	10,000	<0.68 U	<0.60 U	<0.60 U	<0.66 U	<0.68 U	<0.73 U	<0.67 U	<0.70 U	<0.69 U	<0.71 U	<0.65 U
PFHxDA	ng/L	--	<0.82 U	<0.74 U	<0.73 U	<0.81 U	<0.83 U	<0.89 U	<0.82 U	<0.85 U	<0.84 U	<0.87 U	<0.79 U
PFODA	ng/L	400,000	<0.87 U	<0.78 U	<0.78 U	<0.86 U	<0.87 U	<0.94 U	<0.86 U	<0.90 U	<0.88 U	<0.92 U	<0.83 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.4 J**	**0.64 J**	<0.17 U	**2.1**	**1.8 J**	<0.20 U	<0.18 U	**0.36 J**	**0.34 J**	**0.23 J**	**0.97 J**
PFPeS	ng/L	--	<0.28 U	**0.37 J**	<0.25 U	**0.93 J**	**0.78 J**	<0.30 U	<0.28 U	<0.29 U	<0.28 U	<0.29 U	<0.27 U
PFHxS	ng/L	40	**2.2**	**1.3 J**	<0.47 U	**2.5**	**1.8 J**	<0.57 U	<0.52 U	<0.55 U	<0.54 U	<0.56 U	**1.2 J**
PFHpS	ng/L	--	<0.18 U	<0.16 U	<0.16 U	<0.17 U	<0.18 U	<0.19 U	<0.17 U	<0.18 U	<0.18 U	<0.19 U	<0.17 U
PFOS	ng/L	20	**3.8**	<0.45 U	<0.45 U	**1.5 JI**	**1.3 JI**	<0.54 U	<0.50 U	<0.52 U	<0.51 U	<0.53 U	**0.51 J**
PFNS	ng/L	--	<0.34 U	<0.31 U	<0.31 U	<0.34 U	<0.34 U	<0.37 U	<0.34 U	<0.35 U	<0.35 U	<0.36 U	<0.33 U
PFDS	ng/L	--	<0.30 U	<0.26 U	<0.26 U	<0.29 U	<0.30 U	<0.32 U	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.28 U
PFDoS	ng/L	--	<0.90 U	<0.80 U	<0.80 U	<0.88 U	<0.90 U	<0.97 U	<0.89 U	<0.93 U	<0.91 U	<0.95 U	<0.86 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.21 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.1 U	<2.3 U	<2.3 U	<2.5 U	<2.3 U	<2.4 U	<2.3 U	<2.4 U	<2.2 U
8:2 FTSA	ng/L	--	<0.43 U	<0.38 U	<0.38 U	<0.42 U	<0.43 U	<0.46 U	<0.42 U	<0.44 U	<0.43 U	<0.45 U	<0.41 U
10:2 FTSA	ng/L	--	<0.62 U	<0.55 U	<0.55 U	<0.61 U	<0.62 U	<0.67 U	<0.62 U	<0.64 U	<0.63 U	<0.65 U	<0.59 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**0.92 J**	<0.81 U	<0.81 U	**1.5 J**	<0.91 U	<0.98 U	**1.2 J**	**1.1 J**	<0.92 U	<0.96 U	<0.87 U
NMeFOSA	ng/L	--	<0.40 U	<0.36 U	<0.35 U	<0.39 U	<0.40 U	<0.43 U	<0.40 U	<0.41 U	<0.40 U	<0.42 U	<0.38 U
NEtFOSA	ng/L	20	<0.80 U	<0.72 U	<0.72 U	<0.79 U	<0.81 U	<0.87 U	<0.80 U	<0.83 U	<0.82 U	<0.85 U	<0.77 U
NMeFOSAA	ng/L	--	<1.1 U	<0.99 U	<0.99 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.2 U
NEtFOSE	ng/L	20	<0.79 U	<0.70 U	<0.70 U	<0.77 U	<0.79 U	<0.85 U	<0.78 U	<0.81 U	<0.80 U	<0.83 U	<0.75 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.2 U	<1.2 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U	<1.3 U
DONA	ng/L	3,000	<0.37 U	<0.33 U	<0.33 U	<0.36 U	<0.37 U	<0.40 U	<0.37 U	<0.38 U	<0.38 U	<0.39 U	<0.35 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.26 U	<0.26 U	<0.29 U	<0.30 U	<0.32 U	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**9.7**	**30**	ND	**12.5**	**6.6**	ND	ND	ND	**0.8**	ND	**0.51**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**10.62**	**30**	ND	**14**	**6.6**	ND	**1.2**	**1.1**	**0.8**	ND	**0.51**
Hazard Index (HI)													
HI	ng/L	1.0	0.6	1.5	0.0	0.8	0.4	0.0	0.1	0.1	0.0	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1203	1205	1206	1207	1207	1208	1209	1210	1211	1212	1212
		Sample Date	10/28/20	11/10/20	11/04/20	10/29/20	04/15/21	10/27/20	10/27/20	11/10/20	10/27/20	11/10/20	11/10/20
		Sample Number	PWS1203-OS-102820-100	PWS1205-OS-111020-100	PWS1206-OS-110420-100	PWS1207-OS-102920-100	PWS1207-OS-041521-100	PWS1208-OS-102720-100	PWS1209-OS-102720-100	PWS1210-OS-111020-100	PWS1211-OS-102720-100	PWS1212-OS-111020-100	PWS-FD01-111020
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	<2.2 U	**33**	<2.1 U	<2.2 U	<2.2 U	<2.2 U	<2.3 U	<2.2 U	**11**	**11**
PFPeA	ng/L	--	<0.47 U	<0.45 U	**150**	<0.43 U	<0.45 U	**1.0 J**	**1.7 J**	<0.47 U	<0.45 U	**24**	**23**
PFHxA	ng/L	150,000	<0.56 U	<0.54 U	**150**	<0.51 U	<0.54 U	**0.67 J**	**0.64 J**	<0.56 U	<0.53 U	**16**	**18**
PFHpA	ng/L	--	<0.24 U	<0.23 U	**76**	<0.22 U	<0.23 U	**0.40 J**	**0.28 J**	<0.24 U	<0.23 U	**17**	**17**
PFOA	ng/L	20	<0.82 U	<0.79 U	**13**	<0.74 U	<0.79 U	<0.77 U	<0.79 U	<0.82 U	<0.78 U	**11**	**11**
PFNA	ng/L	30	<0.26 U	<0.25 U	**1.8**	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.26 U	<0.25 U	**2.4**	**2.4**
PFDA	ng/L	300	<0.30 U	<0.29 U	**0.67 J**	<0.27 U	<0.29 U	<0.28 U	<0.29 U	<0.30 U	<0.28 U	**0.73 J**	**0.69 J**
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<0.92 U	<0.96 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.53 U	<0.51 U	<0.46 U	<0.48 U	<0.51 U	<0.50 U	<0.51 U	<0.53 U	<0.50 U	<0.50 U	<0.52 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.70 U	<0.67 U	<0.61 U	<0.64 U	<0.67 U	<0.66 U	<0.68 U	<0.71 U	<0.67 U	<0.67 U	<0.69 U
PFHxDA	ng/L	--	<0.86 U	<0.82 U	<0.74 U	<0.78 U	<0.82 U	<0.81 U	<0.83 U	<0.86 U	<0.81 U	<0.82 U	<0.84 U
PFODA	ng/L	400,000	<0.90 U	<0.87 U	<0.78 U	<0.82 U	<0.87 U	<0.85 U	<0.87 U	<0.91 U	<0.86 U	<0.86 U	<0.89 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.18 U	**2.4**	<0.17 U	<0.18 U	**0.54 J**	<0.19 U	<0.19 U	<0.18 U	**5.8**	**6.2**
PFPeS	ng/L	--	<0.29 U	<0.28 U	<0.25 U	<0.26 U	<0.28 U	<0.27 U	<0.28 U	<0.29 U	<0.27 U	<0.27 U	<0.28 U
PFHxS	ng/L	40	<0.55 U	<0.53 U	**1.1 J**	<0.50 U	<0.53 U	<0.52 U	<0.53 U	<0.55 U	<0.52 U	**1.1 J**	**1.1 J**
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.52 U	<0.50 U	**5.8**	<0.47 U	<0.50 U	<0.49 U	<0.50 U	<0.52 U	<0.49 U	**13**	**13**
PFNS	ng/L	--	<0.36 U	<0.34 U	<0.31 U	<0.32 U	<0.34 U	<0.34 U	<0.34 U	<0.36 U	<0.34 U	<0.34 U	<0.35 U
PFDS	ng/L	--	<0.31 U	<0.30 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.31 U	<0.29 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.93 U	<0.90 U	<0.81 U	<0.85 U	<0.90 U	<0.88 U	<0.90 U	<0.94 U	<0.89 U	<0.89 U	<0.92 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.20 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	**280**	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.4 U	<2.3 U	<2.3 U	<2.4 U
8:2 FTSA	ng/L	--	<0.44 U	<0.43 U	<0.38 U	<0.40 U	<0.43 U	<0.42 U	<0.43 U	<0.44 U	<0.42 U	<0.42 U	<0.43 U
10:2 FTSA	ng/L	--	<0.64 U	<0.62 U	<0.56 U	<0.59 U	<0.62 U	<0.61 U	<0.62 U	<0.65 U	<0.61 U	<0.61 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**1.3 J**	**1.0 J**	**4.5**	**3.5**	<0.91 U	**1.6 J**	<0.91 U	<0.95 U	<0.90 U	<0.90 U	<0.93 U
NMeFOSA	ng/L	--	<0.41 U	<0.40 U	<0.36 U	<0.38 U	<0.40 U	<0.39 U	<0.40 U	<0.42 U	<0.39 U	<0.39 U	<0.41 U
NEtFOSA	ng/L	20	<0.84 U	<0.80 U	<0.72 U	<0.76 U	<0.80 U	<0.79 U	<0.81 U	<0.84 U	<0.79 U	<0.80 U	<0.82 U
NMeFOSAA	ng/L	--	<1.2 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.82 U	<0.79 U	<0.71 U	<0.74 U	<0.79 U	<0.77 U	<0.79 U	<0.82 U	<0.78 U	<0.78 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.2 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.38 U	<0.37 U	<0.33 U	<0.35 U	<0.37 U	<0.36 U	<0.37 U	<0.39 U	<0.37 U	<0.37 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.20 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.30 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.31 U	<0.29 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	**18.8**	ND	ND	ND	ND	ND	ND	**24**	**24**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**1.3**	**1**	**23.3**	**3.5**	ND	**1.6**	ND	ND	ND	**24**	**24**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.1	1.3	0.2	0.0	0.1	0.0	0.0	0.0	1.3	1.3

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1213	1214	1214	1215	1216	1217	1217	1218	1218	1218	1219
		Sample Date	10/29/20	06/22/21	06/22/21	11/09/20	10/28/20	10/28/20	04/12/21	10/28/20	05/28/21	05/28/21	11/07/20
		Sample Number	PWS1213-OS-102920-100	PWS1214-OS-062221-100	PWS-FD01-062221	PWS1215-OS-110920-100	PWS1216-OS-102820-100	PWS1217-OS-102820-100	PWS1217-OS-041221-100	PWS1218-OS-102820-100	PWS1218-OS-052821-100	PWS-FD01-052821	PWS1219-OS-110720-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**5.4**	<2.1 U	<2.1 U	<2.2 U	<2.3 U	<2.2 U	**2.8 J**	**4.0 J**	**5.3**	**5.3**	<2.2 U
PFPeA	ng/L	--	**1.6 J**	<0.43 U	<0.43 U	<0.44 U	**2.3**	<0.45 U	<0.47 U	**6.7**	**14**	**14**	<0.46 U
PFHxA	ng/L	150,000	**0.86 J**	<0.51 U	<0.51 U	<0.52 U	**1.1 J**	<0.53 U	<0.56 U	**7.3**	**16**	**15**	<0.54 U
PFHpA	ng/L	--	**1.1 J**	<0.22 U	<0.22 U	<0.22 U	**0.32 J**	<0.23 U	<0.24 U	**2.6**	**5.2**	**5.3**	<0.23 U
PFOA	ng/L	20	<0.73 U	<0.75 U	<0.75 U	<0.76 U	<0.80 U	<0.78 U	<0.82 U	**2.9**	**10**	**10**	<0.79 U
PFNA	ng/L	30	<0.23 U	<0.24 U	<0.24 U	<0.24 U	<0.26 U	<0.25 U	<0.26 U	<0.26 U	**1.7**	**1.7 J**	<0.25 U
PFDA	ng/L	300	<0.27 U	**0.30 J**	**0.30 J**	<0.28 U	<0.29 U	<0.28 U	**0.30 J**	<0.29 U	<0.27 U	**0.40 J**	<0.29 U
PFUnA	ng/L	3,000	<0.94 U	<0.97 U	<0.97 U	<0.99 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<0.95 U+	<0.99 U+	<1.0 U
PFDoA	ng/L	500	<0.47 U	<0.48 U	<0.48 U	<0.49 U	<0.52 U	<0.51 U	<0.53 U	<0.52 U	<0.47 U	<0.49 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.62 U	<0.64 U	<0.64 U	<0.66 U	<0.69 U	<0.67 U	<0.70 U	<0.69 U	<0.63 U	<0.65 U	<0.68 U
PFHxDA	ng/L	--	<0.76 U	<0.78 U	<0.78 U	<0.80 U	<0.84 U	<0.82 U	<0.86 U	<0.84 U	<0.77 U	<0.80 U	<0.83 U
PFODA	ng/L	400,000	<0.80 U	<0.83 U	<0.83 U	<0.85 U	<0.89 U	<0.86 U	<0.91 U	<0.89 U	<0.81 U	<0.84 U	<0.87 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.28 J**	<0.18 U	<0.18 U	<0.18 U	<0.19 U	<0.18 U	**0.19 J**	**4.0**	**8.0**	**7.8**	<0.19 U
PFPeS	ng/L	--	<0.26 U	<0.26 U	<0.26 U	<0.27 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	**0.44 J**	**0.39 J**	<0.28 U
PFHxS	ng/L	40	<0.49 U	<0.50 U	<0.50 U	<0.51 U	<0.54 U	<0.52 U	<0.55 U	**3.2**	**13**	**13**	<0.53 U
PFHpS	ng/L	--	<0.16 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	**0.23 J**	**0.74 J**	**0.78 J**	<0.18 U
PFOS	ng/L	20	<0.46 U	<0.48 U	<0.48 U	<0.49 U	<0.51 U	<0.50 U	<0.52 U	**1.4 J**	**12 I**	**11**	<0.50 U
PFNS	ng/L	--	<0.32 U	<0.33 U	<0.33 U	<0.33 U	<0.35 U	<0.34 U	<0.36 U	<0.35 U	<0.32 U	<0.33 U	<0.34 U
PFDS	ng/L	--	<0.27 U	<0.28 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.31 U	<0.30 U	<0.28 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.83 U	<0.85 U	<0.86 U	<0.87 U	<0.92 U	<0.89 U	<0.93 U	<0.92 U	<0.83 U	<0.87 U	<0.90 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.1 U	<2.2 U	<2.2 U	<2.2 U	<2.4 U	<2.3 U	<2.4 U	<2.4 U	<2.1 U	<2.2 U	<2.3 U
8:2 FTSA	ng/L	--	<0.39 U	<0.41 U	<0.41 U	<0.41 U	<0.44 U	<0.42 U	<0.44 U	<0.44 U	<0.40 U	<0.41 U	<0.43 U
10:2 FTSA	ng/L	--	<0.57 U	<0.59 U	<0.59 U	<0.60 U	<0.63 U	<0.62 U	<0.65 U	<0.63 U	<0.58 U	<0.60 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**0.94 J**	**2.2**	**2.3**	**1.1 J**	**0.93 J**	**6.1**	<0.94 U	**5.6**	**2.1**	**2.0**	<0.91 U
NMeFOSA	ng/L	--	<0.37 U	<0.38 U	<0.38 U	<0.39 U	<0.41 U	<0.39 U	<0.41 U	<0.41 U	<0.37 U	<0.39 U	<0.40 U
NEtFOSA	ng/L	20	<0.74 U	<0.77 U	<0.77 U	<0.78 U	<0.82 U	<0.80 U	<0.84 U	<0.82 U	<0.75 U	<0.78 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.73 U	<0.75 U	<0.75 U	<0.76 U	<0.80 U	<0.78 U	<0.82 U	<0.80 U	<0.73 U+	<0.76 U+	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.34 U	<0.35 U	<0.35 U	<0.36 U	<0.38 U	<0.37 U	<0.39 U	<0.38 U	<0.34 U	<0.36 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.28 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.31 U	<0.30 U	<0.28 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	ND	ND	ND	**4.3**	**22**	**21**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**0.94**	**2.2**	**2.3**	**1.1**	**0.93**	**6.1**	ND	**9.9**	**24.1**	**23**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.1	0.1	0.0	0.3	0.0	0.6	1.6	1.5	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1220	1221	1222	1223	1224	1225	1226	1226	1227	1227	1228
		Sample Date	11/07/20	11/07/20	03/18/21	11/09/20	11/07/20	11/07/20	11/13/20	04/14/21	10/28/20	04/15/21	11/11/20
		Sample Number	PWS1220-OS-110720-100	PWS1221-OS-110720-100	PWS1222-OS-031821-100	PWS1223-OS-110920-100	PWS1224-OS-110720-100	PWS1225-OS-110720-100	PWS1226-OS-111320-100	PWS1226-OS-041421-100	PWS1227-OS-102820-100	PWS1227-OS-041521-100	PWS1228-OS-111120-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**2.3 J**	**11**	<2.2 U	<2.2 U	<2.0 U	<2.0 U	<2.3 U	<2.2 U	**2.4 J**	**2.5 J**	<2.2 U
PFPeA	ng/L	--	**2.1**	**11**	**1.6 J**	<0.45 U	**0.56 J**	<0.42 U	<0.46 U	<0.45 U	**0.52 J**	**0.71 J**	<0.46 U
PFHxA	ng/L	150,000	**1.2 J**	**10**	<0.54 U	<0.53 U	<0.48 U	<0.49 U	<0.55 U	<0.54 U	<0.55 U	**1.3 J**	<0.54 U
PFHpA	ng/L	--	**0.64 J**	**7.7**	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.24 U	<0.23 U	<0.24 U	**0.42 J**	<0.23 U
PFOA	ng/L	20	<0.76 U	**10**	<0.79 U	<0.78 U	<0.71 U	<0.72 U	<0.80 U	<0.78 U	<0.81 U	<0.77 U	<0.80 U
PFNA	ng/L	30	<0.24 U	**1.4 J**	<0.25 U	<0.25 U	<0.22 U	<0.23 U	<0.25 U	<0.25 U	<0.26 U	<0.24 U	<0.25 U
PFDA	ng/L	300	<0.28 U	**3.5**	<0.29 U	<0.28 U	<0.26 U	<0.26 U	<0.29 U	<0.29 U	<0.30 U	<0.28 U	<0.29 U
PFUnA	ng/L	3,000	<0.99 U	<0.91 U	<1.0 U	<1.0 U	<0.91 U	<0.94 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.49 U	<0.46 U	<0.51 U	<0.51 U	<0.46 U	<0.47 U	<0.52 U	<0.51 U	<0.53 U	<0.50 U	<0.52 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.66 U	<0.61 U	<0.68 U	<0.67 U	<0.61 U	<0.62 U	<0.69 U	<0.67 U	<0.70 U	<0.66 U	<0.68 U
PFHxDA	ng/L	--	<0.80 U	<0.74 U	<0.83 U	<0.82 U	<0.74 U	<0.76 U	<0.84 U	<0.82 U	<0.85 U	<0.81 U	<0.83 U
PFODA	ng/L	400,000	<0.84 U	<0.78 U	<0.88 U	<0.86 U	<0.78 U	<0.80 U	<0.89 U	<0.83 U	<0.90 U	<0.85 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.21 J**	**2.4**	<0.19 U	<0.18 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	**0.91 J**	**0.22 J**	<0.19 U
PFPeS	ng/L	--	<0.27 U	**0.26 J**	<0.28 U	<0.28 U	<0.25 U	<0.26 U	<0.28 U	<0.28 U	<0.29 U	<0.27 U	<0.28 U
PFHxS	ng/L	40	<0.51 U	**1.3 J**	<0.53 U	<0.52 U	<0.47 U	<0.49 U	<0.54 U	<0.53 U	<0.55 U	<0.52 U	<0.53 U
PFHpS	ng/L	--	<0.17 U	**0.28 J**	<0.18 U	<0.17 U	<0.16 U	<0.16 U	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.49 U	**24**	<0.50 U	<0.50 U	<0.45 U	<0.46 U	<0.51 U	<0.50 U	<0.52 U	<0.49 U	<0.51 U
PFNS	ng/L	--	<0.33 U	<0.31 U	<0.35 U	<0.34 U	<0.31 U	<0.32 U	<0.35 U	<0.34 U	<0.35 U	<0.34 U	<0.35 U
PFDS	ng/L	--	<0.29 U	<0.27 U	<0.30 U	<0.29 U	<0.27 U	<0.27 U	<0.30 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.87 U	<0.80 U	<0.90 U	<0.89 U	<0.81 U	<0.83 U	<0.91 U	<0.90 U	<0.93 U	<0.88 U	<0.91 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.1 U	<2.3 U	<2.3 U	<2.1 U	<2.1 U	<2.4 U	<2.3 U	<2.4 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.41 U	<0.38 U	<0.43 U	<0.42 U	<0.38 U	<0.39 U	<0.43 U	<0.42 U	<0.44 U	<0.42 U	<0.43 U
10:2 FTSA	ng/L	--	<0.60 U	<0.56 U	<0.62 U	<0.62 U	<0.56 U	<0.57 U	<0.63 U	<0.62 U	<0.64 U	<0.61 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.88 U	**1.3 J**	<0.91 U	<0.90 U	<0.81 U	<0.83 U	**3.2**	<0.90 U	**4.8**	<0.89 U	<0.92 U
NMeFOSA	ng/L	--	<0.39 U	<0.36 U	<0.40 U	<0.39 U	<0.36 U	<0.37 U	<0.41 U	<0.40 U	<0.41 U	<0.39 U	<0.40 U
NEtFOSA	ng/L	20	<0.78 U	<0.72 U	<0.81 U	<0.80 U	<0.72 U	<0.74 U	<0.82 U	<0.80 U	<0.83 U	<0.79 U	<0.82 U
NMeFOSAA	ng/L	--	<1.1 U	<0.99 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.76 U	<0.70 U	<0.79 U	<0.78 U	<0.71 U	<0.72 U	<0.80 U	<0.78 U	<0.81 U	<0.77 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.2 U	<1.4 U	<1.4 U	<1.2 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.36 U	<0.33 U	<0.37 U	<0.37 U	<0.33 U	<0.34 U	<0.38 U	<0.37 U	<0.38 U	<0.36 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.27 U	<0.30 U	<0.29 U	<0.27 U	<0.27 U	<0.30 U	<0.30 U	<0.31 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**34**	ND	ND	ND	ND	ND	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**35.3**	ND	ND	ND	ND	**3.2**	ND	**4.8**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	1.9	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1229	1229	1230	1232	1232	1233	1234	1234	1236	1236	1237
		Sample Date	11/05/20	11/05/20	11/03/20	11/03/20	04/15/21	11/07/20	11/07/20	11/07/20	11/07/20	11/07/20	11/06/20
		Sample Number	PWS1229-OS-110520-100	PWS-FD02-110520	PWS1230-OS-110320-100	PWS1232-OS-110320-100	PWS1232-OS-041521-100	PWS1233-OS-110720-100	PWS1234-OS-110720-100	PWS-FD01-110720	PWS1236-OS-110720-100	PWS-FD02-110720	PWS1237-OS-110620-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.1 U	<2.2 U	**12**	**13**	<2.1 U	<2.1 U	<2.1 U	<2.0 U	<2.0 U	**8.2**
PFPeA	ng/L	--	<0.44 U	<0.44 U	<0.45 U	**9.7**	**11**	<0.44 U	<0.44 U	<0.43 U	**0.43 J**	**0.44 J**	**8.7**
PFHxA	ng/L	150,000	<0.52 U	<0.52 U	<0.53 U	**7.1**	**7.5**	<0.52 U	<0.52 U	<0.51 U	**0.54 J**	**0.56 J**	**6.0**
PFHpA	ng/L	--	<0.23 U	<0.22 U	<0.23 U	**7.6**	**7.8**	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	**4.4**
PFOA	ng/L	20	<0.77 U	<0.76 U	<0.78 U	**3.3**	**3.3**	<0.76 U	<0.76 U	<0.75 U	**25**	**25**	**6.0**
PFNA	ng/L	30	<0.24 U	<0.24 U	<0.25 U	**0.92 J**	**0.79 J**	<0.24 U	<0.24 U	<0.24 U	<0.22 U	<0.22 U	**1.1 J**
PFDA	ng/L	300	<0.28 U	<0.28 U	<0.29 U	<0.26 U	<0.29 U	<0.28 U	<0.28 U	<0.27 U	<0.26 U	<0.26 U	**2.2**
PFUnA	ng/L	3,000	<0.99 U	<0.98 U	<1.0 U	<0.93 U	<1.0 U	<0.98 U	<0.98 U	<0.97 U	<0.91 U	<0.91 U	<0.91 U
PFDoA	ng/L	500	<0.50 U	<0.49 U	<0.51 U	<0.47 U	<0.52 U	<0.49 U	<0.49 U	<0.49 U	<0.46 U	<0.46 U	<0.46 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U
PFTeA	ng/L	10,000	<0.66 U	<0.65 U	<0.67 U	<0.62 U	<0.69 U	<0.65 U	<0.65 U	<0.65 U	<0.61 U	<0.61 U	<0.61 U
PFHxDA	ng/L	--	<0.80 U	<0.79 U	<0.82 U	<0.75 U	<0.84 U	<0.80 U	<0.79 U	<0.79 U	<0.74 U	<0.74 U	<0.74 U
PFODA	ng/L	400,000	<0.85 U	<0.84 U	<0.87 U	<0.79 U	<0.89 U	<0.84 U	<0.84 U	<0.83 U	<0.78 U	<0.78 U	<0.78 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	**0.18 J**	<0.18 U	**0.86 J**	**0.74 J**	<0.18 U	<0.18 U	<0.18 U	**0.24 J**	**0.25 J**	**1.6 J**
PFPeS	ng/L	--	<0.27 U	<0.27 U	<0.28 U	<0.25 U	<0.28 U	<0.27 U	<0.27 U	<0.27 U	<0.25 U	<0.25 U	<0.25 U
PFHxS	ng/L	40	<0.51 U	<0.51 U	<0.53 U	**0.49 J**	<0.54 U	<0.51 U	<0.51 U	<0.50 U	**0.55 J**	**0.60 J**	**0.95 J**
PFHpS	ng/L	--	<0.17 U	<0.17 U	<0.18 U	<0.16 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U
PFOS	ng/L	20	<0.49 U	<0.48 U	<0.50 U	<0.46 U	**1.6 J**	<0.48 U	<0.48 U	<0.48 U	<0.45 U	<0.45 U	**11**
PFNS	ng/L	--	<0.33 U	<0.33 U	<0.34 U	<0.31 U	<0.35 U	<0.33 U	<0.33 U	<0.33 U	<0.31 U	<0.31 U	<0.31 U
PFDS	ng/L	--	<0.29 U	<0.29 U	<0.29 U	<0.27 U	<0.30 U	<0.29 U	<0.28 U	<0.28 U	<0.27 U	<0.27 U	<0.27 U
PFDoS	ng/L	--	<0.87 U	<0.86 U	<0.89 U	<0.82 U	<0.92 U	<0.87 U	<0.86 U	<0.86 U	<0.81 U	<0.81 U	<0.80 U
4:2 FTSA	ng/L	--	<0.22 U	<0.21 U	<0.22 U	<0.20 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.20 U	<0.20 U	<0.20 U
6:2 FTSA	ng/L	--	<2.3 U	<2.2 U	<2.3 U	**5.1**	**4.2 J**	<2.2 U	<2.2 U	<2.2 U	<2.1 U	<2.1 U	<2.1 U
8:2 FTSA	ng/L	--	<0.41 U	<0.41 U	<0.42 U	<0.39 U	<0.43 U	<0.41 U	<0.41 U	<0.41 U	<0.38 U	<0.38 U	<0.38 U
10:2 FTSA	ng/L	--	<0.60 U	<0.60 U	<0.62 U	<0.57 U	<0.63 U	<0.60 U	<0.60 U	<0.59 U	<0.56 U	<0.56 U	<0.56 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.88 U	<0.87 U	**1.2 J**	<0.83 U	<0.93 U	**1.5 J**	<0.87 U	**0.96 J**	<0.81 U	<0.81 U	<0.81 U
NMeFOSA	ng/L	--	<0.39 U	<0.38 U	<0.40 U	<0.36 U	<0.41 U	<0.38 U	<0.38 U	<0.38 U	<0.36 U	<0.36 U	<0.36 U
NEtFOSA	ng/L	20	<0.78 U	<0.78 U	<0.80 U	<0.74 U	<0.82 U	<0.78 U	<0.77 U	<0.77 U	<0.72 U	<0.72 U	<0.72 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NEtFOSE	ng/L	20	<0.77 U	<0.76 U	<0.78 U	<0.72 U	<0.80 U	<0.76 U	<0.76 U	<0.75 U	<0.71 U	<0.71 U	<0.71 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
DONA	ng/L	3,000	<0.36 U	<0.36 U	<0.37 U	<0.34 U	<0.38 U	<0.36 U	<0.36 U	<0.35 U	<0.33 U	<0.33 U	<0.33 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.21 U	<0.22 U	<0.20 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.20 U	<0.20 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.29 U	<0.29 U	<0.27 U	<0.30 U	<0.29 U	<0.28 U	<0.28 U	<0.27 U	<0.27 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	**3.3**	**4.9**	ND	ND	ND	**25**	**25**	**17**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**1.2**	**3.3**	**4.9**	**1.5**	ND	**0.96**	**25**	**25**	**17**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.0	1.3	1.3	0.9

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

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U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1237	1238	1239	1239	1240	1241	1242	1242	1243	1244	1244
		Sample Date	04/15/21	11/03/20	11/03/20	04/15/21	11/03/20	03/17/21	11/03/20	04/19/21	11/12/20	11/03/20	11/03/20
		Sample Number	PWS1237-OS-041521-100	PWS1238-OS-110320-100	PWS1239-OS-110320-100	PWS1239-OS-041521-100	PWS1240-OS-110320-100	PWS1241-OS-031721-100	PWS1242-OS-110320-100	PWS1242-OS-041921-100	PWS1243-OS-111220-100	PWS1244-OS-110320-100	PWS-FD03-110320
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**8.2**	<2.1 U	**3.0 J**	**2.7 J**	<2.0 U	**3.2 J**	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U
PFPeA	ng/L	--	**4.5**	**0.49 J**	**6.8**	**4.2**	<0.41 U	**2.8**	<0.46 U	<0.45 U	<0.44 U	<0.44 U	**0.48 J**
PFHxA	ng/L	150,000	**4.4**	<0.51 U	**9.2**	**6.0**	<0.48 U	**1.2 JB**	<0.54 U	<0.54 U	<0.52 U	<0.52 U	<0.52 U
PFHpA	ng/L	--	**2.8**	<0.22 U	**4.2**	**2.6**	<0.21 U	<0.24 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U	<0.23 U
PFOA	ng/L	20	**4.0**	<0.75 U	**17**	**13**	<0.71 U	<0.80 U	<0.80 U	<0.79 U	<0.77 U	<0.77 U	<0.77 U
PFNA	ng/L	30	**0.65 J**	<0.24 U	**0.61 J**	**0.93 J**	<0.22 U	<0.26 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.24 U
PFDA	ng/L	300	**1.6 J**	<0.27 U	<0.26 U	<0.29 U	<0.26 U	<0.29 U	<0.29 U	<0.29 U	<0.28 U	<0.28 U	<0.28 U
PFUnA	ng/L	3,000	<1.0 U	<0.97 U	<0.94 U	<1.0 U	<0.92 U	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<0.99 U	<0.99 U
PFDoA	ng/L	500	<0.51 U	<0.48 U	<0.47 U	<0.52 U	<0.46 U	<0.52 U	<0.51 U	<0.51 U	<0.50 U	<0.50 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.68 U	<0.64 U	<0.62 U	<0.69 U	<0.61 U	<0.69 U	<0.68 U	<0.68 U	<0.66 U	<0.66 U	<0.66 U
PFHxDA	ng/L	--	<0.83 U	<0.78 U	<0.76 U	<0.84 U	<0.74 U	<0.84 U	<0.83 U	<0.82 U	<0.80 U	<0.80 U	<0.80 U
PFODA	ng/L	400,000	<0.88 U	<0.83 U	<0.80 U	<0.89 U	<0.78 U	<0.89 U	<0.88 U	<0.87 U	<0.85 U	<0.85 U	<0.85 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.2 J**	<0.18 U	**1.5 J**	**0.93 J**	<0.17 U	<0.19 U	<0.19 U	<0.19 U	<0.18 U	**0.33 J**	**0.23 J**
PFPeS	ng/L	--	<0.28 U	<0.26 U	**0.36 J**	<0.28 U	<0.25 U	<0.28 U	<0.28 U	<0.28 U	<0.27 U	<0.27 U	<0.27 U
PFHxS	ng/L	40	**0.78 J**	<0.50 U	**3.1**	**2.4**	<0.47 U	<0.54 U	<0.53 U	<0.53 U	<0.51 U	<0.51 U	<0.51 U
PFHpS	ng/L	--	<0.18 U	<0.17 U	<0.16 U	<0.18 U	<0.16 U	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U
PFOS	ng/L	20	**8.6**	<0.48 U	**2.3**	**1.7 J**	<0.45 U	<0.51 U	**2.0**	<0.50 U	<0.49 U	<0.49 U	<0.49 U
PFNS	ng/L	--	<0.35 U	<0.33 U	<0.32 U	<0.35 U	<0.31 U	<0.35 U	<0.35 U	<0.34 U	<0.33 U	<0.33 U	<0.33 U
PFDS	ng/L	--	<0.30 U	<0.28 U	<0.27 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U
PFDoS	ng/L	--	<0.91 U	<0.85 U	<0.83 U	<0.92 U	<0.81 U	<0.92 U	<0.91 U	<0.90 U	<0.87 U	<0.87 U	<0.88 U
4:2 FTSA	ng/L	--	<0.22 U	<0.21 U	<0.20 U	<0.23 U	<0.20 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.3 U	<2.2 U	<2.1 U	<2.4 U	<2.1 U	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.43 U	<0.40 U	<0.39 U	<0.43 U	**1.4 J**	<0.43 U	<0.43 U	<0.43 U	<0.41 U	<0.41 U	<0.42 U
10:2 FTSA	ng/L	--	<0.63 U	<0.59 U	<0.57 U	<0.63 U	<0.56 U	<0.63 U	<0.63 U	<0.62 U	<0.60 U	<0.60 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.92 U	**1.5 J**	<0.83 U	<0.93 U	<0.82 U	<0.93 U	**0.94 J**	<0.91 U	<0.88 U	**1.2 J**	<0.89 U
NMeFOSA	ng/L	--	<0.40 U	<0.38 U	<0.37 U	<0.41 U	<0.36 U	<0.41 U	<0.40 U	<0.40 U	<0.39 U	<0.39 U	<0.39 U
NEtFOSA	ng/L	20	<0.81 U	<0.77 U	<0.74 U	<0.82 U	<0.72 U	<0.82 U	<0.81 U	<0.81 U	<0.78 U	<0.78 U	<0.79 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.79 U	<0.75 U	<0.72 U	<0.80 U	<0.71 U	<0.80 U	<0.80 U	<0.79 U	<0.77 U	<0.77 U	<0.77 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.2 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.37 U	<0.35 U	<0.34 U	<0.38 U	<0.33 U	<0.38 U	<0.37 U	<0.37 U	<0.36 U	<0.36 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.21 U	<0.20 U	<0.23 U	<0.20 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.28 U	<0.27 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**12.6**	ND	**19.3**	**14.7**	ND	ND	**2**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**12.6**	**1.5**	**19.3**	**14.7**	ND	ND	**2.94**	ND	ND	**1.2**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.7	0.1	1.1	0.8	0.0	0.0	0.1	0.0	0.0	0.1	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1245	1246	1246	1247	1247	1248	1248	1249	1249	1250	1250
		Sample Date	11/03/20	11/06/20	11/06/20	03/18/21	05/27/21	11/06/20	04/23/21	11/06/20	04/23/21	10/31/20	04/17/21
		Sample Number	PWS1245-OS-110320-100	PWS1246-OS-110620-100	PWS-FD02-110620	PWS1247-OS-031821-100	PWS1247-IS-052721-100	PWS1248-OS-110620-100	PWS1248-OS-042321-100	PWS1249-OS-110620-100	PWS1249-OS-042321-100	PWS1250-OS-103120-100	PWS1250-OS-041721-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	**4.8**	**4.9**	<2.2 U	<2.1 U	**12**	**13**	**10**	**15**	<2.3 U	<2.4 U
PFPeA	ng/L	--	<0.46 U	**2.5**	**2.6**	**0.70 J**	<0.42 U	**23**	**25**	**8.4**	**18**	<0.46 U	<0.48 U
PFHxA	ng/L	150,000	<0.54 U	**1.9**	**1.9**	<0.54 U	<0.50 U	**16**	**17**	**5.4**	**12**	<0.55 U	<0.57 U
PFHpA	ng/L	--	<0.23 U	**1.5 J**	**1.6 J**	<0.23 U	<0.22 U	**11**	**14**	**2.6**	**4.6**	<0.24 U	<0.25 U
PFOA	ng/L	20	<0.79 U	**0.90 J**	**0.90 J**	<0.79 U	<0.73 U	**4.4**	**4.7**	**4.7**	**5.0**	<0.80 U	<0.84 U
PFNA	ng/L	30	<0.25 U	<0.24 U	<0.24 U	<0.25 U	<0.23 U	<0.25 U	<0.26 U	<0.25 U	<0.25 U	<0.26 U	<0.27 U
PFDA	ng/L	300	<0.29 U	<0.27 U	<0.27 U	<0.29 U	<0.27 U	<0.28 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.31 U
PFUnA	ng/L	3,000	<1.0 U	<0.97 U	<0.97 U	<1.0 U	<0.95 U+	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U
PFDoA	ng/L	500	<0.51 U	<0.48 U	<0.48 U	<0.51 U	<0.47 U	<0.50 U	<0.53 U	<0.51 U	<0.52 U	<0.52 U	<0.54 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
PFTeA	ng/L	10,000	<0.68 U	<0.64 U	<0.64 U	<0.68 U	<0.63 U	<0.67 U	<0.71 U	<0.67 U	<0.68 U	<0.69 U	<0.72 U
PFHxDA	ng/L	--	<0.83 U	<0.78 U	<0.78 U	<0.83 U	<0.77 U	<0.82 U	<0.86 U	<0.82 U	<0.83 U	<0.84 U	<0.88 U
PFODA	ng/L	400,000	<0.88 U	<0.83 U	<0.83 U	<0.87 U	<0.81 U	<0.86 U	<0.91 U	<0.87 U	<0.88 U	<0.89 U	<0.93 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.36 J**	**0.36 J**	**0.40 J**	<0.19 U	<0.17 U	**0.29 J**	**0.27 J**	**0.99 J**	**1.7 J**	<0.19 U	<0.20 U
PFPeS	ng/L	--	<0.28 U	<0.26 U	<0.26 U	<0.28 U	<0.26 U	<0.28 U	<0.29 U	**0.31 J**	<0.28 U	<0.28 U	<0.30 U
PFHxS	ng/L	40	<0.53 U	<0.50 U	<0.50 U	<0.53 U	<0.49 U	**0.57 J**	<0.55 U	**0.89 J**	**0.90 J**	<0.54 U	<0.56 U
PFHpS	ng/L	--	<0.18 U	<0.17 U	<0.17 U	<0.18 U	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.19 U
PFOS	ng/L	20	<0.50 U	<0.47 U	<0.47 U	<0.50 U	<0.47 U	<0.50 U	<0.52 U	<0.50 U	<0.51 U	<0.51 U	<0.53 U
PFNS	ng/L	--	<0.35 U	<0.33 U	<0.33 U	<0.34 U	<0.32 U	<0.34 U	<0.36 U	<0.34 U	<0.35 U	<0.35 U	<0.37 U
PFDS	ng/L	--	<0.30 U	<0.28 U	<0.28 U	<0.30 U	<0.28 U	<0.29 U	<0.31 U	<0.29 U	<0.30 U	<0.30 U	<0.32 U
PFDoS	ng/L	--	<0.91 U	<0.85 U	<0.85 U	<0.90 U	<0.84 U	<0.89 U	<0.94 U	<0.89 U	<0.91 U	<0.92 U	<0.96 U
4:2 FTSA	ng/L	--	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.23 U	<0.24 U
6:2 FTSA	ng/L	--	<2.3 U	<2.2 U	<2.2 U	<2.3 U	<2.2 U	**5.9**	**7.5**	<2.3 U	<2.3 U	<2.4 U	<2.5 U
8:2 FTSA	ng/L	--	<0.43 U	<0.40 U	<0.40 U	<0.43 U	<0.40 U	<0.42 U	<0.45 U	<0.42 U	<0.43 U	<0.43 U	<0.45 U
10:2 FTSA	ng/L	--	<0.63 U	<0.59 U	<0.59 U	<0.62 U	<0.58 U	<0.61 U	<0.65 U	<0.62 U	<0.63 U	<0.63 U	<0.66 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.92 U	<0.86 U	<0.86 U	<0.91 U	<0.85 U	<0.90 U	<0.95 U	<0.90 U	<0.92 U	<0.93 U	<0.97 U
NMeFOSA	ng/L	--	<0.40 U	<0.38 U	<0.38 U	<0.40 U	<0.37 U	<0.39 U	<0.42 U	<0.40 U	<0.40 U	<0.41 U	<0.43 U
NEtFOSA	ng/L	20	<0.81 U	<0.76 U	<0.76 U	<0.81 U	<0.75 U	<0.80 U	<0.84 U	<0.80 U	<0.82 U	<0.82 U	<0.86 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	**1.5 J**	<1.0 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	**3.9 J**	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U
NEtFOSE	ng/L	20	<0.79 U	<0.75 U	<0.75 U	<0.79 U	<0.73 U+	<0.78 U	<0.82 U	<0.78 U	<0.80 U	<0.80 U	<0.84 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U
DONA	ng/L	3,000	<0.37 U	<0.35 U	<0.35 U	<0.37 U	<0.35 U	<0.37 U	<0.39 U	<0.37 U	<0.38 U	<0.38 U	<0.40 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.23 U	<0.24 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.28 U	<0.28 U	<0.30 U	<0.28 U	<0.29 U	<0.31 U	<0.29 U	<0.30 U	<0.30 U	<0.32 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**0.9**	**0.9**	ND	ND	**4.4**	**4.7**	**4.7**	**5**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**0.9**	**0.9**	**3.9**	ND	**4.4**	**4.7**	**4.7**	**5**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.0	0.2	0.0	0.2	0.2	0.3	0.3	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

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Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1250	1252	1252	1253	1253	1254	1254	1254	1254	1255	1256
		Sample Date	10/31/20	11/04/20	04/16/21	11/04/20	04/15/21	11/03/20	04/13/21	11/03/20	04/13/21	11/05/20	11/05/20
		Sample Number	PWS-FD02-103120	PWS1252-OS-110420-100	PWS1252-OS-041621-100	PWS1253-OS-110420-100	PWS1253-OS-041521-100	PWS1254-OS-110320-100	PWS1254-OS-041321-100	PWS-FD02-110320	PWS-FD01-041321	PWS1255-OS-110520-100	PWS1256-OS-110520-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	**2.4 J**	<2.2 U	**5.9**	**7.7**	**21**	**9.4**	**21**	**9.6**	<2.2 U	<2.2 U
PFPeA	ng/L	--	<0.45 U	**2.1**	<0.45 U	**5.4**	**6.3**	**15**	**7.3**	**17**	**7.1**	<0.46 U	<0.45 U
PFHxA	ng/L	150,000	<0.53 U	**1.7**	**0.53 J**	**5.1**	**5.6**	**11**	**5.7**	**12**	**5.8**	<0.54 U	<0.53 U
PFHpA	ng/L	--	<0.23 U	**1.4 J**	<0.23 U	**3.5**	**4.6**	**9.5**	**5.3**	**10**	**5.1**	<0.23 U	<0.23 U
PFOA	ng/L	20	<0.78 U	**3.1**	**1.2 J**	**6.5**	**9.5**	**6.3**	**2.5**	**5.8**	**2.5**	<0.79 U	<0.77 U
PFNA	ng/L	30	<0.25 U	<0.23 U	<0.25 U	**1.1 J**	**0.87 J**	**0.99 J**	<0.26 U	**1.1 J**	<0.25 U	<0.25 U	<0.25 U
PFDA	ng/L	300	<0.29 U	<0.26 U	<0.28 U	<0.29 U	<0.29 U	<0.28 U	<0.30 U	<0.28 U	<0.29 U	<0.29 U	<0.28 U
PFUnA	ng/L	3,000	<1.0 U	<0.94 U	<1.0 U	<1.0 U	<1.0 U	<0.98 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.51 U	<0.47 U	<0.50 U	<0.51 U	<0.51 U	<0.49 U	<0.53 U	**1.8**	<0.51 U	<0.51 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	**2.2**	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.67 U	<0.62 U	<0.66 U	<0.68 U	<0.67 U	<0.65 U	<0.70 U	**2.1**	<0.68 U	<0.68 U	<0.66 U
PFHxDA	ng/L	--	<0.82 U	<0.76 U	<0.81 U	<0.83 U	<0.82 U	<0.79 U	<0.86 U	**1.7 J**	<0.83 U	<0.83 U	<0.81 U
PFODA	ng/L	400,000	<0.87 U	<0.80 U	<0.85 U	<0.87 U	<0.87 U	<0.84 U	<0.91 U	<0.85 U	<0.81 U	<0.87 U	<0.85 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	**0.52 J**	<0.18 U	**1.5 J**	**1.9**	**1.6 J**	**0.63 J**	**1.7 J**	**0.71 J**	<0.19 U	<0.18 U
PFPeS	ng/L	--	<0.28 U	<0.26 U	<0.27 U	**0.31 J**	**0.34 J**	<0.27 U	<0.29 U	<0.27 U	<0.28 U	<0.28 U	<0.27 U
PFHxS	ng/L	40	<0.52 U	**0.61 J**	<0.52 U	**2.9**	**3.0**	**0.66 J**	<0.55 U	**0.81 J**	<0.53 U	<0.53 U	<0.52 U
PFHpS	ng/L	--	<0.17 U	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.17 U
PFOS	ng/L	20	**3.4**	**0.87 J**	<0.49 U	**12**	**9.8**	**1.8**	<0.52 U	**1.9**	<0.51 U	<0.50 U	<0.49 U
PFNS	ng/L	--	<0.34 U	<0.32 U	<0.34 U	<0.34 U	<0.34 U	<0.33 U	<0.36 U	<0.34 U	<0.35 U	<0.34 U	<0.34 U
PFDS	ng/L	--	<0.29 U	<0.27 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U	**0.62 J**	<0.30 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.89 U	<0.83 U	<0.88 U	<0.90 U	<0.89 U	<0.87 U	<0.94 U	**0.96 J**	<0.91 U	<0.90 U	<0.88 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	**6.5**	<2.3 U	**6.8**	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.42 U	<0.39 U	<0.42 U	<0.43 U	<0.42 U	<0.41 U	<0.44 U	<0.42 U	<0.43 U	<0.43 U	<0.42 U
10:2 FTSA	ng/L	--	<0.62 U	<0.57 U	<0.61 U	<0.62 U	<0.62 U	<0.60 U	<0.65 U	**1.2 J**	<0.63 U	<0.62 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**1.4 J**	**2.4**	<0.89 U	<0.91 U	<0.90 U	<0.87 U	<0.95 U	**0.93 J**	<0.92 U	<0.91 U	<0.89 U
NMeFOSA	ng/L	--	<0.40 U	<0.37 U	<0.39 U	<0.40 U	<0.40 U	<0.38 U	<0.42 U	<0.39 U	<0.40 U	<0.40 U	<0.39 U
NEtFOSA	ng/L	20	<0.80 U	<0.74 U	<0.79 U	<0.81 U	<0.80 U	<0.78 U	<0.84 U	<0.79 U	<0.81 U	<0.81 U	<0.79 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	**2.1 J**	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	**2.7 J**	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.78 U	<0.72 U	<0.77 U	<0.79 U	<0.78 U	<0.76 U	<0.82 U	<0.77 U	<0.79 U	<0.79 U	<0.77 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.37 U	<0.34 U	<0.36 U	<0.37 U	<0.37 U	<0.36 U	<0.39 U	<0.36 U	<0.37 U	<0.37 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.27 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.31 U	**0.77 J**	<0.30 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**3.4**	**3.97**	**1.2**	**18.5**	**19.3**	**8.1**	**2.5**	**7.7**	**2.5**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**4.8**	**6.37**	**1.2**	**18.5**	**19.3**	**8.1**	**2.5**	**11.33**	**2.5**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.3	0.1	1.0	1.1	0.5	0.1	0.6	0.1	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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PFAS Parameters are defined in Table 1

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to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1257	1257	1257	1258	1258	1259	1260	1261	1262	1263	1263
		Sample Date	11/03/20	04/15/21	11/03/20	11/06/20	11/06/20	11/05/20	11/04/20	11/05/20	11/05/20	11/04/20	04/15/21
		Sample Number	PWS1257-OS-110320-100	PWS1257-OS-041521-100	PWS-FD01-110320	PWS1258-OS-110620-100	PWS-FD03-110620	PWS1259-OS-110520-100	PWS1260-OS-110420-100	PWS1261-OS-110520-100	PWS1262-OS-110520-100	PWS1263-OS-110420-100	PWS1263-OS-041521-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	<2.2 U	<2.2 U	**4.6**	**4.7**	<2.1 U	<2.1 U	<2.2 U	**15**	<2.0 U	<2.2 U
PFPeA	ng/L	--	**0.87 J**	<0.45 U	**0.84 J**	**0.63 J**	**0.65 J**	<0.44 U	**0.97 J**	<0.45 U	**12**	**1.3 J**	**1.3 J**
PFHxA	ng/L	150,000	**0.66 J**	**0.74 J**	**0.72 J**	<0.53 U	<0.54 U	<0.52 U	<0.51 U	<0.53 U	**12**	**0.91 J**	**1.4 J**
PFHpA	ng/L	--	**0.66 J**	**0.56 J**	**0.77 J**	<0.23 U	<0.23 U	<0.22 U	**0.33 J**	<0.23 U	**3.0**	**0.34 J**	**0.32 J**
PFOA	ng/L	20	<0.80 U	**1.0 J**	<0.77 U	<0.78 U	<0.79 U	<0.76 U	<0.75 U	<0.78 U	**7.7**	<0.71 U	<0.79 U
PFNA	ng/L	30	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.25 U	**0.75 J**	<0.23 U	<0.25 U
PFDA	ng/L	300	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	<0.27 U	<0.28 U	**6.9**	<0.26 U	<0.29 U
PFUnA	ng/L	3,000	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<1.0 U	<0.98 U	<0.97 U	<1.0 U	<1.0 U	<0.92 U	<1.0 U
PFDoA	ng/L	500	<0.52 U	<0.50 U	<0.50 U	<0.50 U	<0.51 U	<0.49 U	<0.49 U	<0.50 U	<0.51 U	<0.46 U	<0.51 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.69 U	<0.66 U	<0.66 U	<0.67 U	<0.68 U	<0.65 U	<0.64 U	<0.67 U	<0.68 U	<0.61 U	<0.68 U
PFHxDA	ng/L	--	<0.84 U	<0.81 U	<0.80 U	<0.81 U	<0.83 U	<0.79 U	<0.79 U	<0.82 U	<0.82 U	<0.74 U	<0.83 U
PFODA	ng/L	400,000	<0.89 U	<0.86 U	<0.85 U	<0.86 U	<0.88 U	<0.84 U	<0.83 U	<0.86 U	<0.87 U	<0.79 U	<0.87 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.87 J**	**1.8**	**0.90 J**	**0.61 J**	**0.59 J**	<0.18 U	**0.44 J**	<0.18 U	**6.7**	<0.17 U	<0.19 U
PFPeS	ng/L	--	<0.28 U	<0.27 U	**0.29 J**	<0.27 U	<0.28 U	<0.27 U	<0.26 U	<0.27 U	**0.64 J**	<0.25 U	<0.28 U
PFHxS	ng/L	40	**6.8**	**3.2**	**6.4**	<0.52 U	<0.53 U	<0.51 U	**0.56 J**	<0.52 U	**2.7**	<0.48 U	<0.53 U
PFHpS	ng/L	--	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.16 U	<0.18 U
PFOS	ng/L	20	<0.51 U	<0.49 U	<0.49 U	<0.49 U	<0.50 U	<0.48 U	<0.48 U	<0.49 U	**18**	<0.45 U	<0.50 U
PFNS	ng/L	--	<0.35 U	<0.34 U	<0.33 U	<0.34 U	<0.35 U	<0.33 U	<0.33 U	<0.34 U	<0.34 U	<0.31 U	<0.34 U
PFDS	ng/L	--	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.30 U	<0.27 U	<0.30 U
PFDoS	ng/L	--	<0.92 U	<0.88 U	<0.88 U	<0.88 U	<0.91 U	<0.87 U	<0.86 U	<0.89 U	<0.90 U	<0.81 U	<0.90 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.22 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.2 U	<2.3 U	<2.3 U	<2.1 U	<2.3 U
8:2 FTSA	ng/L	--	<0.43 U	<0.42 U	<0.42 U	<0.42 U	<0.43 U	<0.41 U	<0.41 U	<0.42 U	<0.43 U	<0.39 U	<0.43 U
10:2 FTSA	ng/L	--	<0.63 U	<0.61 U	<0.61 U	<0.61 U	<0.63 U	<0.60 U	<0.59 U	<0.61 U	<0.62 U	<0.56 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.92 U	<0.89 U	**0.90 J**	<0.89 U	**0.98 J**	<0.88 U	<0.87 U	<0.90 U	<0.91 U	**2.9**	<0.91 U
NMeFOSA	ng/L	--	<0.41 U	<0.39 U	<0.39 U	<0.39 U	<0.40 U	<0.38 U	<0.38 U	<0.39 U	<0.40 U	<0.36 U	<0.40 U
NEtFOSA	ng/L	20	<0.82 U	<0.79 U	<0.79 U	<0.79 U	<0.81 U	<0.78 U	<0.77 U	<0.80 U	<0.80 U	<0.73 U	<0.81 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.80 U	<0.77 U	<0.77 U	<0.78 U	<0.79 U	<0.76 U	<0.75 U	<0.78 U	<0.79 U	<0.71 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.38 U	<0.36 U	<0.36 U	<0.36 U	<0.37 U	<0.36 U	<0.35 U	<0.37 U	<0.37 U	<0.33 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.30 U	<0.27 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**1**	ND	ND	ND	ND	ND	ND	**25.7**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**1**	**0.9**	ND	**0.98**	ND	ND	ND	**25.7**	**2.9**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	1.4	0.1	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1263	1264	1264	1265	1265	1267	1268	1269	1269	1270	1271
		Sample Date	04/15/21	11/07/20	04/15/21	11/04/20	04/15/21	11/05/20	11/05/20	03/18/21	05/26/21	11/11/20	11/06/20
		Sample Number	PWS-FD01-041521	PWS1264-OS-110720-100	PWS1264-OS-041521-100	PWS1265-OS-110420-100	PWS1265-OS-041521-100	PWS1267-OS-110520-100	PWS1268-OS-110520-100	PWS1269-OS-031821-100	PWS1269-IS-052621-100	PWS1270-OS-111120-100	PWS1271-OS-110620-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	**10**	**7.3**	**3.8 J**	**6.1**	<2.3 U	<2.0 U	**35**	**11**	<2.2 U	<2.0 U
PFPeA	ng/L	--	**1.4 J**	**14**	**6.7**	**1.1 J**	**1.4 J**	**0.47 J**	<0.41 U	**36**	**8.8**	**0.63 J**	<0.40 U
PFHxA	ng/L	150,000	**1.3 J**	**12**	**4.1**	**0.74 J**	**1.5 J**	<0.55 U	<0.49 U	**25**	**6.4**	<0.54 U	<0.48 U
PFHpA	ng/L	--	**0.33 J**	**4.1**	**2.3**	**0.64 J**	**0.85 J**	<0.24 U	<0.21 U	**26**	**6.1**	<0.23 U	<0.21 U
PFOA	ng/L	20	<0.77 U	**5.3**	**2.8**	<0.84 U	**0.92 J**	<0.81 U	<0.72 U	**14**	**3.9**	<0.79 U	<0.70 U
PFNA	ng/L	30	<0.24 U	<0.23 U	<0.25 U	<0.27 U	<0.25 U	<0.26 U	<0.23 U	**1.2 J**	**0.43 J**	<0.25 U	<0.22 U
PFDA	ng/L	300	<0.28 U	<0.27 U	<0.28 U	<0.31 U	<0.29 U	<0.29 U	<0.26 U	<0.26 U	<0.25 U	<0.29 U	<0.26 U
PFUnA	ng/L	3,000	<0.99 U	<0.96 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.93 U	<0.91 U	<0.88 U	<1.0 U	<0.91 U
PFDoA	ng/L	500	<0.50 U	<0.48 U	<0.50 U	<0.54 U	<0.51 U	<0.52 U	<0.46 U	<0.46 U	<0.44 U	<0.51 U	<0.45 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.66 U	<0.63 U	<0.66 U	<0.72 U	<0.68 U	<0.69 U	<0.62 U	<0.61 U	<0.58 U	<0.68 U	<0.60 U
PFHxDA	ng/L	--	<0.80 U	<0.77 U	<0.81 U	<0.88 U	<0.82 U	<0.85 U	<0.75 U	<0.74 U	<0.71 U	<0.83 U	<0.74 U
PFODA	ng/L	400,000	<0.85 U	<0.82 U	<0.85 U	<0.93 U	<0.87 U	<0.89 U	<0.79 U	<0.78 U	<0.75 U	<0.88 U	<0.78 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	**3.0**	**1.5 J**	**0.86 J**	**1.1 J**	<0.19 U	<0.17 U	**2.3**	**0.76 J**	<0.19 U	<0.17 U
PFPeS	ng/L	--	<0.27 U	**1.1 J**	**0.50 JI**	<0.30 UF1	<0.28 U	<0.29 U	<0.25 U	<0.25 U	<0.24 U	<0.28 U	<0.25 U
PFHxS	ng/L	40	<0.51 U	**5.5**	**1.3 J**	**0.61 J**	**0.55 JI**	<0.54 U	<0.48 U	**1.6 J**	**0.63 J**	<0.53 U	<0.47 U
PFHpS	ng/L	--	<0.17 U	<0.16 U	<0.17 U	<0.19 U	<0.18 U	<0.18 U	<0.16 U	<0.16 U	<0.15 U	<0.18 U	<0.16 U
PFOS	ng/L	20	<0.49 U	**1.7**	**1.3 JI**	<0.53 U	<0.50 U	<0.51 U	<0.46 U	**3.7**	**1.6**	<0.50 U	<0.45 U
PFNS	ng/L	--	<0.33 U	<0.32 U	<0.34 U	<0.37 U	<0.34 U	<0.35 U	<0.31 U	<0.31 U	<0.30 U	<0.35 U	<0.31 U
PFDS	ng/L	--	<0.29 U	<0.28 U	<0.29 U	<0.32 U	<0.30 U	<0.30 U	<0.27 U	<0.27 U	<0.26 U	<0.30 U	<0.26 U
PFDoS	ng/L	--	<0.88 U	<0.84 U	<0.88 U	<0.96 U	<0.90 U	<0.92 U	<0.82 U	<0.80 U	<0.77 U	<0.91 U	<0.80 U
4:2 FTSA	ng/L	--	<0.22 U	<0.21 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.20 U	<0.20 U	<0.19 U	<0.22 U	<0.20 U
6:2 FTSA	ng/L	--	<2.3 U	<2.2 U	<2.3 U	<2.5 U	<2.3 U	<2.4 U	<2.1 U	**7.9**	**2.9 J**	<2.3 U	<2.1 U
8:2 FTSA	ng/L	--	<0.42 U	<0.40 U	<0.42 U	<0.46 U	<0.43 U	<0.44 U	<0.39 U	<0.38 U	<0.37 U	<0.43 U	<0.38 U
10:2 FTSA	ng/L	--	<0.60 U	<0.58 U	<0.61 U	<0.66 UF1	<0.62 U	<0.64 U	<0.57 U	<0.56 U	<0.53 U	<0.63 U	<0.55 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.88 U	**1.8**	<0.89 U	**4.1**	**0.93 J**	<0.93 U	**1.1 J**	<0.81 U	<0.78 U	<0.92 U	<0.81 U
NMeFOSA	ng/L	--	<0.39 U	<0.37 U	<0.39 U	<0.43 U	<0.40 U	<0.41 U	<0.36 U	<0.36 U	<0.34 U	<0.40 U	<0.36 U
NEtFOSA	ng/L	20	<0.78 U	<0.76 U	<0.79 U	<0.86 U	<0.81 U	<0.83 U	<0.74 U	<0.72 U	<0.69 U	<0.81 U	<0.72 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<0.96 U	<1.1 U	<0.99 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.0 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.77 U	<0.74 U	<0.77 U	<0.84 U	<0.79 U	<0.81 U	<0.72 U	<0.70 U	<0.68 U	<0.79 U	<0.70 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.3 U	<1.2 U	<1.2 U	<1.4 U	<1.2 U
DONA	ng/L	3,000	<0.36 U	<0.35 U	<0.36 U	<0.40 U	<0.37 U	<0.38 U	<0.34 U	<0.33 U	<0.32 U	<0.37 U	<0.33 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.21 U	<0.22 U	<0.24 U	<0.22 U	<0.23 U	<0.20 U	<0.20 U	<0.19 U	<0.22 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.28 U	<0.29 U	<0.32 U	<0.30 U	<0.30 U	<0.27 U	<0.27 U	<0.26 U	<0.30 U	<0.26 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**7**	**4.1**	ND	**0.92**	ND	ND	**17.7**	**5.5**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**8.8**	**4.1**	**4.1**	**1.85**	ND	**1.1**	**17.7**	**5.5**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.6	0.2	0.2	0.1	0.0	0.1	1.0	0.3	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1272	1272	1273	1274	1275	1276	1276	1276	1276	1277	1278
		Sample Date	11/04/20	04/19/21	11/05/20	11/05/20	11/09/20	11/04/20	04/16/21	11/04/20	04/16/21	11/04/20	03/17/21
		Sample Number	PWS1272-OS-110420-100	PWS1272-OS-041921-100	PWS1273-OS-110520-100	PWS1274-OS-110520-100	PWS1275-OS-110920-100	PWS1276-OS-110420-100	PWS1276-OS-041621-100	PWS-FD03-110420	PWS-FD01-041621	PWS1277-OS-110420-100	PWS1278-OS-031721-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.2 U	**2.4 J**	**17**	<2.3 U	**3.8 J**	**7.6**	**4.0 J**	**7.9**	<2.3 U	**10**
PFPeA	ng/L	--	<0.42 U	<0.45 U	**0.60 J**	**30**	**0.74 J**	**3.7**	**7.5**	**4.6**	**7.3**	**0.54 J**	**7.2**
PFHxA	ng/L	150,000	<0.50 U	<0.53 U	<0.54 U	**39**	<0.55 U	**6.0**	**9.0**	**5.7**	**9.8**	<0.54 U	**8.7**
PFHpA	ng/L	--	<0.21 U	<0.23 U	**0.34 J**	**18**	<0.24 U	**6.0**	**7.6**	**5.7**	**8.2**	<0.23 U	**6.0**
PFOA	ng/L	20	<0.73 U	<0.77 U	<0.79 U	**44**	<0.80 U	**3.3**	**3.9**	**3.1**	**3.7**	<0.80 U	**13**
PFNA	ng/L	30	<0.23 U	<0.25 U	<0.25 U	**7.3**	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	**1.9**
PFDA	ng/L	300	<0.27 U	<0.28 U	<0.29 U	**4.4**	<0.29 U	<0.28 U	<0.29 U	<0.29 U	<0.29 U	<0.29 U	**0.41 J**
PFUnA	ng/L	3,000	<0.94 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<0.98 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.93 U
PFDoA	ng/L	500	<0.47 U	<0.50 U	<0.51 U	<0.56 U	<0.52 U	<0.49 U	<0.51 U	<0.51 U	<0.52 U	<0.52 U	<0.46 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.62 U	<0.66 U	<0.68 U	<0.74 U	<0.69 U	<0.65 U	<0.67 U	<0.67 U	<0.69 U	<0.69 U	<0.62 U
PFHxDA	ng/L	--	<0.76 U	<0.81 U	<0.83 U	<0.90 U	<0.84 U	<0.80 U	<0.82 U	<0.82 U	<0.84 U	<0.84 U	<0.75 U
PFODA	ng/L	400,000	<0.80 U	<0.86 U	<0.88 U	<0.95 U	<0.89 U	<0.84 U	<0.87 U	<0.87 U	<0.88 U	<0.88 U	<0.79 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	**0.21 J**	**0.86 J**	**5.5**	<0.19 U	**1.8**	**1.5 J**	**2.0**	**1.6 J**	<0.19 U	**3.5**
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.28 U	**0.99 J**	<0.28 U	<0.27 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	**0.46 J**
PFHxS	ng/L	40	<0.49 U	<0.52 U	**1.1 J**	**5.3**	<0.54 U	**1.6 J**	**1.6 J**	**1.4 J**	**1.7 J**	<0.54 U	**1.6 J**
PFHpS	ng/L	--	<0.16 U	<0.17 U	<0.18 U	**1.4 J**	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.18 U	<0.18 U	**0.17 J**
PFOS	ng/L	20	**0.55 J**	<0.49 U	<0.51 U	**32 I**	<0.51 U	**1.5 J**	**1.4 J**	<0.50 U	**1.1 J**	<0.51 U	**21**
PFNS	ng/L	--	<0.32 U	<0.34 U	<0.35 U	<0.37 U	<0.35 U	<0.33 U	<0.34 U	<0.34 U	<0.35 U	<0.35 U	<0.31 U
PFDS	ng/L	--	<0.27 U	<0.29 U	<0.30 U	<0.32 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U
PFDoS	ng/L	--	<0.83 U	<0.88 U	<0.91 U	<0.98 U	<0.91 U	<0.87 U	<0.89 U	<0.89 U	<0.91 U	<0.91 U	<0.82 U
4:2 FTSA	ng/L	--	<0.21 U	<0.22 U	<0.22 U	<0.24 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.23 U	<0.23 U	<0.20 U
6:2 FTSA	ng/L	--	<2.1 U	<2.3 U	<2.3 U	<2.5 U	<2.4 U	<2.2 U	<2.3 U	<2.3 U	<2.4 U	<2.3 U	<2.1 U
8:2 FTSA	ng/L	--	<0.39 U	<0.42 U	<0.43 U	<0.47 U	<0.43 U	<0.41 U	<0.42 U	<0.42 U	<0.43 U	<0.43 U	<0.39 U
10:2 FTSA	ng/L	--	<0.57 U	<0.61 U	<0.63 U	<0.68 U	<0.63 U	<0.60 U	<0.62 U	<0.62 U	<0.63 U	<0.63 U	<0.56 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**2.1**	<0.89 U	<0.92 U	<0.99 U	<0.92 U	<0.88 U	<0.90 U	<0.90 U	<0.92 U	<0.92 U	<0.83 U
NMeFOSA	ng/L	--	<0.37 U	<0.39 U	<0.40 U	<0.43 U	<0.41 U	<0.38 U	<0.40 U	<0.40 U	<0.40 U	<0.40 U	<0.36 U
NEtFOSA	ng/L	20	<0.74 U	<0.79 U	<0.81 U	<0.88 U	<0.82 U	<0.78 U	<0.80 U	<0.80 U	<0.82 U	<0.82 U	<0.73 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.73 U	<0.77 U	<0.79 U	<0.86 U	<0.80 U	<0.76 U	<0.78 U	<0.78 U	<0.80 U	<0.80 U	<0.72 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.34 U	<0.36 U	<0.37 U	<0.40 U	<0.38 U	<0.36 U	<0.37 U	<0.37 U	<0.38 U	<0.38 U	<0.34 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.22 U	<0.22 U	<0.24 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.23 U	<0.23 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.29 U	<0.30 U	<0.32 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**0.55**	ND	ND	**76**	ND	**4.8**	**5.3**	**3.1**	**4.8**	ND	**34**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.65**	ND	ND	**76**	ND	**4.8**	**5.3**	**3.1**	**4.8**	ND	**34**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.0	0.0	4.2	0.0	0.3	0.3	0.2	0.3	0.0	1.8

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1279	1279	1279	1280	1280	1281	1281	1282	1282	1283	1284
		Sample Date	11/03/20	05/25/21	05/25/21	11/05/20	11/05/20	11/05/20	04/16/21	11/05/20	04/16/21	11/04/20	03/19/21
		Sample Number	PWS1279-OS-110320-100	PWS1279-OS-052521-100	PWS-FD01-052521	PWS1280A-OS-110520-100	PWS1280B-OS-110520-100	PWS1281-OS-110520-100	PWS1281-OS-041621-100	PWS1282-OS-110520-100	PWS1282-OS-041621-100	PWS1283-OS-110420-100	PWS1284-OS-031921-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**6.2**	**23**	**21**	<2.2 U	<2.3 U	**3.2 J**	**2.7 J**	**2.7 J**	**3.4 J**	**8.0**	**3.4 J**
PFPeA	ng/L	--	**2.4**	**19**	**18**	<0.45 U	<0.47 U	**2.4**	**2.6**	**3.9**	**4.9**	**0.55 J**	<0.41 U
PFHxA	ng/L	150,000	**2.1**	**16**	**15**	<0.53 U	<0.55 U	**2.2**	**3.2**	**5.0**	**6.9**	<0.51 U	<0.49 U
PFHpA	ng/L	--	**1.6 J**	**14**	**14**	<0.23 U	<0.24 U	**1.8**	**1.9**	**2.0**	**2.5**	<0.22 U	<0.21 U
PFOA	ng/L	20	**2.8**	**22**	**21**	<0.78 U	<0.81 U	**5.9**	**5.8**	**4.3**	**7.1**	<0.74 U	**1.5 J**
PFNA	ng/L	30	<0.25 U	**1.6**	**1.6 J**	<0.25 U	<0.26 U	<0.24 U	**0.60 J**	**0.70 J**	**0.76 J**	<0.24 U	<0.23 U
PFDA	ng/L	300	<0.29 U	<0.25 U	<0.27 U	<0.29 U	<0.29 U	<0.28 U	<0.29 U	**1.3 J**	**3.2**	<0.27 U	<0.26 U
PFUnA	ng/L	3,000	<1.0 U	<0.90 U	<0.96 U	<1.0 U	<1.0 U	<0.99 U	<1.0 U	<0.95 U	<1.0 U	<0.96 U	<0.93 U
PFDoA	ng/L	500	<0.51 U	<0.45 U	<0.48 U	<0.51 U	<0.52 U	<0.50 U	<0.51 U	<0.47 U	<0.51 U	<0.48 U	<0.47 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U
PFTeA	ng/L	10,000	<0.68 U	<0.60 U	<0.64 U	<0.67 U	<0.69 U	<0.66 U	<0.68 U	<0.63 U	<0.68 U	<0.64 U	<0.62 U
PFHxDA	ng/L	--	<0.83 U	<0.73 U	<0.78 U	<0.82 U	<0.85 U	<0.80 U	<0.83 U	<0.77 U	<0.83 U	<0.78 U	<0.75 U
PFODA	ng/L	400,000	<0.88 U	<0.77 U	<0.82 U	<0.86 U	<0.89 U	<0.85 U	<0.87 U	<0.81 U	<0.87 U	<0.82 U	<0.80 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.73 J**	**1.3 J**	**1.3 J**	<0.18 U	<0.19 U	**1.4 J**	**3.5**	**2.4**	**3.7**	**0.86 J**	<0.17 U
PFPeS	ng/L	--	<0.28 U	**0.46 J**	**0.38 J**	<0.28 U	<0.29 U	<0.27 U	**0.34 J**	<0.26 U	<0.28 U	<0.26 U	<0.25 U
PFHxS	ng/L	40	**1.2 J**	**9.6**	**9.7**	<0.52 U	<0.54 U	**1.6 J**	**2.6**	**1.4 J**	**2.3**	<0.50 U	**0.96 J**
PFHpS	ng/L	--	<0.18 U	**1.8**	**1.8**	<0.17 U	<0.18 U	**0.20 J**	**0.22 J**	<0.16 U	<0.18 U	<0.17 U	<0.16 U
PFOS	ng/L	20	<0.50 U	**7.8**	**8.1**	<0.50 U	<0.51 U	**11**	**13**	**9.6**	**17**	<0.47 U	<0.46 U
PFNS	ng/L	--	<0.34 U	<0.30 U	<0.32 U	<0.34 U	<0.35 U	<0.33 U	<0.34 U	<0.32 U	<0.34 U	<0.32 U	<0.31 U
PFDS	ng/L	--	<0.30 U	<0.26 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.27 U
PFDoS	ng/L	--	<0.90 U	<0.79 U	<0.85 U	<0.89 U	<0.92 U	<0.88 U	<0.90 U	<0.84 U	<0.90 U	<0.85 U	<0.82 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U	<0.21 U	<0.20 U
6:2 FTSA	ng/L	--	<2.3 U	<2.0 U	<2.2 U	<2.3 U	<2.4 U	<2.3 U	<2.3 U	<2.2 U	<2.3 U	<2.2 U	<2.1 U
8:2 FTSA	ng/L	--	<0.43 U	<0.37 U	<0.40 U	<0.42 U	<0.44 U	<0.42 U	<0.43 U	<0.40 U	<0.43 U	<0.40 U	<0.39 U
10:2 FTSA	ng/L	--	<0.62 U	<0.55 U	<0.59 U	<0.62 U	<0.64 U	<0.61 U	<0.62 U	<0.58 U	<0.62 U	<0.59 U	<0.57 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.91 U	<0.80 U	<0.86 U	<0.90 U	<0.93 U	<0.89 U	**0.93 J**	<0.85 U	<0.91 U	<0.86 U	<0.83 U
NMeFOSA	ng/L	--	<0.40 U	<0.35 U	<0.38 U	<0.40 U	<0.41 U	<0.39 U	<0.40 U	<0.37 U	<0.40 U	<0.38 U	<0.36 U
NEtFOSA	ng/L	20	<0.81 U	<0.71 U	<0.76 U	<0.80 U	<0.83 U	<0.79 U	<0.81 U	<0.75 U	<0.81 U	<0.76 U	<0.74 U
NMeFOSAA	ng/L	--	<1.1 U	<0.98 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.1 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
NEtFOSE	ng/L	20	<0.79 U	<0.69 U	<0.75 U	<0.78 U	<0.81 U	<0.77 U	<0.79 U	<0.73 U	<0.79 U	<0.74 U	<0.72 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.2 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U
DONA	ng/L	3,000	<0.37 U	<0.33 U	<0.35 U	<0.37 U	<0.38 U	<0.36 U	<0.37 U	<0.35 U	<0.37 U	<0.35 U	<0.34 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.21 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U	<0.21 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.26 U	<0.28 U	<0.29 U	<0.30 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**2.8**	**29.8**	**29.1**	ND	ND	**16.9**	**18.8**	**13.9**	**24.1**	ND	**1.5**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.8**	**29.8**	**29.1**	ND	ND	**16.9**	**19.73**	**13.9**	**24.1**	ND	**1.5**
Hazard Index (HI)													
HI	ng/L	1.0	0.2	1.8	1.8	0.0	0.0	0.9	1.1	0.8	1.3	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1285	1285	1286	1287	1287	1288	1289	1290	1290	1291	1292
		Sample Date	11/04/20	11/04/20	11/07/20	11/03/20	04/16/21	11/10/20	11/03/20	11/05/20	04/17/21	11/04/20	03/17/21
		Sample Number	PWS1285-OS-110420-100	PWS-FD01-110420	PWS1286-OS-110720-100	PWS1287-OS-110320-100	PWS1287-OS-041621-100	PWS1288-OS-111020-100	PWS1289-OS-110320-100	PWS1290-OS-110520-100	PWS1290-OS-041721-100	PWS1291-OS-110420-100	PWS1292-OS-031721-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	<2.1 U	<1.9 U	**5.5**	**4.3 J**	<2.3 U	<2.2 U	**13**	**14**	<2.1 U	<2.2 U
PFPeA	ng/L	--	<0.43 U	<0.44 U	<0.39 U	**6.9**	**5.1**	**0.63 J**	<0.45 U	**16**	**19**	**0.49 J**	<0.46 U
PFHxA	ng/L	150,000	<0.50 U	<0.52 U	<0.47 U	**5.8**	**4.6**	**0.56 J**	<0.53 U	**10**	**12**	<0.51 U	<0.54 U
PFHpA	ng/L	--	<0.22 U	<0.22 U	<0.20 U	**3.4**	**2.3**	<0.24 U	<0.23 U	**4.4**	**5.4**	**0.24 J**	<0.23 U
PFOA	ng/L	20	<0.74 U	<0.76 U	<0.68 U	**4.7**	**3.1**	<0.80 U	<0.78 U	**3.4**	**4.1**	**0.91 J**	**3.1**
PFNA	ng/L	30	<0.23 U	<0.24 U	<0.22 U	**0.31 J**	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	**0.35 J**	<0.25 U
PFDA	ng/L	300	<0.27 U	<0.28 U	<0.25 U	<0.31 U	<0.28 U	<0.29 U	<0.28 U	<0.28 U	<0.29 U	<0.27 U	<0.29 U
PFUnA	ng/L	3,000	<0.96 U	<0.98 U	<0.89 U	<1.1 U	<0.99 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.97 U	<1.0 U
PFDoA	ng/L	500	<0.48 U	<0.49 U	<0.44 U	<0.56 U	<0.49 U	<0.52 U	<0.50 U	<0.50 U	<0.51 U	<0.48 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.0 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.63 U	<0.65 U	<0.59 U	<0.74 U	<0.65 U	<0.69 U	<0.67 U	<0.67 U	<0.68 U	<0.64 U	<0.68 U
PFHxDA	ng/L	--	<0.77 U	<0.79 U	<0.72 U	<0.90 U	<0.80 U	<0.84 U	<0.81 U	<0.81 U	<0.82 U	<0.78 U	<0.83 U
PFODA	ng/L	400,000	<0.82 U	<0.84 U	<0.76 U	<0.95 U	<0.84 U	<0.88 U	<0.86 U	<0.86 U	<0.87 U	<0.83 U	<0.87 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.18 U	<0.16 U	**1.1 J**	**0.83 J**	**0.45 J**	<0.18 U	**0.88 J**	**1.8**	**0.28 J**	<0.19 U
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.24 U	<0.30 U	<0.27 U	<0.28 U	<0.27 U	<0.27 U	<0.28 U	<0.26 U	<0.28 U
PFHxS	ng/L	40	<0.50 U	<0.51 U	<0.46 U	**1.3 J**	**0.99 J**	<0.54 U	<0.52 U	**0.67 J**	<0.53 U	**0.77 J**	<0.53 U
PFHpS	ng/L	--	<0.17 U	<0.17 U	<0.15 U	<0.19 U	<0.17 U	<0.18 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.47 U	<0.48 U	<0.44 U	**1.1 J**	**0.83 J**	<0.51 U	<0.49 U	<0.49 U	<0.50 U	**1.2 J**	<0.50 U
PFNS	ng/L	--	<0.32 U	<0.33 U	<0.30 U	<0.38 U	<0.33 U	<0.35 U	<0.34 U	<0.34 U	<0.34 U	<0.32 U	<0.34 U
PFDS	ng/L	--	<0.28 U	<0.28 U	<0.26 U	<0.33 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U
PFDoS	ng/L	--	<0.84 U	<0.86 U	<0.78 U	<0.99 U	<0.87 U	<0.91 U	<0.89 U	<0.89 U	<0.90 U	<0.85 U	<0.90 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.19 U	<0.24 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.2 U	<2.0 U	<2.5 U	<2.2 U	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.3 U
8:2 FTSA	ng/L	--	<0.40 U	<0.41 U	<0.37 U	<0.47 U	<0.41 U	<0.43 U	<0.42 U	<0.42 U	<0.43 U	<0.40 U	<0.43 U
10:2 FTSA	ng/L	--	<0.58 U	<0.60 U	<0.54 U	<0.68 U	<0.60 U	<0.63 U	<0.61 U	<0.61 U	<0.62 U	<0.59 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.85 U	<0.87 U	<0.79 U	**1.2 J**	<0.88 U	<0.92 U	<0.89 U	<0.90 U	<0.91 U	**0.97 J**	<0.91 U
NMeFOSA	ng/L	--	<0.37 U	<0.38 U	<0.35 U	<0.44 U	<0.39 U	<0.40 U	<0.39 U	<0.39 U	<0.40 U	<0.38 U	<0.40 U
NEtFOSA	ng/L	20	<0.76 U	<0.77 U	<0.70 U	<0.88 U	<0.78 U	<0.82 U	<0.79 U	<0.80 U	<0.80 U	<0.76 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<0.97 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.0 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.1 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.74 U	<0.76 U	<0.68 U	**0.89 J**	<0.76 U	<0.80 U	<0.78 U	<0.78 U	<0.79 U	<0.75 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.2 U	<1.5 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.36 U	<0.32 U	<0.41 U	<0.36 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.35 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.19 U	<0.24 U	<0.22 U	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.28 U	<0.26 U	<0.33 U	<0.29 U	<0.30 U	<0.29 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	**5.8**	**3.93**	ND	ND	**3.4**	**4.1**	**2.11**	**3.1**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	ND	**7.89**	**3.93**	ND	ND	**3.4**	**4.1**	**3.08**	**3.1**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.2	0.2	0.2	0.2

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1292	1293	1294	1294	1294	1295	1296	1297	1298	1299	1299
		Sample Date	05/28/21	04/16/21	11/06/20	04/17/21	04/17/21	11/05/20	11/07/20	11/06/20	11/11/20	11/05/20	04/21/21
		Sample Number	PWS1292-IS-052821-100	PWS1293-IS-041621-100	PWS1294-OS-110620-100	PWS1294-OS-041721-100	PWS-FD01-041721	PWS1295-OS-110520-100	PWS1296-OS-110720-100	PWS1297-OS-110620-100	PWS1298-OS-111120-100	PWS1299-OS-110520-100	PWS-1299-OS-042121-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	**14**	**9.8**	**17**	**16**	<2.2 U	**8.6**	<2.3 U	**2.9 J**	**4.4 J**	**7.0**
PFPeA	ng/L	--	<0.43 U	**19**	**5.7**	**4.6**	**4.9**	**0.58 J**	**2.9**	**0.46 J**	**2.2**	**2.6**	**2.6**
PFHxA	ng/L	150,000	<0.51 U	**18**	**6.4**	**3.7**	**3.5**	<0.54 U	**2.4**	<0.55 U	**1.4 J**	**1.6 J**	**2.5**
PFHpA	ng/L	--	<0.22 U	**8.0**	**7.3**	**3.0**	**2.5**	**0.41 J**	**1.7**	<0.24 U	**0.51 J**	**1.5 J**	**1.4 J**
PFOA	ng/L	20	<0.75 U	**21**	**3.9**	**3.1**	**3.1**	<0.80 U	**0.93 J**	<0.80 U	**1.8 J**	**2.3**	**2.0**
PFNA	ng/L	30	<0.24 U	**4.1**	<0.23 U	<0.25 U	<0.25 U	<0.25 U	<0.22 U	<0.26 U	<0.25 U	<0.26 U	<0.23 U
PFDA	ng/L	300	<0.27 U	<0.30 U	<0.26 U	<0.29 U	<0.29 U	<0.29 U	<0.26 U	<0.29 U	<0.29 U	<0.29 U	<0.27 U
PFUnA	ng/L	3,000	<0.96 U+	<1.0 U	<0.93 U	<1.0 U	<1.0 U	<1.0 U	<0.92 U	<1.0 U	<1.0 U	<1.0 U	<0.95 U
PFDoA	ng/L	500	<0.48 U	<0.52 U	<0.46 U	<0.51 U	<0.52 U	<0.52 U	<0.46 U	<0.52 U	<0.51 U	<0.52 U	<0.47 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.64 U	<0.70 U	<0.62 U	<0.68 U	<0.69 U	<0.68 U	<0.61 U	<0.69 U	<0.68 U	<0.69 U	<0.63 U
PFHxDA	ng/L	--	<0.78 U	<0.85 U	<0.75 U	<0.83 U	<0.84 U	<0.83 U	<0.74 U	<0.84 U	<0.82 U	<0.84 U	<0.76 U
PFODA	ng/L	400,000	<0.82 U	<0.90 U	<0.79 U	<0.88 U	<0.88 U	<0.88 U	<0.78 U	<0.89 U	<0.87 U	<0.89 U	<0.81 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	**10**	**2.1**	**2.5**	**2.7**	<0.19 U	**0.88 J**	<0.19 U	**0.22 J**	**0.67 J**	**0.69 J**
PFPeS	ng/L	--	<0.26 U	**0.37 J**	<0.25 U	<0.28 U	**0.36 J**	<0.28 U	<0.25 U	<0.28 U	<0.28 U	<0.28 U	<0.26 U
PFHxS	ng/L	40	<0.50 U	**7.6**	**0.92 J**	**0.90 J**	**0.89 J**	<0.53 U	**0.69 J**	<0.54 U	<0.53 U	<0.54 U	**0.52 J**
PFHpS	ng/L	--	<0.17 U	**0.82 J**	<0.16 U	<0.18 U	<0.18 U	<0.18 U	<0.16 U	<0.18 U	<0.18 U	<0.18 U	<0.16 U
PFOS	ng/L	20	<0.47 U	**33 I**	**1.6 J**	**1.5 J**	**1.5 J**	<0.51 U	<0.45 U	<0.51 U	<0.50 U	**1.2 J**	**1.0 J**
PFNS	ng/L	--	<0.32 U	<0.35 U	<0.31 U	<0.34 U	<0.35 U	<0.35 U	<0.31 U	<0.35 U	<0.34 U	<0.35 U	<0.32 U
PFDS	ng/L	--	<0.28 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.28 U
PFDoS	ng/L	--	<0.85 U	<0.92 U	<0.82 U	<0.90 U	<0.91 U	<0.91 U	<0.81 U	<0.92 U	<0.90 U	<0.92 U	<0.83 U
4:2 FTSA	ng/L	--	<0.21 U	<0.23 U	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.20 U	<0.23 U	<0.22 U	<0.23 U	<0.21 U
6:2 FTSA	ng/L	--	<2.2 U	<2.4 U	<2.1 U	<2.3 U	<2.3 U	<2.3 U	<2.1 U	<2.4 U	<2.3 U	<2.4 U	<2.1 U
8:2 FTSA	ng/L	--	<0.40 U	<0.44 U	<0.39 U	<0.43 U	<0.43 U	<0.43 U	<0.38 U	<0.43 U	<0.43 U	<0.44 U	<0.40 U
10:2 FTSA	ng/L	--	<0.59 U	<0.64 U	<0.57 U	<0.62 U	<0.63 U	<0.63 U	<0.56 U	<0.63 U	<0.62 U	<0.63 U	<0.58 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**0.93 J**	<0.93 U	<0.83 U	<0.91 U	<0.92 U	<0.92 U	<0.82 U	<0.93 U	<0.91 U	**5.7**	**3.1**
NMeFOSA	ng/L	--	<0.38 U	<0.41 U	<0.36 U	<0.40 U	<0.40 U	<0.40 U	<0.36 U	<0.41 U	<0.40 U	<0.41 U	<0.37 U
NEtFOSA	ng/L	20	<0.76 U	<0.83 U	<0.74 U	<0.81 U	<0.82 U	<0.81 U	<0.72 U	<0.82 U	<0.81 U	<0.82 U	<0.75 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.75 U+	<0.81 U	<0.72 U	<0.79 U	<0.80 U	<0.80 U	<0.71 U	<0.80 U	<0.79 U	<0.80 U	<0.73 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.2 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.35 U	<0.38 U	<0.34 U	<0.37 U	<0.38 U	<0.37 U	<0.33 U	<0.38 U	<0.37 U	<0.38 U	<0.34 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.23 U	<0.20 U	<0.22 U	<0.23 U	<0.22 U	<0.20 U	<0.23 U	<0.22 U	<0.23 U	<0.21 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.27 U	<0.30 U	<0.30 U	<0.30 U	<0.28 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**54**	**5.5**	**4.6**	**4.6**	ND	**0.93**	ND	**1.8**	**3.5**	**3**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**0.93**	**54**	**5.5**	**4.6**	**4.6**	ND	**0.93**	ND	**1.8**	**9.2**	**6.1**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	3.0	0.3	0.3	0.3	0.0	0.1	0.0	0.1	0.5	0.3

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1299	1300	1300	1301	1301	1302	1303	1303	1304	1305	1306
		Sample Date	11/05/20	11/04/20	04/16/21	11/02/20	04/23/21	11/03/20	11/04/20	04/19/21	11/05/20	11/04/20	03/18/21
		Sample Number	PWS-FD01-110520	PWS1300-OS-110420-100	PWS1300-OS-041621-100	PWS1301-OS-110220-100	PWS1301-OS-042321-100	PWS1302-OS-110320-100	PWS1303-OS-110420-100	PWS1303-OS-041921-100	PWS1304-OS-110520-100	PWS1305-OS-110420-100	PWS1306-OS-031821-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**4.5 J**	<2.2 U	<2.2 U	<2.2 U	<2.2 U	**2.8 J**	**17**	**15**	<2.3 U	<2.1 U	**11**
PFPeA	ng/L	--	**2.6**	**3.3**	**1.9**	**0.98 J**	<0.46 U	**1.0 J**	**3.6**	**10**	**1.0 J**	**0.74 J**	**12**
PFHxA	ng/L	150,000	**1.9**	**3.1**	**2.2**	**0.69 J**	**0.66 J**	**0.79 J**	**6.3**	**11**	**0.76 J**	<0.51 U	**10**
PFHpA	ng/L	--	**1.3 J**	**1.6 J**	**0.90 J**	**0.56 J**	**0.35 J**	**0.46 J**	**4.6**	**7.6**	**0.28 J**	<0.22 U	**7.6**
PFOA	ng/L	20	**1.9**	**8.0**	**9.0**	**1.9**	**1.2 J**	<0.72 U	**8.8**	**15**	<0.80 U	**0.92 J**	**13**
PFNA	ng/L	30	<0.26 U	**1.5 J**	**2.0**	<0.25 U	<0.25 U	<0.23 U	<0.22 U	<0.25 U	<0.25 U	<0.24 U	**0.56 JI**
PFDA	ng/L	300	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.29 U	<0.26 U	<0.26 U	<0.29 U	<0.29 U	<0.27 U	<0.29 U
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.94 U	<0.91 U	<1.0 U	<1.0 U	<0.96 U	<1.0 U
PFDoA	ng/L	500	<0.53 U	<0.51 U	<0.50 U	<0.51 U	<0.51 U	<0.47 U	<0.46 U	<0.51 U	<0.52 U	<0.48 U	<0.51 U
PFTriA	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.70 U	**0.77 JI**	<0.67 U	<0.68 U	<0.68 U	<0.62 U	<0.60 U	<0.68 U	<0.69 U	<0.64 U	<0.68 U
PFHxDA	ng/L	--	<0.86 U	<0.83 U	<0.82 U	<0.83 U	<0.83 U	<0.76 U	<0.74 U	<0.83 U	<0.84 U	<0.78 U	<0.83 U
PFODA	ng/L	400,000	<0.91 U	<0.87 U	<0.86 U	<0.88 U	<0.88 U	<0.80 U	<0.78 U	<0.88 U	<0.88 U	<0.82 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.54 J**	**0.62 J**	**0.79 J**	**15**	**4.2**	**0.37 J**	**2.1**	**1.4 J**	**0.38 J**	**1.1 J**	**1.8 J**
PFPeS	ng/L	--	<0.29 U	**0.28 J**	<0.27 U	<0.28 U	<0.28 U	<0.26 U	**0.47 J**	**0.54 J**	<0.28 U	<0.26 U	<0.28 U
PFHxS	ng/L	40	<0.55 U	**1.3 J**	**1.7 J**	**0.63 J**	<0.53 U	**0.49 J**	**12**	**25**	<0.54 U	<0.50 U	**0.93 J**
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.16 U	**2.1**	**2.0**	<0.18 U	<0.17 U	<0.18 U
PFOS	ng/L	20	**1.2 J**	**1.2 J**	**1.8**	**0.90 J**	<0.50 U	<0.46 U	**9.4**	**11 I**	<0.51 U	<0.47 U	**2.2**
PFNS	ng/L	--	<0.36 U	<0.34 U	<0.34 U	<0.35 U	<0.34 U	<0.31 U	<0.31 U	<0.34 U	<0.35 U	<0.32 U	<0.35 U
PFDS	ng/L	--	<0.31 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.26 U	<0.30 U	<0.30 U	<0.28 U	<0.30 U
PFDoS	ng/L	--	<0.93 U	<0.90 U	<0.89 U	<0.91 U	<0.90 U	<0.83 U	<0.80 U	<0.90 U	<0.91 U	<0.85 U	<0.91 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.1 U	<2.1 U	<2.3 U	<2.3 U	<2.2 U	<2.3 U
8:2 FTSA	ng/L	--	<0.44 U	<0.43 U	<0.42 U	<0.43 U	<0.43 U	<0.39 U	<0.38 U	<0.43 U	<0.43 U	<0.40 U	<0.43 U
10:2 FTSA	ng/L	--	<0.65 U	<0.62 U	<0.61 U	<0.63 U	<0.62 U	<0.57 U	<0.55 U	<0.62 U	<0.63 U	<0.58 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.94 U	**4.3**	<0.90 U	**1.6 J**	**0.96 J**	<0.83 U	<0.81 U	<0.91 U	<0.92 U	<0.85 U	**1.9**
NMeFOSA	ng/L	--	<0.41 U	<0.40 U	<0.39 U	<0.40 U	<0.40 U	<0.37 U	<0.36 U	<0.40 U	<0.40 U	<0.38 U	<0.40 U
NEtFOSA	ng/L	20	<0.84 U	<0.81 U	<0.80 U	<0.81 U	<0.81 U	<0.74 U	<0.72 U	<0.81 U	<0.82 U	<0.76 U	<0.81 U
NMeFOSAA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<0.99 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U
NEtFOSAA	ng/L	20	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.82 U	<0.79 U	<0.78 U	<0.79 U	<0.79 U	<0.72 U	<0.70 U	<0.79 U	<0.80 U	<0.74 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.2 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U
DONA	ng/L	3,000	<0.39 U	<0.37 U	<0.37 U	<0.37 U	<0.37 U	<0.34 U	<0.33 U	<0.37 U	<0.38 U	<0.35 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.20 U	<0.20 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.30 U	<0.29 U	<0.30 U	<0.30 U	<0.27 U	<0.26 U	<0.30 U	<0.30 U	<0.28 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**3.1**	**9.2**	**10.8**	**2.8**	**1.2**	ND	**18.2**	**26**	ND	**0.92**	**15.2**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.1**	**13.5**	**10.8**	**4.4**	**2.16**	ND	**18.2**	**26**	ND	**0.92**	**17.1**
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.8	0.6	0.2	0.1	0.0	1.2	1.9	0.0	0.0	0.9

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1306	1307	1308	1309	1309	1310	1311	1311	1312	1313	1314
		Sample Date	06/22/21	11/11/20	11/04/20	11/05/20	04/19/21	03/19/21	11/03/20	04/19/21	03/19/21	03/17/21	03/17/21
		Sample Number	PWS1306-IS-062221-100	PWS1307-OS-111120-100	PWS1308-OS-110420-100	PWS1309-OS-110520-100	PWS1309-OS-041921-100	PWS1310-OS-031921-100	PWS1311-OS-110320-100	PWS1311-OS-041921-100	PWS1312-OS-031921-100	PWS1313-OS-031721-100	PWS1314-OS-031721-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**12**	**2.5 J**	<2.3 U	**5.2**	**10**	<2.1 U	<2.1 U	<2.2 U	**15**	<2.3 U	<2.3 U
PFPeA	ng/L	--	**8.0**	<0.46 U	<0.46 U	**2.9**	**17**	<0.44 U	<0.43 U	<0.44 U	**1.3 J**	<0.47 U	**0.67 J**
PFHxA	ng/L	150,000	**6.6**	<0.54 U	<0.55 U	**2.1**	**24**	<0.52 U	<0.51 U	<0.52 U	**0.60 J**	<0.55 U	<0.56 U
PFHpA	ng/L	--	**4.6**	<0.23 U	<0.24 U	**2.0**	**6.2**	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.24 U	<0.24 U
PFOA	ng/L	20	**5.5**	<0.79 U	<0.81 U	**4.7**	**16**	<0.76 U	<0.74 U	<0.76 U	<0.72 U	<0.81 U	<0.83 U
PFNA	ng/L	30	**0.49 J**	<0.25 U	<0.26 U	<0.26 U	**1.3 J**	<0.24 U	<0.24 U	<0.24 U	<0.23 U	<0.26 U	<0.26 U
PFDA	ng/L	300	**0.30 J**	<0.29 U	<0.29 U	<0.30 U	<0.29 U	<0.28 U	<0.27 U	<0.28 U	<0.26 U	<0.29 U	<0.30 U
PFUnA	ng/L	3,000	<0.92 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<0.98 U	<0.96 U	<0.99 U	<0.94 U	<1.0 U	<1.1 U
PFDoA	ng/L	500	<0.46 U	<0.51 U	<0.52 U	<0.52 U	<0.52 U	<0.49 U	<0.48 U	<0.49 U	<0.47 U	<0.52 U	<0.53 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.3 U
PFTeA	ng/L	10,000	<0.61 U	<0.68 U	<0.69 U	<0.70 U	<0.69 U	<0.65 U	<0.64 U	<0.66 U	<0.62 U	<0.69 U	<0.71 U
PFHxDA	ng/L	--	<0.74 U	<0.83 U	<0.84 U	<0.85 U	<0.84 U	<0.80 U	<0.78 U	<0.80 U	<0.76 U	<0.85 U	<0.87 U
PFODA	ng/L	400,000	<0.78 U	<0.87 U	<0.89 U	<0.90 U	<0.89 U	<0.84 U	<0.82 U	<0.85 U	<0.80 U	<0.89 U	<0.91 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.88 J**	**0.53 J**	<0.19 U	**0.88 J**	**2.2**	<0.18 U	<0.17 U	<0.18 U	**1.9**	<0.19 U	**0.71 J**
PFPeS	ng/L	--	<0.25 U	<0.28 U	<0.28 U	<0.29 U	**0.37 J**	<0.27 U	<0.26 U	<0.27 U	**0.56 J**	<0.29 U	<0.29 U
PFHxS	ng/L	40	**0.59 J**	<0.53 U	<0.54 U	**2.9**	**4.0**	<0.51 U	<0.50 U	<0.51 U	**1.4 J**	<0.54 U	<0.55 U
PFHpS	ng/L	--	<0.16 U	<0.18 U	<0.18 U	<0.18 U	**0.56 J**	<0.17 U	<0.17 U	<0.17 U	<0.16 U	<0.18 U	<0.18 U
PFOS	ng/L	20	**1.5 J**	<0.50 U	<0.51 U	**1.5 J**	**5.9**	<0.48 U	<0.47 U	<0.49 U	**1.0 JI**	<0.51 U	<0.53 U
PFNS	ng/L	--	<0.31 U	<0.34 U	<0.35 U	<0.35 U	<0.35 U	<0.33 U	<0.32 U	<0.33 U	<0.31 U	<0.35 U	<0.36 U
PFDS	ng/L	--	<0.27 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.27 U	<0.30 U	<0.31 U
PFDoS	ng/L	--	<0.81 U	<0.90 U	<0.92 U	<0.93 U	<0.92 U	<0.87 U	<0.84 U	<0.87 U	<0.83 U	<0.92 U	<0.94 U
4:2 FTSA	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.22 U	<0.20 U	<0.23 U	<0.23 U
6:2 FTSA	ng/L	--	<2.1 U	<2.3 U	<2.4 U	<2.4 U	<2.4 U	<2.2 U	<2.2 U	<2.2 U	<2.1 U	<2.4 U	<2.4 U
8:2 FTSA	ng/L	--	<0.38 U	<0.43 U	<0.44 U	**0.71 J**	<0.44 U	<0.41 U	<0.40 U	<0.41 U	<0.39 U	<0.44 U	<0.45 U
10:2 FTSA	ng/L	--	<0.56 U	<0.62 U	<0.64 U	<0.64 U	<0.63 U	<0.60 U	<0.58 U	<0.60 U	<0.57 U	<0.64 U	<0.65 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**3.1**	<0.91 U	<0.93 U	<0.94 U	<0.93 U	<0.88 U	**2.4**	**1.1 J**	<0.83 U	<0.93 U	<0.95 U
NMeFOSA	ng/L	--	<0.36 U	<0.40 U	<0.41 U	<0.41 U	<0.41 U	<0.38 U	<0.37 U	<0.39 U	<0.37 U	<0.41 U	<0.42 U
NEtFOSA	ng/L	20	<0.72 U	<0.81 U	<0.83 U	<0.83 U	<0.82 U	<0.78 U	<0.76 U	<0.78 U	<0.74 U	<0.83 U	<0.85 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.2 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.3 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.4 U
NEtFOSE	ng/L	20	<0.71 U	<0.79 U	<0.81 U	<0.81 U	<0.80 U	<0.76 U	<0.74 U	<0.76 U	<0.72 U	<0.81 U	<0.83 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.5 U
DONA	ng/L	3,000	<0.33 U	<0.37 U	<0.38 U	<0.38 U	<0.38 U	<0.36 U	<0.35 U	<0.36 U	<0.34 U	<0.38 U	<0.39 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.22 U	<0.23 U	<0.23 U	<0.23 U	<0.21 U	<0.21 U	<0.22 U	<0.20 U	<0.23 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.30 U	<0.30 U	<0.31 U	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.27 U	<0.30 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**7**	ND	ND	**6.2**	**21.9**	ND	ND	ND	**1**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**10.1**	ND	ND	**6.2**	**21.9**	ND	**2.4**	**1.1**	**1**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.5	0.0	0.0	0.4	1.2	0.0	0.1	0.1	0.1	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1315	1315	1315	1316	1317	1319	1320	1321	1322	1323	1324
		Sample Date	03/17/21	05/27/21	05/27/21	04/17/21	11/03/20	11/03/20	11/11/20	11/04/20	11/09/20	11/06/20	11/05/20
		Sample Number	PWS1315-OS-031721-100	PWS1315-OS-052721-100	PWS-FD01-052721	PWS1316-IS-041721-100	PWS1317-OS-110320-100	PWS1319-OS-110320-100	PWS1320-OS-111120-100	PWS1321-OS-110420-100	PWS1322-OS-110920-100	PWS1323-OS-110620-100	PWS1324-OS-110520-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**3.3 J**	**3.5 J**	**3.6 J**	**8.9**	<2.2 U	<2.0 U	<2.2 U	**3.6 J**	<2.2 U	<2.0 U	<2.3 U
PFPeA	ng/L	--	**2.3**	**2.5**	**2.6**	**6.2**	<0.45 U	<0.41 U	<0.46 U	**2.6**	**2.0**	**0.47 J**	<0.47 U
PFHxA	ng/L	150,000	**1.4 J**	**1.8**	**1.8**	**5.9**	<0.54 U	<0.49 U	<0.54 U	**1.0 J**	**2.3**	<0.48 U	<0.56 U
PFHpA	ng/L	--	**0.55 J**	**0.74 J**	**0.71 J**	**5.4**	<0.23 U	<0.21 U	<0.23 U	**0.30 J**	**2.2**	<0.21 U	<0.24 U
PFOA	ng/L	20	**1.0 J**	**1.2 J**	**1.2 J**	**11**	<0.78 U	<0.72 U	<0.80 U	<0.72 U	**7.9**	<0.70 U	<0.82 U
PFNA	ng/L	30	<0.24 U	<0.23 U	<0.23 U	**0.68 J**	<0.25 U	<0.23 U	<0.25 U	<0.23 U	<0.25 U	<0.22 U	<0.26 U
PFDA	ng/L	300	<0.27 U	<0.27 U	<0.26 U	<0.30 U	<0.29 U	<0.26 U	<0.29 U	<0.26 U	<0.29 U	<0.26 U	<0.30 U
PFUnA	ng/L	3,000	<0.97 U	<0.94 U+	<0.94 U+	<1.1 U	<1.0 U	<0.93 U	<1.0 U	<0.93 U	<1.0 U	<0.91 U	<1.1 U
PFDoA	ng/L	500	<0.49 U	<0.47 U	<0.47 U	<0.53 U	<0.51 U	<0.46 U	<0.52 U	<0.46 U	<0.51 U	<0.45 U	<0.53 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.3 U
PFTeA	ng/L	10,000	<0.65 U	<0.63 U	<0.62 U	<0.70 U	<0.67 U	<0.61 U	<0.68 U	<0.62 U	<0.67 U	<0.60 U	<0.70 U
PFHxDA	ng/L	--	<0.79 U	<0.76 U	<0.76 U	<0.86 U	<0.82 U	<0.75 U	<0.83 U	<0.75 U	<0.82 U	<0.73 U	<0.86 U
PFODA	ng/L	400,000	<0.83 U	<0.81 U	<0.80 U	<0.91 U	<0.87 U	<0.79 U	<0.88 U	<0.79 U	<0.87 U	<0.77 U	<0.90 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.79 JI**	**0.27 J**	<0.17 U	**1.1 J**	<0.18 U	<0.17 U	<0.19 U	<0.17 U	**7.1**	**0.46 J**	<0.19 U
PFPeS	ng/L	--	**0.28 J**	<0.26 U	<0.26 U	**0.56 J**	<0.28 U	<0.25 U	<0.28 U	<0.25 U	**0.67 J**	<0.25 U	<0.29 U
PFHxS	ng/L	40	<0.50 U	<0.49 U	<0.49 U	**9.4**	<0.53 U	<0.48 U	<0.53 U	<0.48 U	**3.4**	**0.48 J**	<0.55 U
PFHpS	ng/L	--	<0.17 U	<0.16 U	<0.16 U	**1.5 J**	<0.18 U	<0.16 U	<0.18 U	<0.16 U	<0.18 U	<0.16 U	<0.18 U
PFOS	ng/L	20	<0.48 U	<0.46 U	<0.46 U	**4.3 I**	<0.50 U	<0.45 U	<0.51 U	<0.46 U	<0.50 U	<0.45 U	<0.52 U
PFNS	ng/L	--	<0.33 U	<0.32 U	<0.32 U	<0.36 U	<0.34 U	<0.31 U	<0.35 U	<0.31 U	<0.34 U	<0.30 U	<0.36 U
PFDS	ng/L	--	<0.28 U	<0.27 U	<0.27 U	<0.31 U	<0.30 U	<0.27 U	<0.30 U	<0.27 U	<0.30 U	<0.26 U	<0.31 U
PFDoS	ng/L	--	<0.86 U	<0.83 U	<0.83 U	<0.93 U	<0.89 U	<0.82 U	<0.91 U	<0.82 U	<0.90 U	<0.80 U	<0.93 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.23 U	<0.22 U	<0.20 U	<0.22 U	<0.20 U	<0.22 U	<0.20 U	<0.23 U
6:2 FTSA	ng/L	--	<2.2 U	<2.1 U	<2.1 U	<2.4 U	<2.3 U	<2.1 U	<2.3 U	<2.1 U	<2.3 U	<2.1 U	<2.4 U
8:2 FTSA	ng/L	--	<0.41 U	<0.39 U	<0.39 U	<0.44 U	<0.42 U	<0.39 U	<0.43 U	<0.39 U	<0.42 U	<0.38 U	<0.44 U
10:2 FTSA	ng/L	--	<0.59 U	<0.57 U	<0.57 U	<0.65 U	<0.62 U	<0.56 U	<0.63 U	<0.57 U	<0.62 U	<0.55 U	<0.64 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**3.0**	<0.84 U	**0.96 J**	<0.94 U	<0.90 U	<0.82 U	<0.92 U	<0.83 U	**1.4 J**	<0.81 U	<0.94 U
NMeFOSA	ng/L	--	<0.38 U	<0.37 U	<0.37 U	<0.41 U	<0.40 U	<0.36 U	<0.40 U	<0.36 U	<0.40 U	<0.35 U	<0.41 U
NEtFOSA	ng/L	20	<0.77 U	<0.75 U	<0.74 U	<0.84 U	<0.80 U	<0.73 U	<0.81 U	<0.74 U	<0.80 U	<0.72 U	<0.84 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.0 U	<1.2 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<0.99 U	<1.2 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.3 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.75 U	<0.73 U+	<0.73 U+	<0.82 U	<0.78 U	<0.72 U	<0.80 U	<0.72 U	<0.78 U	<0.70 U	<0.82 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.2 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.34 U	<0.34 U	<0.39 U	<0.37 U	<0.34 U	<0.37 U	<0.34 U	<0.37 U	<0.33 U	<0.38 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.23 U	<0.22 U	<0.20 U	<0.22 U	<0.20 U	<0.22 U	<0.20 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.27 U	<0.27 U	<0.31 U	<0.30 U	<0.27 U	<0.30 U	<0.27 U	<0.30 U	<0.26 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**1**	**1.2**	**1.2**	**15.3**	ND	ND	ND	ND	**7.9**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**4**	**1.2**	**2.16**	**15.3**	ND	ND	ND	ND	**9.3**	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.1	0.1	1.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

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Laboratory Qualifiers

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Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1325	1325	1326	1327	1328	1329	1330	1331	1332	1332	1333
		Sample Date	11/06/20	04/17/21	11/06/20	11/09/20	11/06/20	11/06/20	11/06/20	11/07/20	11/11/20	04/20/21	11/06/20
		Sample Number	PWS1325-OS-110620-100	PWS1325-OS-041721-100	PWS1326-OS-110620-100	PWS1327-OS-110920-100	PWS1328-OS-110620-100	PWS1329-OS-110620-100	PWS1330-OS-110620-100	PWS1331-OS-110720-100	PWS1332-OS-111120-100	PWS-1332-OS-042021-100	PWS1333-OS-110620-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.2 U	**8.2**	<2.2 U	**9.0**	<1.9 U	**3.3 J**	<2.0 U	**10**	**8.7**	<2.2 U
PFPeA	ng/L	--	<0.45 U	<0.45 U	**23**	<0.44 U	**3.3**	<0.40 U	**2.2**	<0.41 U	**7.4**	**6.6**	<0.44 U
PFHxA	ng/L	150,000	<0.53 U	<0.54 U	**17**	<0.52 U	**2.2**	<0.47 U	**2.3**	<0.48 U	**7.0**	**8.1**	<0.52 U
PFHpA	ng/L	--	<0.23 U	<0.23 U	**5.3**	<0.22 U	**2.1**	**0.20 J**	**0.83 J**	<0.21 U	**5.0**	**5.5**	<0.23 U
PFOA	ng/L	20	<0.77 U	<0.78 U	**13**	<0.76 U	**0.80 J**	<0.69 U	**0.95 J**	<0.71 U	**5.8**	**4.2**	<0.77 U
PFNA	ng/L	30	<0.25 U	<0.25 U	**0.98 J**	<0.24 U	<0.24 U	<0.22 U	<0.23 U	<0.23 U	<0.25 U	<0.25 U	<0.24 U
PFDA	ng/L	300	<0.28 U	<0.29 U	**0.46 J**	<0.28 U	<0.27 U	<0.25 U	<0.27 U	<0.26 U	<0.29 U	<0.28 U	<0.28 U
PFUnA	ng/L	3,000	<1.0 U	<1.0 U	<1.0 U	<0.99 U	<0.97 U	<0.89 U	<0.94 U	<0.92 U	<1.0 U	<1.0 U	<0.99 U
PFDoA	ng/L	500	<0.50 U	<0.51 U	<0.51 U	<0.49 U	<0.49 U	<0.44 U	<0.47 U	<0.46 U	<0.52 U	<0.50 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.67 U	<0.67 U	<0.68 U	<0.66 U	<0.65 U	<0.59 U	<0.62 U	<0.61 U	<0.68 U	<0.66 U	<0.66 U
PFHxDA	ng/L	--	<0.81 U	<0.82 U	<0.82 U	<0.80 U	<0.79 U	<0.72 U	<0.76 U	<0.74 U	<0.83 U	<0.81 U	<0.80 U
PFODA	ng/L	400,000	<0.86 U	<0.87 U	<0.87 U	<0.85 U	<0.83 U	<0.76 U	<0.80 U	<0.78 U	<0.88 U	<0.86 U	<0.85 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.44 J**	**0.41 J**	**2.4**	<0.18 U	**0.64 J**	<0.16 U	**0.60 J**	<0.17 U	**6.9**	**2.0**	<0.18 U
PFPeS	ng/L	--	<0.27 U	<0.28 U	**0.70 J**	<0.27 U	<0.27 U	<0.24 U	<0.26 U	<0.25 U	<0.28 U	<0.27 U	<0.27 U
PFHxS	ng/L	40	<0.52 U	<0.53 U	**3.4**	<0.51 U	<0.50 U	<0.46 U	**0.52 J**	<0.48 U	**1.6 J**	**0.72 J**	<0.52 U
PFHpS	ng/L	--	<0.17 U	<0.18 U	**1.0 J**	<0.17 U	<0.17 U	<0.15 U	<0.16 U	<0.16 U	<0.18 U	<0.17 U	<0.17 U
PFOS	ng/L	20	**0.58 J**	<0.50 U	**42**	<0.49 U	<0.48 U	<0.44 U	<0.46 U	<0.45 U	**2.9**	<0.49 U	<0.49 U
PFNS	ng/L	--	<0.34 U	<0.34 U	<0.34 U	<0.33 U	<0.33 U	<0.30 U	<0.32 U	<0.31 U	<0.35 U	<0.34 U	<0.33 U
PFDS	ng/L	--	<0.29 U	<0.30 U	<0.30 U	<0.29 U	<0.28 U	<0.26 U	<0.27 U	<0.27 U	<0.30 U	<0.29 U	<0.29 U
PFDoS	ng/L	--	<0.88 U	<0.89 U	<0.90 U	<0.87 U	<0.86 U	<0.78 U	<0.83 U	<0.81 U	<0.91 U	<0.88 U	<0.88 U
4:2 FTSA	ng/L	--	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.19 U	<0.21 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.3 U	<2.3 U	<2.3 U	<2.2 U	<2.2 U	<2.0 U	<2.1 U	<2.1 U	<2.3 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.42 U	<0.42 U	<0.43 U	<0.41 U	<0.41 U	<0.37 U	<0.39 U	<0.38 U	<0.43 U	<0.42 U	<0.42 U
10:2 FTSA	ng/L	--	<0.61 U	<0.62 U	<0.62 U	<0.60 U	<0.59 U	<0.54 U	<0.57 U	<0.56 U	<0.63 U	<0.61 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**2.3**	<0.90 U	<0.91 U	<0.88 U	<0.87 U	<0.79 U	<0.84 U	<0.82 U	<0.92 U	<0.89 U	<0.89 U
NMeFOSA	ng/L	--	<0.39 U	<0.40 U	<0.40 U	<0.39 U	<0.38 U	<0.35 U	<0.37 U	<0.36 U	<0.40 U	<0.39 U	<0.39 U
NEtFOSA	ng/L	20	<0.79 U	<0.80 U	<0.80 U	<0.78 U	<0.77 U	<0.70 U	<0.74 U	<0.73 U	<0.82 U	<0.79 U	<0.79 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<0.97 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.77 U	<0.78 U	<0.79 U	<0.76 U	<0.75 U	<0.69 U	<0.73 U	<0.71 U	<0.80 U	<0.77 U	<0.77 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.36 U	<0.37 U	<0.37 U	<0.36 U	<0.35 U	<0.32 U	<0.34 U	<0.33 U	<0.37 U	<0.36 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.19 U	<0.21 U	<0.20 U	<0.22 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.30 U	<0.30 U	<0.29 U	<0.28 U	<0.26 U	<0.27 U	<0.27 U	<0.30 U	<0.29 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**0.58**	ND	**55**	ND	**0.8**	ND	**0.95**	ND	**8.7**	**4.2**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.88**	ND	**55**	ND	**0.8**	ND	**0.95**	ND	**8.7**	**4.2**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.5	0.2	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1334	1335	1336	1337	1338	1338	1338	1339	1340	1341	1341
		Sample Date	03/16/21	11/04/20	11/04/20	11/03/20	11/03/20	04/19/21	04/19/21	11/06/20	11/04/20	11/10/20	04/20/21
		Sample Number	PWS1334-OS-031621-100	PWS1335-OS-110420-100	PWS1336-OS-110420-100	PWS1337-OS-110320-100	PWS1338-OS-110320-100	PWS1338-OS-041921-100	PWS-FD01-041921	PWS1339-OS-110620-100	PWS1340-OS-110420-100	PWS1341-OS-111020-100	PWS-1341-OS-042021-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**3.6 J**	<2.1 U	<2.3 U	<2.2 U	**3.5 J**	**4.1 J**	**4.6 J**	<2.4 U	<2.0 U	<2.2 U	<2.2 U
PFPeA	ng/L	--	**2.4**	<0.42 U	<0.47 U	<0.45 U	**1.6 J**	**1.8 J**	**2.2**	**1.3 J**	<0.41 U	<0.45 U	<0.46 U
PFHxA	ng/L	150,000	**1.6 J**	<0.50 U	<0.56 U	<0.53 U	**1.6 J**	**2.1**	**2.2**	<0.59 U	<0.48 U	<0.53 U	<0.54 U
PFHpA	ng/L	--	<0.21 U	<0.22 U	<0.24 U	<0.23 U	**1.1 J**	**2.0**	**2.1**	<0.25 U	<0.21 U	<0.23 U	<0.23 U
PFOA	ng/L	20	<0.71 U	<0.74 U	<0.82 U	**0.86 J**	**15**	**15**	**16**	<0.86 U	<0.70 U	<0.77 U	<0.80 U
PFNA	ng/L	30	<0.23 U	<0.23 U	<0.26 U	<0.25 U	<0.24 U	<0.25 U	<0.25 U	<0.27 U	<0.22 U	<0.25 U	<0.25 U
PFDA	ng/L	300	<0.26 U	<0.27 U	<0.30 U	<0.29 U	<0.27 U	<0.29 U	<0.29 U	<0.31 U	<0.26 U	<0.28 U	<0.29 U
PFUnA	ng/L	3,000	<0.92 U	<0.95 U	<1.1 U	<1.0 U	<0.97 U	<1.0 U	<1.0 U	<1.1 U	<0.91 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.46 U	<0.48 U	<0.53 U	<0.51 U	<0.49 U	<0.51 U	<0.52 U	<0.56 U	<0.46 U	<0.50 U	<0.51 U
PFTriA	ng/L	--	<1.1 U	<1.1 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.61 U	<0.63 U	<0.70 U	<0.67 U	<0.65 U	<0.68 U	<0.69 U	<0.74 U	<0.60 U	<0.66 U	<0.68 U
PFHxDA	ng/L	--	<0.74 U	<0.77 U	<0.86 U	<0.82 U	<0.79 U	<0.83 U	<0.84 U	<0.90 U	<0.74 U	<0.81 U	<0.83 U
PFODA	ng/L	400,000	<0.79 U	<0.81 U	<0.90 U	<0.87 U	<0.83 U	<0.88 U	<0.89 U	<0.95 U	<0.78 U	<0.86 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.17 U	<0.17 U	<0.19 U	<0.18 U	**0.35 J**	<0.19 U	<0.19 U	<0.20 U	<0.17 U	<0.18 U	<0.19 U
PFPeS	ng/L	--	<0.25 U	<0.26 U	<0.29 U	<0.28 U	<0.27 U	<0.28 U	<0.28 U	<0.30 U	<0.25 U	<0.27 U	<0.28 U
PFHxS	ng/L	40	<0.48 U	<0.49 U	<0.55 U	**0.54 J**	**0.51 J**	**0.54 J**	**0.54 J**	<0.58 U	<0.47 U	<0.52 U	<0.53 U
PFHpS	ng/L	--	<0.16 U	<0.16 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U	<0.19 U	<0.16 U	<0.17 U	<0.18 U
PFOS	ng/L	20	<0.45 U+	<0.47 U	<0.52 U	<0.50 U	**0.55 J**	**1.3 J**	<0.51 U	<0.55 U	<0.45 U	<0.49 U	<0.51 U
PFNS	ng/L	--	<0.31 U	<0.32 U	<0.36 U	<0.34 U	<0.33 U	<0.34 U	<0.35 U	<0.37 U	<0.31 U	<0.34 U	<0.35 U
PFDS	ng/L	--	<0.27 U	<0.28 U	<0.31 U	<0.29 U	<0.28 U	<0.30 U	<0.30 U	<0.32 U	<0.26 U	<0.29 U	<0.30 U
PFDoS	ng/L	--	<0.81 U	<0.84 U	<0.93 U	<0.89 U	<0.86 U	<0.90 U	<0.91 U	<0.98 U	<0.80 U	<0.88 U	<0.91 U
4:2 FTSA	ng/L	--	<0.20 U	<0.21 U	<0.23 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.24 U	<0.20 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.1 U	<2.2 U	<2.4 U	<2.3 U	<2.2 U	<2.3 U	<2.4 U	<2.5 U	<2.1 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.38 U	<0.40 U	<0.44 U	<0.42 U	<0.41 U	<0.43 U	<0.43 U	<0.46 U	<0.38 U	<0.42 U	<0.43 U
10:2 FTSA	ng/L	--	<0.56 U	<0.58 U	<0.64 U	<0.62 U	<0.59 U	<0.62 U	<0.63 U	<0.68 U	<0.55 U	<0.61 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.82 U	<0.85 U	**1.1 J**	<0.90 U	**1.1 J**	<0.91 U	<0.92 U	**1.5 J**	<0.81 U	**2.2**	**2.0**
NMeFOSA	ng/L	--	<0.36 U	<0.37 U	<0.41 U	<0.40 U	<0.38 U	<0.40 U	<0.41 U	<0.43 U	<0.36 U	<0.39 U	<0.40 U
NEtFOSA	ng/L	20	<0.73 U	<0.75 U	<0.84 U	<0.80 U	<0.77 U	<0.81 U	<0.82 U	<0.88 U	<0.72 U	<0.79 U	<0.81 U
NMeFOSAA	ng/L	--	<1.0 U	<1.0 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<0.99 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.1 U	<1.1 U	<1.3 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.71 U	<0.74 U	<0.82 U	<0.78 U	<0.75 U	<0.79 U	<0.80 U	<0.86 U	<0.70 U	<0.77 U	<0.80 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.5 U	<1.2 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.33 U	<0.35 U	<0.38 U	<0.37 U	<0.35 U	<0.37 U	<0.38 U	<0.40 U	<0.33 U	<0.36 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.20 U	<0.21 U	<0.23 U	<0.22 U	<0.21 U	<0.22 U	<0.23 U	<0.24 U	<0.20 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.27 U	<0.28 U	<0.31 U	<0.29 U	<0.28 U	<0.30 U	<0.30 U	<0.32 U	<0.26 U	<0.29 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	**0.86**	**15.55**	**16.3**	**16**	ND	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	ND	**1.1**	**0.86**	**16.65**	**16.3**	**16**	**1.5**	ND	**2.2**	**2**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.1	0.1	0.8	0.8	0.8	0.1	0.0	0.1	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

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Laboratory Qualifiers

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Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1343	1344	1344	1344	1345	1345	1346	1347	1348	1349	1349
		Sample Date	03/17/21	03/19/21	05/26/21	05/26/21	11/06/20	05/25/21	11/10/20	11/11/20	11/12/20	11/13/20	11/13/20
		Sample Number	PWS1343-OS-031721-100	PWS1344-OS-031921-100	PWS1344-OS-052621-100	PWS-FD01-052621	PWS1345-OS-110620-100	PWS1345-OS-052521-100	PWS1346-OS-111020-100	PWS1347-OS-111120-100	PWS1348-OS-111220-100	PWS1349-OS-111320-100	PWS-FD01-111320
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.0 U	<2.0 U	<2.1 U	**16**	**14**	<2.3 U	**5.5**	<2.2 U	<2.2 U	<2.3 U
PFPeA	ng/L	--	<0.45 U	<0.41 U	**0.73 J**	**0.73 J**	**35**	**32**	**1.1 J**	**2.2**	**0.49 J**	<0.46 U	<0.47 U
PFHxA	ng/L	150,000	<0.54 U	**1.5 J**	**1.2 J**	**1.3 J**	**18**	**17**	**0.81 JI**	**1.7 J**	<0.53 U	<0.54 U	<0.56 U
PFHpA	ng/L	--	<0.23 U	**0.89 J**	**0.92 J**	**1.0 J**	**11**	**8.5**	**0.85 J**	**1.8 J**	<0.23 U	<0.23 U	<0.24 U
PFOA	ng/L	20	<0.79 U	**2.2**	**1.7**	**1.7 J**	**5.1**	**4.3**	**1.9**	**1.3 J**	<0.77 U	<0.79 U	<0.82 U
PFNA	ng/L	30	<0.25 U	<0.23 U	<0.23 U	<0.24 U	**1.2 J**	**1.1 J**	<0.26 U	<0.25 U	<0.25 U	<0.25 U	<0.26 U
PFDA	ng/L	300	<0.29 U	<0.26 U	<0.26 U	<0.27 U	<0.30 U	<0.26 U	<0.30 U	<0.29 U	<0.28 U	<0.29 U	<0.30 U
PFUnA	ng/L	3,000	<1.0 U	<0.93 U	<0.92 U	<0.97 U	<1.1 U	<0.92 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U
PFDoA	ng/L	500	<0.51 U	<0.46 U	<0.46 U	<0.48 U	<0.54 U	<0.46 U	<0.53 U	<0.52 U	<0.50 U	<0.51 U	<0.53 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
PFTeA	ng/L	10,000	<0.68 U	<0.62 U	<0.61 U	<0.64 U	<0.71 U	<0.61 U	<0.70 U	<0.69 U	<0.67 U	<0.68 U	<0.71 U
PFHxDA	ng/L	--	<0.83 U	<0.75 U	<0.74 U	<0.78 U	<0.87 U	<0.75 U	<0.85 U	<0.84 U	<0.81 U	<0.83 U	<0.86 U
PFODA	ng/L	400,000	<0.87 U	<0.79 U	<0.78 U	<0.83 U	<0.92 U	<0.79 U	<0.90 U	<0.88 U	<0.86 U	<0.88 U	<0.91 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.17 U	<0.17 U	<0.18 U	**3.5**	**4.1**	**0.57 J**	**1.0 J**	<0.18 U	<0.19 U	<0.19 U
PFPeS	ng/L	--	<0.28 U	<0.25 U	<0.25 U	<0.26 U	<0.29 U	<0.25 U	<0.29 U	<0.28 U	<0.27 U	<0.28 U	<0.29 U
PFHxS	ng/L	40	<0.53 U	<0.48 U	<0.48 U	<0.50 U	<0.56 U	<0.48 U	**1.1 J**	**0.66 J**	<0.52 U	<0.53 U	<0.55 U
PFHpS	ng/L	--	<0.18 U	<0.16 U	<0.16 U	<0.17 U	<0.19 U	<0.16 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.18 U
PFOS	ng/L	20	<0.50 U	<0.46 U	<0.45 U	<0.48 U	<0.53 U	<0.45 U	<0.52 U	<0.51 U	<0.49 U	<0.51 U	<0.52 U
PFNS	ng/L	--	<0.34 U	<0.31 U	<0.31 U	<0.33 U	<0.36 U	<0.31 U	<0.35 U	<0.35 U	<0.34 U	<0.35 U	<0.36 U
PFDS	ng/L	--	<0.30 U	<0.27 U	<0.27 U	<0.28 U	<0.31 U	<0.27 U	<0.31 U	<0.30 U	<0.29 U	<0.30 U	<0.31 U
PFDoS	ng/L	--	<0.90 U	<0.82 U	<0.81 U	<0.86 U	<0.95 U	<0.81 U	<0.93 U	<0.91 U	<0.88 U	<0.91 U	<0.94 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.21 U	<0.23 U	<0.20 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.1 U	<2.2 U	**7.6**	**7.3**	<2.4 U	<2.3 U	<2.3 U	<2.3 U	<2.4 U
8:2 FTSA	ng/L	--	<0.43 U	<0.39 U	<0.38 U	<0.41 U	<0.45 U	<0.39 U	<0.44 U	<0.43 U	<0.42 U	<0.43 U	<0.44 U
10:2 FTSA	ng/L	--	<0.62 U	<0.57 U	<0.56 U	<0.59 U	<0.65 U	<0.56 U	<0.64 U	<0.63 U	<0.61 U	<0.63 U	<0.65 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.91 U	<0.83 U	<0.82 U	<0.86 U	<0.96 U	<0.82 U	<0.94 U	<0.92 U	<0.89 U	<0.92 U	<0.95 U
NMeFOSA	ng/L	--	<0.40 U	<0.36 U	<0.36 U	<0.38 U	<0.42 U	<0.36 U	<0.41 U	<0.40 U	<0.39 U	<0.40 U	<0.42 U
NEtFOSA	ng/L	20	<0.81 U	<0.73 U	<0.73 U	<0.77 U	<0.85 U	<0.73 U	<0.83 U	<0.82 U	<0.79 U	<0.81 U	<0.84 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.0 U	<1.1 U	<1.2 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.3 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U
NEtFOSE	ng/L	20	<0.79 U	<0.72 U	<0.71 U	<0.75 U	<0.83 U	<0.71 U	<0.81 U	<0.80 U	<0.77 U	<0.79 U	<0.82 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.5 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U
DONA	ng/L	3,000	<0.37 U	<0.34 U	<0.33 U	<0.35 U	<0.39 U	<0.34 U	<0.38 U	<0.38 U	<0.36 U	<0.37 U	<0.39 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.20 U	<0.21 U	<0.23 U	<0.20 U	<0.23 U	<0.23 U	<0.22 U	<0.22 U	<0.23 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.27 U	<0.27 U	<0.28 U	<0.31 U	<0.27 U	<0.31 U	<0.30 U	<0.29 U	<0.30 U	<0.31 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**2.2**	**1.7**	**1.7**	**5.1**	**4.3**	**1.9**	**1.3**	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**2.2**	**1.7**	**1.7**	**5.1**	**4.3**	**1.9**	**1.3**	ND	ND	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.0	0.0	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1350	1350	1351	1352	1352	1353	1354	1354	1355	1355	1356
		Sample Date	03/17/21	05/26/21	12/16/20	03/19/21	05/25/21	12/16/20	12/17/20	04/17/21	12/16/20	04/20/21	12/16/20
		Sample Number	PWS1350-OS-031621-100	PWS1350-IS-052621-100	PWS1351-OS-121620-100	PWS1352-OS-031921-100	PWS1352-IS-052521-100	PWS1353-OS-121620-100	PWS1354-OS-121720-100	PWS1354-OS-041721-100	PWS1355-OS-121620-100	PWS-1355-OS-042021-100	PWS1356-OS-121620-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**11**	**8.1**	<2.1 U	**3.3 J**	**5.4**	<2.1 U	<2.1 U	**17**	**2.8 J**	**4.2 J**	<2.2 U
PFPeA	ng/L	--	**8.2**	**6.3**	**0.56 J**	**8.4**	**6.6**	<0.42 U	**2.2**	**16**	**1.7**	<0.45 U	**0.44 J**
PFHxA	ng/L	150,000	**6.5**	**5.0**	<0.50 U	**11**	**8.2**	<0.50 U	**1.4 J**	**17**	**1.6 J**	**3.5**	<0.52 U
PFHpA	ng/L	--	**5.7**	**4.5**	<0.22 U	**4.6**	**2.7**	<0.22 U	**0.74 J**	**19**	**1.4 J**	**1.7 J**	<0.23 U
PFOA	ng/L	20	**3.9**	**2.8**	<0.74 U	**8.9**	**5.1**	<0.74 U	<0.74 U	**210**	**2.7**	**3.2**	<0.77 U
PFNA	ng/L	30	**0.48 J**	**0.35 J**	<0.23 U	<0.24 U	**0.40 J**	<0.23 U	<0.23 U	**2.0**	<0.23 U	<0.25 U	<0.24 U
PFDA	ng/L	300	<0.28 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.28 U	<0.27 U	<0.29 U	<0.28 U
PFUnA	ng/L	3,000	<0.98 U	<0.97 U	<0.95 U	<0.97 U	<0.95 U	<0.95 U	<0.95 U	<0.99 U	<0.95 U	<1.0 U	<1.0 U
PFDoA	ng/L	500	<0.49 U	<0.49 U	<0.48 U	<0.49 U	<0.48 U	<0.48 U	<0.48 U	<0.50 U	<0.47 U	<0.51 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.65 U	<0.64 U	<0.63 U	<0.64 U	<0.63 U	<0.63 U	<0.63 U	<0.66 U	<0.63 U	<0.67 U	<0.66 U
PFHxDA	ng/L	--	<0.80 U	<0.79 U	<0.77 U	<0.79 U	<0.77 U	<0.77 U	<0.77 U	<0.80 U	<0.77 U	<0.82 U	<0.81 U
PFODA	ng/L	400,000	<0.84 U	<0.83 U	<0.81 U	<0.83 U	<0.82 U	<0.81 U	<0.81 U	<0.85 U	<0.81 U	<0.87 U	<0.85 U
Sulfonic Acids													
PFBS	ng/L	450,000	**8.5**	**5.1**	<0.17 U	**4.3**	**7.7**	<0.17 U	**0.64 J**	**68**	**1.0 J**	<0.18 U	<0.18 U
PFPeS	ng/L	--	<0.27 U	<0.26 U	<0.26 U	**0.70 J**	**0.42 J**	<0.26 U	**0.38 J**	**2.8**	**0.26 J**	<0.28 U	<0.27 U
PFHxS	ng/L	40	**0.52 J**	<0.50 U	<0.49 U	**1.2 J**	**1.2 J**	<0.49 U	<0.49 U	**29**	**0.85 J**	**1.1 J**	<0.52 U
PFHpS	ng/L	--	<0.17 U	<0.17 U	<0.16 U	<0.17 U	<0.16 U	<0.16 U	<0.16 U	**0.57 J**	<0.16 U	<0.18 U	<0.17 U
PFOS	ng/L	20	<0.48 U	<0.48 U	<0.47 U	**2.5**	**2.2**	<0.47 U	**3.9 I**	**63**	**1.1 JI**	**0.93 J**	<0.49 U
PFNS	ng/L	--	<0.33 U	<0.33 U	<0.32 U	<0.33 U	<0.32 U	<0.32 U	<0.32 U	<0.33 U	<0.32 U	<0.34 U	<0.33 U
PFDS	ng/L	--	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	<0.30 U	<0.29 U
PFDoS	ng/L	--	<0.87 U	<0.86 U	<0.84 U	<0.86 U	<0.84 U	<0.84 U	<0.84 U	<0.88 U	<0.83 U	<0.90 U	<0.88 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.2 U	<2.3 U	<2.1 U	<2.3 U	<2.3 U
8:2 FTSA	ng/L	--	<0.41 U	<0.41 U	<0.40 U	<0.41 U	<0.40 U	<0.40 U	<0.40 U	<0.42 U	<0.40 U	<0.42 U	<0.42 U
10:2 FTSA	ng/L	--	<0.60 U	<0.59 U	<0.58 U+	<0.59 U	<0.58 U	<0.58 U+	<0.58 U+	<0.61 U	<0.58 U+	<0.62 U	<0.61 U+
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.88 U	<0.87 U	<0.85 U	<0.86 U	**0.93 J**	<0.85 U	<0.85 U	<0.89 U	<0.84 U	<0.90 U	<0.89 U
NMeFOSA	ng/L	--	<0.38 U	<0.38 U	<0.37 U	<0.38 U	<0.37 U	<0.37 U	<0.37 U	<0.39 U	<0.37 U	<0.40 U	<0.39 U
NEtFOSA	ng/L	20	<0.78 U	<0.77 U	<0.75 U	<0.77 U	<0.75 U	<0.75 U	<0.75 U	<0.79 U	<0.75 U	<0.80 U	<0.79 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.76 U	<0.75 U	<0.74 U	<0.75 U	<0.74 U	<0.74 U	<0.74 U	<0.77 U	<0.73 U	<0.78 U	<0.77 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.36 U	<0.35 U	<0.35 U	<0.35 U	<0.35 U	<0.35 U	<0.35 U	<0.36 U	<0.34 U	<0.37 U	<0.36 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.21 U	<0.22 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.29 U	<0.28 U	<0.30 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**3.9**	**2.8**	ND	**11.4**	**7.3**	ND	**3.9**	**273**	**3.8**	**4.13**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.9**	**2.8**	ND	**11.4**	**8.23**	ND	**3.9**	**273**	**3.8**	**4.13**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.2	0.0	0.6	0.5	0.0	0.2	14.4	0.2	0.2	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1357	1357	1358	1360	1361	1362	1362	1363	1364	1364	1365
		Sample Date	12/16/20	04/21/21	12/17/20	03/16/21	03/18/21	03/20/21	05/25/21	03/20/21	03/20/21	05/27/21	03/19/21
		Sample Number	PWS1357-OS-121620-100	PWS-1357-OS-042121-100	PWS1358-OS-121720-100	PWS1360-OS-031621-100	PWS1361-OS-031821-100	PWS1362-OS-032021-100	PWS1362-OS-052521-100	PWS1363-OS-032021-100	PWS1364-OS-032021-100	PWS1364-OS-052721-100	PWS1365-OS-031921-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**4.1 J**	**4.4 J**	<2.3 U	<2.1 U	<2.1 U	**2.3 J**	<1.9 U	<2.0 U	**3.5 J**	**5.5**	<1.9 U
PFPeA	ng/L	--	**3.0**	**3.5**	**0.62 J**	<0.43 U	<0.42 U	**1.3 J**	**1.5 J**	<0.41 U	<0.42 U	<0.43 U	<0.40 U
PFHxA	ng/L	150,000	**2.9**	**3.3**	<0.56 U	<0.51 U	<0.50 U	**2.1 I**	**1.5 J**	<0.48 U	<0.50 U	<0.51 U	<0.47 U
PFHpA	ng/L	--	**1.5 J**	**2.2**	**0.37 J**	<0.22 U	<0.21 U	**1.5 J**	**0.78 J**	<0.21 U	<0.21 U	<0.22 U	<0.20 U
PFOA	ng/L	20	**4.7**	**5.1**	**1.3 J**	<0.75 U	<0.73 U	**2.1**	**0.99 J**	<0.71 U	<0.73 U	<0.75 U	<0.69 U
PFNA	ng/L	30	**0.29 J**	**0.25 J**	<0.26 U	<0.24 U	<0.23 U	<0.24 U	<0.22 U	<0.22 U	<0.23 U	<0.24 U	<0.22 U
PFDA	ng/L	300	<0.27 U	**0.74 J**	<0.30 U	<0.27 U	<0.27 U	<0.27 U	<0.25 U	<0.26 U	<0.27 U	<0.27 U	<0.25 U
PFUnA	ng/L	3,000	<0.95 U	<1.0 U	<1.1 U	<0.97 U	<0.94 U	<0.96 U	<0.89 U	<0.91 U	<0.94 U	<0.97 U+	<0.89 U
PFDoA	ng/L	500	<0.47 U	<0.50 U	<0.53 U	<0.49 U	<0.47 U	<0.48 U	<0.45 U	<0.46 U	<0.47 U	<0.48 U	<0.45 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.3 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
PFTeA	ng/L	10,000	<0.63 U	<0.67 U	**1.1 JI**	<0.65 U	<0.63 U	<0.64 U	<0.59 U	<0.61 U	<0.62 U	<0.64 U	<0.59 U
PFHxDA	ng/L	--	<0.77 U	<0.81 U	<0.86 U	<0.79 U	<0.76 U	<0.78 U	<0.72 U	<0.74 U	<0.76 U	<0.78 U	<0.72 U
PFODA	ng/L	400,000	<0.81 U	<0.86 U	<0.91 U	<0.83 U	<0.81 U	<0.82 U	<0.76 U	<0.78 U	<0.80 U	<0.83 U	<0.76 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.9**	**1.9**	**0.37 J**	<0.18 U	<0.17 U	**0.44 J**	<0.16 U	<0.17 U	**4.2**	**1.4 J**	<0.16 U
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.29 U	<0.27 U	<0.26 U	<0.26 U	<0.24 U	<0.25 U	<0.26 U	<0.26 U	<0.24 U
PFHxS	ng/L	40	**0.80 J**	**0.97 J**	**0.90 J**	<0.50 U	<0.49 U	**0.93 J**	<0.46 U	<0.47 U	<0.49 U	<0.50 U	<0.46 U
PFHpS	ng/L	--	<0.16 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U	<0.17 U	<0.15 U	<0.16 U	<0.16 U	<0.17 U	<0.15 U
PFOS	ng/L	20	**4.5**	**6.8**	**0.64 J**	<0.48 U+	<0.46 U	<0.47 U	<0.44 U	<0.45 U	**11**	<0.48 U	<0.44 U
PFNS	ng/L	--	<0.32 U	<0.34 U	<0.36 U	<0.33 U	<0.32 U	<0.32 U	<0.30 U	<0.31 U	<0.32 U	<0.33 U	<0.30 U
PFDS	ng/L	--	<0.28 U	<0.29 U	<0.31 U	<0.28 U	<0.27 U	<0.28 U	<0.26 U	<0.27 U	<0.27 U	<0.28 U	<0.26 U
PFDoS	ng/L	--	<0.84 U	<0.88 U	<0.93 U	<0.86 U	<0.83 U	<0.85 U	<0.79 U	<0.81 U	<0.83 U	<0.85 U	<0.79 U
4:2 FTSA	ng/L	--	<0.21 U	<0.22 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.19 U	<0.20 U	<0.21 U	<0.21 U	<0.19 U
6:2 FTSA	ng/L	--	<2.2 U	<2.3 U	<2.4 U	<2.2 U	<2.1 U	<2.2 U	<2.0 U	<2.1 U	<2.1 U	<2.2 U	<2.0 U
8:2 FTSA	ng/L	--	<0.40 U	<0.42 U	<0.44 U	<0.41 U	<0.40 U	<0.40 U	<0.37 U	<0.38 U	<0.39 U	<0.40 U	<0.37 U
10:2 FTSA	ng/L	--	<0.58 U+	<0.61 U	<0.65 U	<0.59 U	<0.58 U	<0.58 U	<0.54 U	<0.56 U	<0.57 U	<0.59 U	<0.54 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.84 U	**2.5**	<0.94 U	<0.87 U	<0.84 U	<0.85 U	**1.1 J**	<0.81 U	<0.84 U	**1.6 J**	<0.80 U
NMeFOSA	ng/L	--	<0.37 U	<0.39 U	<0.41 U	<0.38 U	<0.37 U	<0.37 U	<0.35 U	<0.36 U	<0.37 U	<0.38 U	<0.35 U
NEtFOSA	ng/L	20	<0.75 U	<0.79 U	<0.84 U	<0.77 U	<0.75 U	<0.76 U	<0.70 U	<0.72 U	<0.74 U	<0.77 U	<0.71 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.2 U	<1.1 U	<1.0 U	<1.0 U	<0.97 U	<1.0 U	<1.0 U	<1.1 U	<0.97 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.3 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U
NEtFOSE	ng/L	20	<0.73 U	<0.77 U	<0.82 U	<0.75 U	<0.73 U	<0.74 U	<0.69 U	<0.71 U	<0.73 U	<0.75 U+	<0.69 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U
DONA	ng/L	3,000	<0.34 U	<0.36 U	<0.39 U	<0.35 U	<0.34 U	<0.35 U	<0.32 U	<0.33 U	<0.34 U	<0.35 U	<0.32 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.22 U	<0.23 U	<0.21 U	<0.21 U	<0.21 U	<0.19 U	<0.20 U	<0.21 U	<0.21 U	<0.19 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.29 U	<0.31 U	<0.28 U	<0.27 U	<0.28 U	<0.26 U	<0.27 U	<0.27 U	<0.28 U	<0.26 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**9.2**	**11.9**	**1.94**	ND	ND	**2.1**	**0.99**	ND	**11**	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**9.2**	**14.4**	**1.94**	ND	ND	**2.1**	**2.09**	ND	**11**	**1.6**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.5	0.8	0.1	0.0	0.0	0.1	0.1	0.0	0.6	0.1	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1366A	1366B	1366C	1367	1367	1368	1369	1369	1370	1370	1371
		Sample Date	04/16/21	04/16/21	04/16/21	03/19/21	03/19/21	03/18/21	03/19/21	05/26/21	03/20/21	05/27/21	03/20/21
		Sample Number	PWS1366A-OS-041621-100	PWS1366B-IS-041621-100	PWS1366C-IS-041621-100	PWS1367-OS-031921-100	PWS-FD01-031921	PWS1368-OS-031821-100	PWS1369-OS-031921-100	PWS1369-OS-052621-100	PWS1370-OS-032021-100	PWS1370-OS-052721-100	PWS1371-OS-302021-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.2 U	<2.2 U	<2.2 U	<2.1 U	<2.1 U	**2.5 J**	**6.3**	**5.1**	**6.7**	**7.0**	**16**
PFPeA	ng/L	--	<0.45 U	<0.45 U	<0.46 U	<0.43 U	<0.42 U	**1.1 J**	**6.9**	**5.3**	**8.9**	**6.7**	**20**
PFHxA	ng/L	150,000	<0.53 U	<0.54 U	<0.54 U	<0.51 U	<0.50 U	**0.99 J**	**5.0**	**2.9**	**5.5**	**5.5**	**14**
PFHpA	ng/L	--	<0.23 U	<0.23 U	<0.23 U	<0.22 U	<0.21 U	**0.77 J**	**1.2 J**	**0.85 J**	**3.0**	**3.1**	**16**
PFOA	ng/L	20	<0.77 U	<0.79 U	<0.80 U	<0.74 U	<0.73 U	**0.89 J**	**1.4 J**	<0.73 U	**3.0**	**2.7**	**4.5**
PFNA	ng/L	30	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.23 U	<0.26 U	<0.22 U	<0.23 U	<0.24 U	**0.37 J**	<0.23 U
PFDA	ng/L	300	<0.28 U	<0.29 U	<0.29 U	<0.27 U	<0.27 U	<0.30 U	<0.26 U	<0.27 U	<0.27 U	<0.28 U	<0.26 U
PFUnA	ng/L	3,000	<1.0 U	<1.0 U	<1.0 U	<0.96 U	<0.94 U	<1.1 U	<0.91 U	<0.95 U	<0.97 U	<1.0 U+	<0.92 U
PFDoA	ng/L	500	<0.50 U	<0.51 U	<0.51 U	<0.48 U	<0.47 U	<0.53 U	<0.46 U	<0.47 U	<0.48 U	<0.50 U	<0.46 U
PFTriA	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.3 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.67 U	<0.68 U	<0.68 U	<0.64 U	<0.63 U	<0.70 U	<0.60 U	<0.63 U	<0.64 U	<0.66 U	<0.61 U
PFHxDA	ng/L	--	<0.81 U	<0.83 U	<0.83 U	<0.78 U	<0.76 U	<0.86 U	<0.74 U	<0.77 U	<0.78 U	<0.81 U	<0.74 U
PFODA	ng/L	400,000	<0.86 U	<0.87 U	<0.88 U	<0.82 U	<0.81 U	<0.90 U	<0.78 U	<0.81 U	<0.83 U	<0.86 U	<0.79 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.18 U	<0.19 U	<0.19 U	<0.17 U	<0.17 U	<0.19 U	<0.17 U	<0.17 U	**1.3 J**	**1.1 J**	**1.6 J**
PFPeS	ng/L	--	<0.27 U	<0.28 U	<0.28 U	<0.26 U	<0.26 U	<0.29 U	<0.25 U	<0.26 U	<0.26 U	<0.27 U	**0.35 J**
PFHxS	ng/L	40	<0.52 U	<0.53 U	<0.53 U	<0.50 U	<0.49 U	<0.55 U	<0.47 U	<0.49 U	**0.96 J**	**0.93 J**	**1.0 J**
PFHpS	ng/L	--	<0.17 U	<0.18 U	<0.18 U	<0.17 U	<0.16 U	<0.18 U	<0.16 U	<0.16 U	<0.17 U	<0.17 U	<0.16 U
PFOS	ng/L	20	<0.49 U	<0.50 U	<0.51 U	<0.47 U	**0.52 J**	<0.52 U	**1.9 I**	<0.46 U	<0.48 U	<0.49 U	**2.4 I**
PFNS	ng/L	--	<0.34 U	<0.34 U	<0.35 U	<0.32 U	<0.32 U	<0.36 U	<0.31 U	<0.32 U	<0.33 U	<0.34 U	<0.31 U
PFDS	ng/L	--	<0.29 U	<0.30 U	<0.30 U	<0.28 U	<0.27 U	<0.31 U	<0.27 U	<0.28 U	<0.28 U	<0.29 U	<0.27 U
PFDoS	ng/L	--	<0.88 U	<0.90 U	<0.91 U	<0.85 U	<0.83 U	<0.93 U	<0.80 U	<0.84 U	<0.85 U	<0.88 U	<0.81 U
4:2 FTSA	ng/L	--	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.23 U	<0.20 U	<0.21 U	<0.21 U	<0.22 U	<0.20 U
6:2 FTSA	ng/L	--	<2.3 U	**2.5 J**	<2.3 U	<2.2 U	<2.1 U	<2.4 U	**2.1 J**	<2.2 U	**4.3 J**	**3.5 J**	<2.1 U
8:2 FTSA	ng/L	--	<0.42 U	<0.43 U	<0.43 U	<0.40 U	<0.39 U	<0.44 U	<0.38 U	<0.40 U	<0.40 U	<0.42 U	<0.38 U
10:2 FTSA	ng/L	--	<0.61 U	<0.62 U	<0.63 U	<0.58 U	<0.58 U	<0.64 U	<0.56 U	<0.58 U	<0.59 U	<0.61 U	<0.56 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.89 U	**0.91 J**	<0.92 U	<0.85 U	<0.84 U	<0.94 U	<0.81 U	<0.84 U	<0.86 U	<0.89 U	<0.82 U
NMeFOSA	ng/L	--	<0.39 U	<0.40 U	<0.40 U	<0.37 U	<0.37 U	<0.41 U	<0.36 U	<0.37 U	<0.38 U	<0.39 U	<0.36 U
NEtFOSA	ng/L	20	<0.79 U	<0.81 U	<0.81 U	<0.76 U	<0.75 U	<0.84 U	<0.72 U	<0.75 U	<0.77 U	<0.79 U	<0.73 U
NMeFOSAA	ng/L	--	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.0 U	<1.2 U	<0.99 U	<1.0 U	<1.1 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U	<1.3 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.77 U	<0.79 U	<0.80 U	<0.74 U	<0.73 U	<0.82 U	<0.70 U	<0.73 U	<0.75 U	<0.77 U+	<0.71 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.3 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U
DONA	ng/L	3,000	<0.36 U	<0.37 U	<0.37 U	<0.35 U	<0.34 U	<0.38 U	<0.33 U	<0.34 U	<0.35 U	<0.36 U	<0.33 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.22 U	<0.22 U	<0.21 U	<0.21 U	<0.23 U	<0.20 U	<0.21 U	<0.21 U	<0.22 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.30 U	<0.30 U	<0.28 U	<0.27 U	<0.31 U	<0.27 U	<0.28 U	<0.28 U	<0.29 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	**0.52**	**0.89**	**3.3**	ND	**3**	**2.7**	**6.9**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	ND	**0.91**	ND	ND	**0.52**	**0.89**	**3.3**	ND	**3**	**2.7**	**6.9**
Hazard Index (HI)													
HI	ng/L	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.2	0.4

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1371	1372	1372	1373	1373	1374	1374	1375	1376A	1376B	1377
		Sample Date	05/27/21	03/20/21	05/26/21	03/20/21	05/28/21	03/20/21	03/20/21	03/19/21	04/19/21	04/19/21	04/19/21
		Sample Number	PWS1371-OS-052721-100	PWS1372-OS-032021-100	PWS1372-OS-052621-100	PWS1373-OS-032021-100	PWS1373-IS-052821-100	PWS1374-OS-032021-100	PWS-FD01-032021	PWS1375-OS-031921-100	PWS1376A-OS-041921-100	PWS1376B-OS-041921-100	PWS1377-OS-041921-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**9.5**	<2.0 U	<2.0 U	**2.7 J**	**2.7 J**	**2.8 J**	**2.5 J**	<1.9 U	**6.5**	**3.6 J**	**21**
PFPeA	ng/L	--	**8.9**	**2.2**	**1.4 J**	**1.9**	**1.0 J**	**1.8**	**1.7**	<0.40 U	**2.8**	**1.1 J**	**98**
PFHxA	ng/L	150,000	**5.8**	**1.2 JI**	**1.3 J**	**2.5 I**	**2.2**	**1.6 J**	**1.7**	<0.47 U	**2.6**	**1.9**	**73**
PFHpA	ng/L	--	**8.2**	**1.4 J**	**0.91 J**	**1.8**	**1.4 J**	**1.7**	**1.6 J**	<0.20 U	**1.1 J**	**1.1 J**	**13**
PFOA	ng/L	20	**7.7**	**4.8**	**3.2**	**7.9**	**5.4**	**1.5 J**	**1.6 J**	<0.69 U	**1.6 J**	**4.0**	**12**
PFNA	ng/L	30	<0.24 U	<0.23 U	<0.23 U	<0.23 U	<0.25 U	<0.23 U	<0.23 U	<0.22 U	<0.25 U	<0.26 U	**0.29 J**
PFDA	ng/L	300	<0.27 U	<0.26 U	<0.26 U	<0.27 U	<0.29 U	<0.26 U	<0.27 U	<0.25 U	<0.29 U	<0.30 U	<0.28 U
PFUnA	ng/L	3,000	<0.97 U+	<0.94 U	<0.92 U	<0.95 U	<1.0 U+	<0.94 U	<0.94 U	<0.89 U	<1.0 U	<1.1 U	<1.0 U
PFDoA	ng/L	500	<0.49 U	<0.47 U	<0.46 U	<0.47 U	<0.51 U	<0.47 U	<0.47 U	<0.45 U	<0.51 U	<0.54 U	<0.50 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U
PFTeA	ng/L	10,000	<0.65 U	<0.62 U	<0.61 U	<0.63 U	<0.68 U	<0.62 U	<0.62 U	<0.59 U	<0.67 U	<0.71 U	<0.67 U
PFHxDA	ng/L	--	<0.79 U	<0.76 U	<0.74 U	<0.77 U	<0.83 U	<0.76 U	<0.76 U	<0.72 U	<0.82 U	<0.87 U	<0.81 U
PFODA	ng/L	400,000	<0.83 U	<0.80 U	<0.78 U	<0.81 U	<0.88 U	<0.80 U	<0.80 U	<0.76 U	<0.87 U	<0.92 U	<0.86 U
Sulfonic Acids													
PFBS	ng/L	450,000	**1.3 J**	**2.8**	**2.2**	**25**	**17**	**0.46 J**	<0.17 U	<0.16 U	**1.4 J**	**1.3 J**	**4.1**
PFPeS	ng/L	--	<0.27 U	**0.51 JI**	<0.25 U	**0.44 J**	**0.28 J**	**0.34 J**	<0.26 U	<0.24 U	**0.45 J**	**0.46 J**	**0.72 J**
PFHxS	ng/L	40	**1.1 J**	**0.86 J**	**0.68 J**	**1.4 J**	**1.5 J**	**0.65 J**	**0.69 J**	<0.46 U	**0.97 J**	**1.3 J**	**2.2**
PFHpS	ng/L	--	<0.17 U	<0.16 U	<0.16 U	<0.16 U	<0.18 U	<0.16 U	<0.16 U	<0.15 U	<0.18 U	<0.19 U	<0.17 U
PFOS	ng/L	20	**2.3**	**1.5 JI**	<0.45 U	**8.9**	**0.98 J**	<0.46 U	<0.46 U	<0.44 U	<0.50 U	**1.2 JI**	**4.0**
PFNS	ng/L	--	<0.33 U	<0.32 U	<0.31 U	<0.32 U	<0.35 U	<0.31 U	<0.32 U	<0.30 U	<0.34 U	<0.36 U	<0.34 U
PFDS	ng/L	--	<0.28 U	<0.27 U	<0.27 U	<0.28 U	<0.30 U	<0.27 U	<0.27 U	<0.26 U	<0.30 U	<0.31 U	<0.29 U
PFDoS	ng/L	--	<0.86 U	<0.83 U	<0.81 U	<0.84 U	<0.90 U	<0.83 U	<0.83 U	<0.79 U	<0.90 U	<0.95 U	<0.89 U
4:2 FTSA	ng/L	--	<0.21 U	<0.20 U	<0.20 U	<0.21 U	<0.22 U	<0.20 U	<0.21 U	<0.19 U	<0.22 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.1 U	<2.1 U	<2.2 U	<2.3 U	<2.1 U	<2.1 U	<2.0 U	<2.3 U	<2.4 U	**2.5 J**
8:2 FTSA	ng/L	--	<0.41 U	<0.39 U	<0.38 U	<0.40 U	<0.43 U	<0.39 U	<0.39 U	<0.37 U	<0.43 U	<0.45 U	<0.42 U
10:2 FTSA	ng/L	--	<0.59 U	<0.57 U	<0.56 U	<0.58 U	<0.62 U	<0.57 U	<0.57 U	<0.54 U	<0.62 U	<0.65 U	<0.61 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.87 U	<0.84 U	<0.82 U	<0.84 U	<0.91 U	<0.83 U	<0.84 U	<0.80 U	<0.91 U	<0.96 U	<0.90 U
NMeFOSA	ng/L	--	<0.38 U	<0.37 U	<0.36 U	<0.37 U	<0.40 U	<0.37 U	<0.37 U	<0.35 U	<0.40 U	<0.42 U	<0.39 U
NEtFOSA	ng/L	20	<0.77 U	<0.74 U	<0.73 U	<0.75 U	<0.81 U	<0.74 U	<0.74 U	<0.71 U	<0.80 U	<0.85 U	<0.80 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.0 U	<1.0 U	<0.97 U	<1.1 U	<1.2 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.3 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.1 U	<1.3 U	<1.4 U	<1.3 U
NEtFOSE	ng/L	20	<0.75 U+	<0.73 U	<0.71 U	<0.73 U	<0.79 U+	<0.72 U	<0.73 U	<0.69 U	<0.79 U	<0.83 U	<0.78 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.5 U	<1.4 U
DONA	ng/L	3,000	<0.35 U	<0.34 U	<0.33 U	<0.34 U	<0.37 U	<0.34 U	<0.34 U	<0.32 U	<0.37 U	<0.39 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.20 U	<0.20 U	<0.21 U	<0.22 U	<0.20 U	<0.21 U	<0.19 U	<0.22 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.27 U	<0.27 U	<0.28 U	<0.30 U	<0.27 U	<0.27 U	<0.26 U	<0.30 U	<0.31 U	<0.29 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**10**	**6.3**	**3.2**	**16.8**	**6.38**	**1.5**	**1.6**	ND	**1.6**	**5.2**	**16**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**10**	**6.3**	**3.2**	**16.8**	**6.38**	**1.5**	**1.6**	ND	**1.6**	**5.2**	**16**
Hazard Index (HI)													
HI	ng/L	1.0	0.5	0.3	0.2	0.9	0.4	0.1	0.1	0.0	0.1	0.3	0.9

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1378	1379	1380	1381	1382	1383	1384	1384	1385	1386	1387
		Sample Date	04/22/21	04/21/21	04/19/21	04/20/21	04/20/21	04/21/21	04/20/21	04/20/21	04/22/21	04/21/21	05/25/21
		Sample Number	PWS1378-OS-042221-100	PWS-1379-IS-042121-100	PWS1380-OS-041921-100	PWS-1381-OS-042021-100	PWS-1382-IS-042021-100	PWS-1383-OS-042121-100	PWS-1384-OS-042021-100	PWS-FD01-042021	PWS1385-IS-042221-100	PWS-1386-IS-042121-100	PWS1387-OS-052521-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	**18**	<2.3 U	**7.7**	<2.1 U	**2.9 J**	**5.3**	**5.1**	<2.2 U	<2.0 U	<1.9 U
PFPeA	ng/L	--	<0.46 U	**12**	<0.46 U	**11**	<0.42 U	**1.6 J**	<0.41 U	<0.46 U	**1.6 J**	<0.41 U	<0.39 U
PFHxA	ng/L	150,000	<0.55 U	**8.0**	<0.55 U	**8.4**	<0.50 U	**1.9**	**0.94 J**	**0.89 J**	**2.0**	**0.58 J**	<0.47 U
PFHpA	ng/L	--	<0.23 U	**11**	<0.24 U	**5.1**	<0.21 U	**0.98 J**	<0.21 U	**0.80 J**	**0.36 J**	<0.21 U	<0.20 U
PFOA	ng/L	20	<0.80 U	**3.4**	<0.80 U	**6.8**	<0.73 U	**2.0**	**2.2**	**2.3**	<0.80 U	**0.86 J**	<0.69 U
PFNA	ng/L	30	<0.25 U	**0.72 J**	<0.25 U	**1.2 J**	<0.23 U	<0.23 U	<0.22 U	<0.25 U	<0.25 U	<0.22 U	<0.22 U
PFDA	ng/L	300	<0.29 U	<0.25 U	<0.29 U	**0.35 J**	<0.27 U	<0.26 U	<0.26 U	<0.29 U	<0.29 U	<0.26 U	<0.25 U
PFUnA	ng/L	3,000	<1.0 U	<0.90 U	<1.0 U	<0.93 U	<0.94 U	<0.92 U	<0.91 U	<1.0 U	<1.0 U	<0.91 U	<0.89 U
PFDoA	ng/L	500	<0.52 U	<0.45 U	<0.52 U	<0.46 U	<0.47 U	<0.46 U	<0.46 U	<0.51 U	<0.51 U	<0.46 U	<0.44 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.0 U
PFTeA	ng/L	10,000	<0.69 U	<0.60 U	<0.69 U	<0.62 U	<0.63 U	<0.61 U	<0.61 U	<0.68 U	<0.68 U	<0.61 U	<0.59 U
PFHxDA	ng/L	--	<0.84 U	<0.73 U	<0.84 U	<0.75 U	<0.76 U	<0.75 U	<0.74 U	<0.83 U	<0.83 U	<0.74 U	<0.72 U
PFODA	ng/L	400,000	<0.88 U	<0.77 U	<0.88 U	<0.79 U	<0.81 U	<0.79 U	<0.78 U	<0.88 U	<0.88 U	<0.78 U	<0.76 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	**0.84 J**	**0.41 J**	**1.4 J**	<0.17 U	**0.34 J**	**0.84 J**	**0.79 J**	**0.33 J**	**0.28 J**	<0.16 U
PFPeS	ng/L	--	<0.28 U	<0.25 U	<0.28 U	**0.38 J**	<0.26 U	<0.25 U	<0.25 U	<0.28 U	<0.28 U	<0.25 U	<0.24 U
PFHxS	ng/L	40	<0.54 U	**0.52 J**	<0.54 U	**1.1 J**	<0.49 U	**1.5 J**	**1.6 J**	**1.4 J**	<0.53 U	<0.47 U	<0.46 U
PFHpS	ng/L	--	<0.18 U	<0.16 U	<0.18 U	<0.16 U	<0.16 U	<0.16 U	<0.16 U	<0.18 U	<0.18 U	<0.16 U	<0.15 U
PFOS	ng/L	20	<0.51 U	<0.44 U	<0.51 U	**1.7**	<0.46 U	**1.1 JI**	**1.3 J**	**1.6 J**	<0.51 U	**0.50 J**	<0.44 U
PFNS	ng/L	--	<0.35 U	<0.30 U	<0.35 U	<0.31 U	<0.32 U	<0.31 U	<0.31 U	<0.35 U	<0.35 U	<0.31 U	<0.30 U
PFDS	ng/L	--	<0.30 U	<0.26 U	<0.30 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.30 U	<0.30 U	<0.27 U	<0.26 U
PFDoS	ng/L	--	<0.91 U	<0.80 U	<0.91 U	<0.82 U	<0.83 U	<0.81 U	<0.81 U	<0.91 U	<0.91 U	<0.80 U	<0.78 U
4:2 FTSA	ng/L	--	<0.23 U	<0.20 U	<0.23 U	<0.20 U	<0.21 U	<0.20 U	<0.20 U	<0.22 U	<0.22 U	<0.20 U	<0.19 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.4 U	**12**	<2.1 U	<2.1 U	<2.1 U	<2.3 U	<2.3 U	<2.1 U	<2.0 U
8:2 FTSA	ng/L	--	<0.43 U	<0.38 U	<0.43 U	<0.39 U	<0.40 U	<0.39 U	<0.38 U	<0.43 U	<0.43 U	<0.38 U	<0.37 U
10:2 FTSA	ng/L	--	<0.63 U	<0.55 U	<0.63 U	<0.56 U	<0.58 U	<0.56 U	<0.56 U	<0.63 U	<0.63 U	<0.56 U	<0.54 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**2.8**	<0.81 U	<0.92 U	<0.83 U	**1.0 J**	<0.82 U	**2.2**	**2.4**	<0.92 U	<0.81 U	<0.79 U
NMeFOSA	ng/L	--	<0.40 U	<0.35 U	<0.40 U	<0.36 U	<0.37 U	<0.36 U	<0.36 U	<0.40 U	<0.40 U	<0.36 U	<0.35 U
NEtFOSA	ng/L	20	<0.82 U	<0.72 U	<0.82 U	<0.73 U	<0.75 U	<0.73 U	<0.72 U	<0.81 U	<0.81 U	<0.72 U	<0.70 U
NMeFOSAA	ng/L	--	<1.1 U	<0.99 U	<1.1 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.1 U	<1.1 U	<1.0 U	<0.97 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.0 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.1 U
NEtFOSE	ng/L	20	<0.80 U	<0.70 U	<0.80 U	<0.72 U	<0.73 U	<0.71 U	<0.71 U	<0.80 U	<0.80 U	<0.70 U	<0.69 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.2 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.4 U	<1.4 U	<1.2 U	<1.2 U
DONA	ng/L	3,000	<0.38 U	<0.33 U	<0.38 U	<0.34 U	<0.34 U	<0.34 U	<0.33 U	<0.37 U	<0.37 U	<0.33 U	<0.32 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.20 U	<0.23 U	<0.20 U	<0.21 U	<0.20 U	<0.20 U	<0.22 U	<0.22 U	<0.20 U	<0.19 U
11Cl-PF3OUdS	ng/L	--	<0.30 U	<0.26 U	<0.30 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.30 U	<0.30 U	<0.27 U	<0.26 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	**3.4**	ND	**8.5**	ND	**3.1**	**3.5**	**3.9**	ND	**1.36**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.8**	**3.4**	ND	**8.5**	**1**	**3.1**	**5.7**	**6.3**	ND	**1.36**	ND
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.2	0.0	0.5	0.1	0.2	0.3	0.4	0.0	0.1	0.0

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0 to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1388	1389	1389	1390	1391	1392	1393	1394	1395	1396	1397
		Sample Date	04/21/21	04/21/21	04/21/21	04/19/21	04/17/21	04/20/21	04/20/21	04/17/21	05/27/21	04/17/21	04/21/21
		Sample Number	PWS-1388-OS-042121-100	PWS-1389-OS-042121-100	PWS-FD01-042121	PWS1390-OS-041921-100	PWS1391-OS-041721-100	PWS-1392-IS-042021-100	PWS-1393-IS-042021-100	PWS1394-OS-041721-100	PWS1395-OS-052721-100	PWS1396-OS-041721-100	PWS-1397-OS-042121-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.1 U	**11**	**11**	<2.2 U	<2.2 U	<2.0 U	**7.8**	<2.2 U	<2.1 U	**4.2 J**	**9.4**
PFPeA	ng/L	--	**1.3 J**	**4.1**	**4.4**	<0.45 U	<0.45 U	<0.41 U	**7.4**	**1.2 J**	<0.43 U	**3.7**	**5.9**
PFHxA	ng/L	150,000	**2.3**	**4.1**	**4.3**	<0.53 U	<0.53 U	<0.48 U	**6.5**	**1.3 J**	<0.50 U	**2.5**	**4.3**
PFHpA	ng/L	--	**1.0 J**	**2.0**	**1.8**	<0.23 U	<0.23 U	<0.21 U	**4.1**	**1.1 J**	<0.22 U	**1.0 J**	**2.2**
PFOA	ng/L	20	**5.5**	**3.2**	**3.2**	<0.78 U	<0.78 U	<0.71 U	**3.7**	**1.0 J**	<0.74 U	**1.6 J**	**3.4**
PFNA	ng/L	30	<0.23 U	<0.24 U	<0.24 U	<0.25 U	<0.25 U	<0.23 U	<0.25 U	<0.25 U	<0.23 U	<0.26 U	**0.34 J**
PFDA	ng/L	300	<0.27 U	<0.28 U	<0.28 U	<0.28 U	<0.28 U	<0.26 U	<0.29 U	<0.29 U	<0.27 U	<0.30 U	<0.26 U
PFUnA	ng/L	3,000	<0.95 U	<0.98 U	<0.98 U	<1.0 U	<1.0 U	<0.92 U	<1.0 U	<1.0 U	<0.96 U+	<1.1 U	<0.91 U
PFDoA	ng/L	500	<0.47 U	<0.49 U	<0.49 U	<0.50 U	<0.50 U	<0.46 U	<0.51 U	<0.51 U	<0.48 U	<0.53 U	<0.46 U
PFTriA	ng/L	--	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U
PFTeA	ng/L	10,000	<0.63 U	<0.65 U	<0.65 U	<0.67 U	<0.67 U	<0.61 U	<0.68 U	<0.68 U	<0.64 U	<0.70 U	<0.61 U
PFHxDA	ng/L	--	<0.76 U	<0.79 U	<0.79 U	<0.81 U	<0.82 U	<0.74 U	<0.83 U	<0.83 U	<0.77 U	<0.85 U	<0.74 U
PFODA	ng/L	400,000	<0.81 U	<0.84 U	<0.84 U	<0.86 U	<0.86 U	<0.79 U	<0.88 U	<0.87 U	<0.82 U	<0.90 U	<0.78 U
Sulfonic Acids													
PFBS	ng/L	450,000	**0.98 J**	**1.1 J**	**1.2 J**	**0.43 J**	<0.18 U	<0.17 U	<0.19 U	**0.49 J**	<0.17 U	<0.19 U	**1.5 J**
PFPeS	ng/L	--	<0.26 U	<0.27 U	<0.27 U	<0.27 U	<0.27 U	<0.25 U	<0.28 U	<0.28 U	<0.26 U	<0.29 U	<0.25 U
PFHxS	ng/L	40	**1.8**	**1.3 J**	**1.1 J**	<0.52 U	<0.52 U	<0.48 U	<0.53 U	<0.53 U	<0.50 U	**0.55 J**	**0.90 J**
PFHpS	ng/L	--	**0.18 J**	<0.17 U	<0.17 U	<0.17 U	<0.17 U	<0.16 U	<0.18 U	<0.18 U	<0.17 U	<0.18 U	<0.16 U
PFOS	ng/L	20	**1.3 JI**	**1.3 J**	**1.3 J**	<0.49 U	<0.49 U	<0.45 U	**2.3**	<0.50 U	<0.47 U	<0.52 U	**9.5**
PFNS	ng/L	--	<0.32 U	<0.33 U	<0.33 U	<0.34 U	<0.34 U	<0.31 U	<0.35 U	<0.34 U	<0.32 U	<0.35 U	<0.31 U
PFDS	ng/L	--	<0.28 U	<0.29 U	<0.29 U	<0.29 U	<0.29 U	<0.27 U	<0.30 U	<0.30 U	<0.28 U	<0.31 U	<0.27 U
PFDoS	ng/L	--	<0.83 U	<0.87 U	<0.87 U	<0.89 U	<0.89 U	<0.81 U	<0.91 U	<0.90 U	<0.84 U	<0.93 U	<0.81 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.20 U
6:2 FTSA	ng/L	--	<2.1 U	<2.2 U	<2.2 U	<2.3 U	<2.3 U	<2.1 U	<2.3 U	<2.3 U	<2.2 U	<2.4 U	<2.1 U
8:2 FTSA	ng/L	--	<0.40 U	<0.41 U	<0.41 U	<0.42 U	<0.42 U	<0.38 U	<0.43 U	<0.43 U	<0.40 U	<0.44 U	<0.38 U
10:2 FTSA	ng/L	--	<0.58 U	<0.60 U	<0.60 U	<0.61 U	<0.61 U	<0.56 U	<0.63 U	<0.62 U	<0.58 U	<0.64 U	<0.56 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**3.2**	**3.8**	**2.8**	<0.90 U	<0.90 U	<0.82 U	<0.92 U	<0.91 U	<0.85 U	<0.94 U	<0.82 U
NMeFOSA	ng/L	--	<0.37 U	<0.38 U	<0.38 U	<0.39 U	<0.39 U	<0.36 U	<0.40 U	<0.40 U	<0.37 U	<0.41 U	<0.36 U
NEtFOSA	ng/L	20	<0.75 U	<0.78 U	<0.78 U	<0.80 U	<0.80 U	<0.73 U	<0.81 U	<0.81 U	<0.76 U	<0.83 U	<0.72 U
NMeFOSAA	ng/L	--	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U
NEtFOSAA	ng/L	20	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U
NMeFOSE	ng/L	--	<1.2 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U
NEtFOSE	ng/L	20	<0.73 U	<0.76 U	<0.76 U	<0.78 U	<0.78 U	<0.71 U	<0.79 U	<0.79 U	<0.74 U	<0.81 U	<0.71 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.2 U
DONA	ng/L	3,000	<0.34 U	<0.36 U	<0.36 U	<0.37 U	<0.37 U	<0.33 U	<0.37 U	<0.37 U	<0.35 U	<0.38 U	<0.33 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.20 U	<0.22 U	<0.22 U	<0.21 U	<0.23 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.28 U	<0.29 U	<0.29 U	<0.29 U	<0.29 U	<0.27 U	<0.30 U	<0.30 U	<0.28 U	<0.31 U	<0.27 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**6.8**	**4.5**	**4.5**	ND	ND	ND	**6**	**1**	ND	**1.6**	**12.9**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**10**	**8.3**	**7.3**	ND	ND	ND	**6**	**1**	ND	**1.6**	**12.9**
Hazard Index (HI)													
HI	ng/L	1.0	0.5	0.4	0.4	0.0	0.0	0.0	0.3	0.1	0.0	0.1	0.7

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1398	1399	1400	1401	1401	1402	1403	1403	1404	1405	1406
		Sample Date	04/22/21	04/21/21	04/23/21	04/23/21	04/22/21	04/20/21	04/22/21	04/23/21	04/23/21	04/23/21	04/23/21
		Sample Number	PWS1398-OS-042221-100	PWS-1399-OS-042121-100	PWS1400-OS-042321-100	PWS1401-OS-042321-100	PWS-FD02-042221	PWS-1402-OS-042021-100	PWS1403-OS-042221-100	PWS-FD01-042321	PWS1404-OS-042321-100	PWS1405-OS-042321-100	PWS1406-OS-042321-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	**3.4 J**	<2.1 U	<2.2 U	**7.4**	**2.7 J**	<2.2 U	**2.8 J**	**7.7**	<2.2 U	<2.3 U	<2.2 U
PFPeA	ng/L	--	<0.44 U	<0.42 U	<0.45 U	**3.6**	**0.98 J**	<0.44 U	**1.1 J**	**3.5**	**2.2**	<0.47 U	<0.46 U
PFHxA	ng/L	150,000	<0.52 U	<0.50 U	<0.54 U	**2.0**	**1.3 J**	<0.52 U	**1.4 J**	**1.3 J**	**1.5 J**	<0.56 U	<0.54 U
PFHpA	ng/L	--	<0.22 U	<0.22 U	<0.23 U	**1.4 J**	**0.52 J**	<0.23 U	**0.66 J**	<0.24 U	<0.23 U	<0.24 U	<0.23 U
PFOA	ng/L	20	**1.1 J**	<0.74 U	<0.79 U	**1.3 J**	**2.1**	<0.77 U	**1.8**	**1.2 J**	<0.80 U	<0.82 U	<0.79 U
PFNA	ng/L	30	<0.24 U	<0.23 U	<0.25 U	<0.25 U	<0.24 U	<0.24 U	<0.25 U	<0.26 U	<0.25 U	<0.26 U	<0.25 U
PFDA	ng/L	300	<0.28 U	<0.27 U	<0.29 U	<0.29 U	<0.28 U	<0.28 U	<0.28 U	<0.30 U	<0.29 U	<0.30 U	<0.29 U
PFUnA	ng/L	3,000	<0.98 U	<0.95 U	<1.0 U	<1.0 U	<0.99 U	<0.99 U	<1.0 U	<1.1 U	<1.0 U	<1.1 U	<1.0 U
PFDoA	ng/L	500	<0.49 U	<0.48 U	<0.51 U	<0.51 U	<0.50 U	<0.50 U	<0.50 U	<0.54 U	<0.51 U	<0.53 U	<0.51 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
PFTeA	ng/L	10,000	<0.65 U	<0.63 U	<0.68 U	<0.67 U	<0.66 U	<0.66 U	<0.67 U	<0.71 U	<0.68 U	<0.70 U	<0.68 U
PFHxDA	ng/L	--	<0.79 U	<0.77 U	<0.82 U	<0.82 U	<0.80 U	<0.80 U	<0.82 U	<0.87 U	<0.83 U	<0.85 U	<0.83 U
PFODA	ng/L	400,000	<0.84 U	<0.81 U	<0.87 U	<0.87 U	<0.85 U	<0.85 U	<0.86 U	<0.92 U	<0.88 U	<0.90 U	<0.88 U
Sulfonic Acids													
PFBS	ng/L	450,000	**3.8**	<0.17 U	<0.19 U	**0.52 J**	**1.6 J**	<0.18 U	**1.5 J**	<0.19 U	<0.19 U	**0.38 J**	<0.19 U
PFPeS	ng/L	--	**0.41 J**	<0.26 U	<0.28 U	<0.28 U	**0.30 J**	<0.27 U	<0.28 U	<0.29 U	<0.28 U	<0.29 U	<0.28 U
PFHxS	ng/L	40	**3.4**	<0.49 U	<0.53 U	**0.79 J**	**1.2 J**	<0.52 U	**0.99 J**	**1.1 J**	<0.53 U	<0.55 U	<0.53 U
PFHpS	ng/L	--	<0.17 U	<0.16 U	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.19 U	<0.18 U	<0.18 U	<0.18 U
PFOS	ng/L	20	**1.6 J**	<0.47 U	<0.50 U	<0.50 U	<0.49 U	<0.49 U	**0.81 J**	<0.53 U	<0.51 U	<0.52 U	<0.50 U
PFNS	ng/L	--	<0.33 U	<0.32 U	<0.34 U	<0.34 U	<0.33 U	<0.33 U	<0.34 U	<0.36 U	<0.35 U	<0.35 U	<0.35 U
PFDS	ng/L	--	<0.29 U	<0.28 U	<0.30 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.30 U
PFDoS	ng/L	--	<0.87 U	<0.84 U	<0.90 U	<0.90 U	<0.88 U	<0.88 U	<0.89 U	<0.95 U	<0.91 U	<0.93 U	<0.91 U
4:2 FTSA	ng/L	--	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U
6:2 FTSA	ng/L	--	<2.2 U	<2.2 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.3 U	<2.4 U	<2.3 U	<2.4 U	<2.3 U
8:2 FTSA	ng/L	--	<0.41 U	<0.40 U	<0.43 U	<0.42 U	<0.42 U	<0.42 U	<0.42 U	<0.45 U	<0.43 U	<0.44 U	<0.43 U
10:2 FTSA	ng/L	--	<0.60 U	<0.58 U	<0.62 U	<0.62 U	<0.60 U	<0.61 U	<0.61 U	<0.65 U	<0.63 U	<0.64 U	<0.63 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	<0.87 U	<0.85 U	<0.91 U	**1.3 J**	<0.88 U	**2.1**	**2.3**	**1.1 J**	<0.92 U	**2.6**	**1.7 J**
NMeFOSA	ng/L	--	<0.38 U	<0.37 U	<0.40 U	<0.40 U	<0.39 U	<0.39 U	<0.39 U	<0.42 U	<0.40 U	<0.41 U	<0.40 U
NEtFOSA	ng/L	20	<0.78 U	<0.75 U	<0.80 U	<0.80 U	<0.78 U	<0.79 U	<0.80 U	<0.85 U	<0.81 U	<0.83 U	<0.81 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U
NMeFOSE	ng/L	--	<1.2 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.3 U	<1.4 U	<1.3 U	<1.3 U	<1.3 U
NEtFOSE	ng/L	20	<0.76 U	<0.74 U	<0.79 U	<0.79 U	<0.77 U	<0.77 U	<0.78 U	<0.83 U	<0.80 U	<0.82 U	<0.79 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.3 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.5 U	<1.4 U	<1.4 U	<1.4 U
DONA	ng/L	3,000	<0.36 U	<0.35 U	<0.37 U	<0.37 U	<0.36 U	<0.36 U	<0.37 U	<0.39 U	<0.37 U	<0.38 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.21 U	<0.21 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.22 U	<0.23 U	<0.22 U	<0.23 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.28 U	<0.30 U	<0.30 U	<0.29 U	<0.29 U	<0.29 U	<0.31 U	<0.30 U	<0.31 U	<0.30 U
Chemical Sum													
PFOS+PFOA	ng/L	20	**2.7**	ND	ND	**1.3**	**2.1**	ND	**2.61**	**1.2**	ND	ND	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**2.7**	ND	ND	**2.6**	**2.1**	**2.1**	**4.91**	**2.3**	ND	**2.6**	**1.7**
Hazard Index (HI)													
HI	ng/L	1.0	0.2	0.0	0.0	0.2	0.1	0.1	0.3	0.1	0.0	0.1	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

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Laboratory Qualifiers

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Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1408	1409	1410A	1410A	1410B	1411	1412	1413	1414	1414	1415
		Sample Date	04/17/21	04/22/21	04/22/21	04/22/21	04/22/21	04/22/21	04/22/21	05/27/21	04/23/21	05/27/21	05/25/21
		Sample Number	PWS1408-OS-041721-100	PWS1409-IS-042221-100	PWS1410A-OS-042221-100	PWS-FD01-042221	PWS1410B-IS-042221-100	PWS1411-OS-042221-100	PWS1412-OS-042221-100	PWS1413-OS-052721-100	PWS1414-OS-042321-100	PWS1414-OS-052721-100	PWS1415-OS-052521-100
Chemical Name	**Units**	**Enforcement Standard**											
Carboxylic Acids													
PFBA	ng/L	10,000	<2.3 U	<2.2 U	<2.3 U	<2.1 U	**19**	<2.2 U	<2.3 U	<2.1 U	**4.4 J**	**5.0**	**2.9 J**
PFPeA	ng/L	--	<0.47 U	<0.45 U	<0.47 U	<0.44 U	**11**	<0.45 U	<0.46 U	<0.43 U	**1.9**	**1.9**	**3.4**
PFHxA	ng/L	150,000	<0.56 U	**0.54 J**	<0.56 U	<0.52 U	**6.7**	<0.53 U	<0.55 U	<0.51 U	**1.5 J**	**1.7**	**3.1**
PFHpA	ng/L	--	<0.24 U	<0.23 U	<0.24 U	<0.22 U	**3.6**	<0.23 U	<0.24 U	<0.22 U	**0.80 J**	**1.0 J**	**1.0 J**
PFOA	ng/L	20	<0.82 U	<0.79 U	<0.82 U	<0.75 U	**5.0**	<0.78 U	<0.80 U	<0.75 U	<0.79 U	**0.82 J**	**1.2 J**
PFNA	ng/L	30	<0.26 U	<0.25 U	<0.26 U	<0.24 U	<0.25 U	<0.25 U	<0.25 U	<0.24 U	<0.25 U	<0.23 U	<0.22 U
PFDA	ng/L	300	<0.30 U	<0.29 U	<0.30 U	<0.28 U	<0.28 U	<0.28 U	<0.29 U	<0.27 U	<0.29 U	<0.27 U	<0.25 U
PFUnA	ng/L	3,000	<1.1 U	<1.0 U	<1.1 U	<0.98 U	<1.0 U	<1.0 U	<1.0 U	<0.98 U+	<1.0 U	<0.96 U+	<0.90 U
PFDoA	ng/L	500	<0.53 U	<0.51 U	<0.53 U	<0.49 U	<0.50 U	<0.50 U	<0.52 U	<0.49 U	<0.51 U	<0.48 U	<0.45 U
PFTriA	ng/L	--	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U
PFTeA	ng/L	10,000	<0.70 U	<0.68 U	<0.70 U	<0.65 U	<0.67 U	<0.67 U	<0.69 U	<0.65 U	<0.68 U	<0.63 U	<0.60 U
PFHxDA	ng/L	--	<0.86 U	<0.82 U	<0.86 U	<0.79 U	<0.81 U	<0.82 U	<0.84 U	<0.79 U	<0.83 U	<0.77 U	<0.73 U
PFODA	ng/L	400,000	<0.90 U	<0.87 U	<0.91 U	<0.83 U	<0.86 U	<0.86 U	<0.89 U	<0.83 U	<0.87 U	<0.82 U	<0.77 U
Sulfonic Acids													
PFBS	ng/L	450,000	<0.19 U	<0.18 U	<0.19 U	<0.18 U	**1.5 J**	<0.18 U	<0.19 U	<0.18 U	<0.19 U	<0.17 U	**0.35 J**
PFPeS	ng/L	--	<0.29 U	<0.28 U	<0.29 U	<0.27 U	<0.27 U	<0.27 U	<0.28 U	<0.27 U	<0.28 U	<0.26 U	<0.25 U
PFHxS	ng/L	40	<0.55 U	<0.53 U	<0.55 U	<0.51 U	**2.0**	<0.52 U	<0.54 U	<0.51 U	<0.53 U	<0.50 U	<0.47 U
PFHpS	ng/L	--	<0.18 U	<0.18 U	<0.18 U	<0.17 U	<0.17 U	<0.17 U	<0.18 U	<0.17 U	<0.18 U	<0.17 U	<0.16 U
PFOS	ng/L	20	<0.52 U	<0.50 U	<0.52 U	<0.48 U	<0.49 U	<0.49 U	<0.51 U	<0.48 U	<0.50 U	<0.47 U	<0.44 U
PFNS	ng/L	--	<0.36 U	<0.34 U	<0.36 U	<0.33 U	<0.34 U	<0.34 U	<0.35 U	<0.33 U	<0.34 U	<0.32 U	<0.30 U
PFDS	ng/L	--	<0.31 U	<0.30 U	<0.31 U	<0.28 U	<0.29 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.26 U
PFDoS	ng/L	--	<0.93 U	<0.90 U	<0.94 U	<0.86 U	<0.89 U	<0.89 U	<0.92 U	<0.86 U	<0.90 U	<0.84 U	<0.80 U
4:2 FTSA	ng/L	--	<0.23 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.21 U	<0.20 U
6:2 FTSA	ng/L	--	<2.4 U	<2.3 U	<2.4 U	<2.2 U	<2.3 U	<2.3 U	<2.4 U	<2.2 U	<2.3 U	<2.2 U	<2.1 U
8:2 FTSA	ng/L	--	<0.44 U	<0.43 U	<0.44 U	<0.41 U	<0.42 U	<0.42 U	<0.43 U	<0.41 U	<0.43 U	<0.40 U	<0.38 U
10:2 FTSA	ng/L	--	<0.64 U	<0.62 U	<0.65 U	<0.60 U	<0.61 U	<0.61 U	<0.63 U	<0.59 U	<0.62 U	<0.58 U	<0.55 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols													
FOSA	ng/L	20	**1.2 J**	<0.91 U	**3.6**	**2.6**	<0.90 U	**1.3 J**	<0.92 U	<0.87 U	<0.91 U	<0.85 U	**1.3 J**
NMeFOSA	ng/L	--	<0.41 U	<0.40 U	<0.41 U	<0.38 U	<0.39 U	<0.39 U	<0.41 U	<0.38 U	<0.40 U	<0.37 U	<0.35 U
NEtFOSA	ng/L	20	<0.84 U	<0.80 U	<0.84 U	<0.77 U	<0.80 U	<0.80 U	<0.82 U	<0.77 U	<0.81 U	<0.76 U	<0.71 U
NMeFOSAA	ng/L	--	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.0 U	<0.99 U
NEtFOSAA	ng/L	20	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.1 U	<1.1 U
NMeFOSE	ng/L	--	<1.3 U	<1.3 U	<1.4 U	<1.2 U	<1.3 U	<1.3 U	<1.3 U	<1.2 U	<1.3 U	<1.2 U	<1.2 U
NEtFOSE	ng/L	20	<0.82 U	<0.79 U	<0.82 U	<0.75 U	<0.78 U	<0.78 U	<0.80 U	<0.75 U	<0.79 U	<0.74 U	<0.70 U
Replacement Chemicals													
HFPO-DA	ng/L	300	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.4 U	<1.4 U	<1.3 U	<1.4 U	<1.3 U	<1.2 U
DONA	ng/L	3,000	<0.38 U	<0.37 U	<0.39 U	<0.36 U	<0.37 U	<0.37 U	<0.38 U	<0.35 U	<0.37 U	<0.35 U	<0.33 U
9Cl-PF3ONS	ng/L	--	<0.23 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.22 U	<0.23 U	<0.21 U	<0.22 U	<0.21 U	<0.20 U
11Cl-PF3OUdS	ng/L	--	<0.31 U	<0.30 U	<0.31 U	<0.28 U	<0.29 U	<0.29 U	<0.30 U	<0.28 U	<0.30 U	<0.28 U	<0.26 U
Chemical Sum													
PFOS+PFOA	ng/L	20	ND	ND	ND	ND	**5**	ND	ND	ND	ND	**0.82**	**1.2**
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**1.2**	ND	**3.6**	**2.6**	**5**	**1.3**	ND	ND	ND	**0.82**	**2.5**
Hazard Index (HI)													
HI	ng/L	1.0	0.1	0.0	0.2	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

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Results exceeding the Recommended Enforcement Standard are highlighted

Laboratory Qualifiers

I = Value is estimated maximum possible concentration

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte is not detected at the given method detection limit.

Hazard Index (HI) calculated in accordance with DHS recommendations:

https://dnr.wisconsin.gov/sites/default/files/topic/PFAS/peag/DHSHazIndexLetter20201117.pdf

DHS recommends using an alternative source of water when the HI is equal to or greater than 1.0

to reduce your risk of potential health effects.

Table 2
Potable Well Sampling PFAS Analytical Results
Expanded Site Investigation Area
Marinette County, Wisconsin
(Data through 07/12/2021)

		Location	1416	1417	1418
		Sample Date	05/25/21	05/25/21	06/22/21
		Sample Number	PWS1416-IS-052521-100	PWS1417-IS-052521-100	PWS1418-IS-062221-100
Chemical Name	**Units**	**Enforcement Standard**			
Carboxylic Acids					
PFBA	ng/L	10,000	**3.3 J**	**9.2**	**2.5 J**
PFPeA	ng/L	--	**1.6 J**	**10**	**1.8 J**
PFHxA	ng/L	150,000	**1.8**	**12**	**1.6 J**
PFHpA	ng/L	--	**0.95 J**	**9.3**	**0.43 J**
PFOA	ng/L	20	**3.4**	**12**	<0.79 U
PFNA	ng/L	30	<0.24 U	**0.52 J**	<0.25 U
PFDA	ng/L	300	<0.28 U	<0.26 U	<0.29 U
PFUnA	ng/L	3,000	<0.99 U	<0.91 U	<1.0 U
PFDoA	ng/L	500	<0.50 U	<0.46 U	<0.51 U
PFTriA	ng/L	--	<1.2 U	<1.1 U	<1.2 U
PFTeA	ng/L	10,000	<0.66 U	<0.61 U	<0.68 U
PFHxDA	ng/L	--	<0.80 U	<0.74 U	<0.83 U
PFODA	ng/L	400,000	<0.85 U	<0.78 U	<0.87 U
Sulfonic Acids					
PFBS	ng/L	450,000	**1.3 J**	**12**	**0.80 J**
PFPeS	ng/L	--	<0.27 U	**0.39 J**	<0.28 U
PFHxS	ng/L	40	<0.51 U	**2.0**	**0.63 J**
PFHpS	ng/L	--	<0.17 U	**0.24 J**	<0.18 U
PFOS	ng/L	20	<0.49 U	**10**	<0.50 U
PFNS	ng/L	--	<0.33 U	<0.31 U	<0.34 U
PFDS	ng/L	--	<0.29 U	<0.27 U	<0.30 U
PFDoS	ng/L	--	<0.87 U	<0.80 U	<0.90 U
4:2 FTSA	ng/L	--	<0.22 U	<0.20 U	<0.22 U
6:2 FTSA	ng/L	--	<2.3 U	<2.1 U	<2.3 U
8:2 FTSA	ng/L	--	<0.41 U	<0.38 U	<0.43 U
10:2 FTSA	ng/L	--	<0.60 U	<0.56 U	<0.62 U
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols					
FOSA	ng/L	20	<0.88 U	<0.81 U	**1.9**
NMeFOSA	ng/L	--	<0.39 U	<0.36 U	<0.40 U
NEtFOSA	ng/L	20	<0.78 U	<0.72 U	<0.81 U
NMeFOSAA	ng/L	--	<1.1 U	<1.0 U	<1.1 U
NEtFOSAA	ng/L	20	<1.2 U	<1.1 U	<1.2 U
NMeFOSE	ng/L	--	<1.3 U	<1.2 U	<1.3 U
NEtFOSE	ng/L	20	<0.77 U	<0.71 U	<0.79 U
Replacement Chemicals					
HFPO-DA	ng/L	300	<1.4 U	<1.2 U	<1.4 U
DONA	ng/L	3,000	<0.36 U	<0.33 U	<0.37 U
9Cl-PF3ONS	ng/L	--	<0.22 U	<0.20 U	<0.22 U
11Cl-PF3OUdS	ng/L	--	<0.29 U	<0.27 U	<0.30 U
Chemical Sum					
PFOS+PFOA	ng/L	20	**3.4**	**22**	ND
FOSA+NEtFOSE+NEtFOSA+NetFOSAA+PFOS+PFOA	ng/L	20	**3.4**	**22**	**1.9**
Hazard Index (HI)					
HI	ng/L	1.0	0.2	1.2	0.1

Notes:

Data presented in this table are lab results and still undergoing data validation by Wood.

Potable well samples collected by Wood on behalf of the Wisconsin DNR. Samples analyzed by Eurofins TestAmerica

PFAS Parameters are defined in Table 1

ng/L = nanograms per liter (parts per trillion)

Analyte detections are in **BOLD**

Results exceeding the Recommended Enforcement Standard are highlighted

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