FREQUENTLY ASKED QUESTIONS ABOUT PFAS



# What are Per- and Polyfluoroalkyl substances (PFAS) and why are they harmful?

Per- and polyfluoroalkyl substances (PFAS)are a large group of manmade chemicals that

are resistant to heat, water, and oil. PFAS have been classified by the U.S. Environmental Protection Agency (EPA) as an emerging contaminant on the national landscape. For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, personal care products, fire-fighting foams, and metal plating. PFAS have been found at low levels both in the environment and in blood samples of the general U.S. population.

Click this link to learn more: https://dnr.wi.gov/files/pdf/pubs/rr/RR114bE.pdf

# How does PFAS get into drinking water?

PFAS can get into drinking water when products or wastes containing them are disposed

of, used or spilled onto the ground or into lakes and rivers. The four major sources of PFAS are: fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids.

PFAS move easily through the ground, getting into groundwater that is used for some water supplies or for private drinking water wells. When released into lakes or rivers used as sources of drinking water, they can get into drinking water supplies. PFAS released by facilities into the air can also end up in rivers and lakes used for drinking water.

# How could I be exposed to PFAS?

The main way people are exposed to thesechemicals is by swallowing them. PFAS

chemicals are sometimes found in drinking water and in cooking- or food-packaging products. PFAS can be swallowed along with the water or food, from there they can enter the bloodstream.

Touching products made with PFAS or touching water that contains PFAS is not the main way people are exposed to these chemicals. Most PFAS do not easily absorb into the skin.

Feel free to click here to learn more: https://dnr.wisconsin.gov/topic/PFAS/Impacts.html

# Has Marshfield tested their water for PFAS?

In 2014 as a part of the EPA's Third Unregulated Contaminant Monitoring Rule (UCMR 3), Marshfield Utilities tested all three of their entry points for the required six types of PFAS at a Parts Per Billion (ppb) level and we received no detects (ND). Please see the last page of this document for our test results.

# What are the current standards in Wisconsin for PFAS?

The EPA & Wisconsin are currently working on setting standards.

The Wisconsin Department of Health and Safety (DHS) sent the Wisconsin Department of Natural Resources (DNR) <u>recommended</u> groundwater standards for 18 PFAS. These recommendations are based on available scientific information and are set to protect sensitive populations.

View <u>recommended</u> Groundwater Standards at https://www.dhs.wisconsin.gov/chemical/pfas.htm

# What is Wisconsin doing about PFAS?

Governor Evers signed Executive Order #40 which established the Wisconsin PFAS Action Council and they, in turn, developed the Wisconsin PFAS Action Plan. The Action Plan contains the standard-setting process, sampling techniques, pollution prevention, public education, and other items.

Click this link to learn about Wisconsin's PFAS Action Plan: https://widnr.widen.net/content/d4vyg9qqwj/pdf/EM\_PFASActionPlan.pdf

# What is Marshfield doing about PFAS?

Marshfield has officially requested to be a part of the DNR's Voluntary Testing Program which was announced in February 2022. More details of that testing program will be announced by the DNR in March/April 2022. Testing will then take place shortly thereafter.

It has also been announced by the EPA that Marshfield will also be testing for PFAS again in 2023 for the EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR 5). As a part of UCMR 5, Marshfield Utilities will be testing for 29 PFAS substances. Visit https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule for more information.

# How can PFAS affect people's health?

Some scientific studies suggest that certain PFAS may affect different systems in the body. National Center for Environmental Health (NCEH) / Agency for Toxic Substances & Disease Registry (ATSDR) are working with various partners to better understand how exposure to PFAS might affect people's health— especially how exposure to PFAS in water and food may be harmful. Although more research is needed, research involving humans suggests that high levels of certain PFAS may lead to the following:

- Increased cholesterol levels
- Changes in liver enzymes
- Decreased vaccine response in children
- Increased risk of high blood pressure or pre-eclampsia in pregnant women
- Small decreases in infant birth weights
- Increased risk of kidney or testicular cancer

At this time, scientists are still learning about the health effects of exposures to mixtures of PFAS.

# How can I reduce my exposure to PFAS?

PFAS are present at low levels in some food products and in the environment (air, water, soil etc.), so you probably cannot prevent PFAS exposure altogether. However, if you live near known sources of PFAS contamination, you can take steps to reduce your risk of exposure.

If your drinking water contains PFAS above the EPA Lifetime Health Advisory, consider using an alternative or treated water source for any activity in which you might swallow water:

- a.drinking
- b.food preparation
- c.cooking
- d.brushing teeth, and
- e.preparing infant formula

Check for fish advisories for water bodies where you fish.

- a. Follow fish advisories that tell people to stop or limit eating fish from waters contaminated with PFAS or other compounds.
- b. Research has shown the benefits of eating fish, so continue to eat fish from safe sources as part of your healthy diet.

Read consumer product labels and avoid using those with PFAS.

# How can I learn more?

You can visit the following websites for more information:

### Center for Disease Control (CDC) / Agency for Toxic Substances & Disease Registry (ATSDR):

https://www.cdc.gov/cdc-info/, or (800) 232-4636. https://www.atsdr.cdc.gov/pfas/ https://www.cdc.gov/exposurereport/index.html https://www.atsdr.cdc.gov/pfas/resources/pfas-faqs.html

### **Environmental Protection Agency (EPA):**

https://www.epa.gov/chemical-research/research-and-polyfluoroalkyl-substancespfasexternal icon

### Food and Drug Administration:

https://www.fda.gov/food/newsevents/constituentupdates/ucm479465.htmexternal icon

### National Toxicology Program:

https://ntp.niehs.nih.gov/pubhealth/hat/noms/pfoa/index.htmlexternal icon

#### ANALYTICAL RESULTS: 537 UCMR3 Safe Drinking Water Analysis **Customer: Marshfield Electric & Water Utilities** NLS Project: 221162 Project Description: UCMR3 (SE2) Project Title: EPs & DSMRTs

#### Template: 537UCMR3 Printed: 07/08/2014 10:46

alyzed: 06/24/14 - Analytes: 6					
RESULT	UNITS	DIL	MRL	MCL	Note
ND	ug/L	1	0.090		
ND	ug/L	1	0.010		
ND	ug/L	1	0.030		
ND	ug/L	1	0.020		
ND	ug/L	1	0.020		
ND	ug/L	1	0.040		
83.881%				Photos a according to the second state of the	S
80.244%					S
	RESULT ND ND ND ND ND ND 83.881%	RESULT UNITS   ND ug/L   83.881%	RESULT UNITS DIL   ND ug/L 1   83.881% 1	RESULT UNITS DIL MRL   ND ug/L 1 0.090   ND ug/L 1 0.010   ND ug/L 1 0.030   ND ug/L 1 0.020   ND ug/L 1 0.020   ND ug/L 1 0.040   83.881%	RESULT UNITS DIL MRL MCL   ND ug/L 1 0.090   ND ug/L 1 0.010   ND ug/L 1 0.030   ND ug/L 1 0.020   ND ug/L 1 0.020   ND ug/L 1 0.040   83.881%

#### NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 797575 Wildwood Sample Faucet Collected: 06/17/14 Analy	zed: 06/24/14 - Analyte	is: 6				
ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ug/L	1	0.090		
perfluoroheptanoic acid (PFHpA)	ND	ug/L	1	0.010		
perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	1	0.030		
perfluorooctanoic acid (PFOA)	ND	ug/L	1	0.020		
perfluorononanoic acid (PFNA)	ND	ug/L	1	0.020		
perfluorooctanesulfonic acid (PFOS)	ND	ug/L	1	0.040		
C13-PFHxA (SURR)	89.46%	-		wattan.		S
C13-PFDA (SURR)	86.467%					S

#### NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.

Sample: 797583 Southside Sample Faucet Collected: 06/17/14	Analyzed: 06/24/14 - Analyte	es: 6				
ANALYTE NAME	RESULT	UNITS	DIL	MRL	MCL	Note
perfluorobutanesulfonic acid (PFBS)	ND	ug/L	1	0.090		
perfluoroheptanoic acid (PFHpA)	ND	ug/L	1	0.010		
perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	1	0.030		
perfluorooctanoic acid (PFOA)	ND	ug/L	1	0.020		
perfluorononanoic acid (PFNA)	ND	ug/L	1	0.020		
perfluorooctanesulfonic acid (PFOS)	ND	ug/L	1	0.040		
C13-PFHxA (SURR)	86.149%					S
C13-PFDA (SURR)	88.263%					S

NOTES APPLICABLE TO THIS ANALYSIS:

S = This compound is a surrogate used to evaluate the quality control of a method.



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 615884001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 04/25/2022 10:40 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: 1818 N OAK Location of Sample: WATER TREATMENT PLANT Monitor Point ID:EP400PWS ID#:77201652WI Unique Well#:Entry Point ID:Entry Point ID:400Date Received:4/26/2022Date Reported:5/25/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/09/22 17:2	27			
PFBS (375-73-5)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFHxA (307-24-4)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
HFPO-DA (13252-13-6)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFHpA (375-85-9)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFHxS (355-46-4)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
DONA (919005-14-4)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFNA (375-95-1)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFOS (1763-23-1)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
9CI-PF3ONS (756426-58-1)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFDA (335-76-2)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
N-MeFOSAA (2355-31-9)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
N-EtFOSAA (2991-50-6)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFUnA (2058-94-8)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFOA (335-67-1)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
11CI-PF3OUdS (763051-92-9)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFDoA (307-55-1)	EPA Method 537.1	<0.960	ng/L	0.960	0.960
PFTrDA (72629-94-8)	EPA Method 537.1	<0.960	ng/L	0.960	0.960



Environmental Health Division

#### WSLH Sample: 615884001

Analyte	Analysis Method Result	Units	LOD LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/09/22 17:27		
PFTeDA (376-06-7)	EPA Method 537.1 <0.960	ng/L	0.960 0.960



Laboratory Report

Environmental Health Division

WSLH Sample: 615884001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### Previous Reports

This sample was previously reported under the following report ID(s): 9701847

### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 615885001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 04/25/2022 11:45 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: EAST 29TH ST Location of Sample: SOUTHSIDE BOOSTER STATION Monitor Point ID:EP200PWS ID#:77201652WI Unique Well#:200Entry Point ID:200Date Received:4/26/2022Date Reported:5/24/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/03/22 16:5	9			
PFBS (375-73-5)	EPA Method 537.1	4.67	ng/L	0.925	0.925
PFHxA (307-24-4)	EPA Method 537.1	10.6	ng/L	0.925	0.925
HFPO-DA (13252-13-6)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFHpA (375-85-9)	EPA Method 537.1	3.61	ng/L	0.925	0.925
PFHxS (355-46-4)	EPA Method 537.1	22.0	ng/L	0.925	0.925
DONA (919005-14-4)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFNA (375-95-1)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFOS (1763-23-1)	EPA Method 537.1	24.0	ng/L	0.925	0.925
9CI-PF3ONS (756426-58-1)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFDA (335-76-2)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
N-MeFOSAA (2355-31-9)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
N-EtFOSAA (2991-50-6)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFUnA (2058-94-8)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFOA (335-67-1)	EPA Method 537.1	4.78	ng/L	0.925	0.925
11CI-PF3OUdS (763051-92-9)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFDoA (307-55-1)	EPA Method 537.1	<0.925	ng/L	0.925	0.925
PFTrDA (72629-94-8)	EPA Method 537.1	<0.925	ng/L	0.925	0.925



Environmental Health Division

#### WSLH Sample: 615885001

Analyte	Analysis Method Result	Units	LOD LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/03/22 16:59		
PFTeDA (376-06-7)	EPA Method 537.1 <0.925	ng/L	0.925 0.925



Laboratory Report

Environmental Health Division

WSLH Sample: 615885001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 615885002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To: MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 04/25/2022 11:45 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: EAST 29TH ST Location of Sample: SOUTHSIDE BOOSTER STATION Monitor Point ID:EP200PWS ID#:77201652WI Unique Well#:200Entry Point ID:200Date Received:4/26/2022Date Reported:5/24/2022Sample Type:I-Investigation

### Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyzed past the 14 days holding time: Method EPA Method 537.1 analyzed on 05/12/22 1100

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 05/12/22 11:00	Analysis Date: 05/13/22 11:1	5			
PFBS (375-73-5)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFHxA (307-24-4)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
HFPO-DA (13252-13-6)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFHpA (375-85-9)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFHxS (355-46-4)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
DONA (919005-14-4)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFNA (375-95-1)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFOS (1763-23-1)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
9CI-PF3ONS (756426-58-1)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFDA (335-76-2)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
N-MeFOSAA (2355-31-9)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
N-EtFOSAA (2991-50-6)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFUnA (2058-94-8)	EPA Method 537.1	<0.983	ng/L	0.983	0.983



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 615885002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 05/12/22 11:00	Analysis Date: 05/13/22 11:	15			
PFOA (335-67-1)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
11CI-PF3OUdS (763051-92-9)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFDoA (307-55-1)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFTrDA (72629-94-8)	EPA Method 537.1	<0.983	ng/L	0.983	0.983
PFTeDA (376-06-7)	EPA Method 537.1	<0.983	ng/L	0.983	0.983



Laboratory Report

Environmental Health Division

WSLH Sample: 615885002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 615886001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 04/25/2022 13:15 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: 2000 S CENTRAL AVE Location of Sample: WILDWOOD BOOSTER STATION Monitor Point ID:EP300PWS ID#:77201652WI Unique Well#:Entry Point ID:State Received:4/26/2022Date Reported:5/24/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/03/22 17:1	1			
PFBS (375-73-5)	EPA Method 537.1	0.988	ng/L	0.929	0.929
PFHxA (307-24-4)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
HFPO-DA (13252-13-6)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFHpA (375-85-9)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFHxS (355-46-4)	EPA Method 537.1	1.40	ng/L	0.929	0.929
DONA (919005-14-4)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFNA (375-95-1)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFOS (1763-23-1)	EPA Method 537.1	2.10	ng/L	0.929	0.929
9CI-PF3ONS (756426-58-1)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFDA (335-76-2)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
N-MeFOSAA (2355-31-9)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
N-EtFOSAA (2991-50-6)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFUnA (2058-94-8)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFOA (335-67-1)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
11CI-PF3OUdS (763051-92-9)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFDoA (307-55-1)	EPA Method 537.1	<0.929	ng/L	0.929	0.929
PFTrDA (72629-94-8)	EPA Method 537.1	<0.929	ng/L	0.929	0.929



Environmental Health Division

#### WSLH Sample: 615886001

Analyte	Analysis Method Result	Units	LOD LOQ
Prep Date: 04/28/22 14:00	Analysis Date: 05/03/22 17:11		
PFTeDA (376-06-7)	EPA Method 537.1 <0.929	ng/L	0.929 0.929



Laboratory Report

Environmental Health Division

WSLH Sample: 615886001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 615886002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To: MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 04/25/2022 13:15 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: 2000 S CENTRAL AVE Location of Sample: WILDWOOD BOOSTER STATION Monitor Point ID:EP300PWS ID#:77201652WI Unique Well#:Entry Point ID:State Received:4/26/2022Date Reported:5/24/2022Sample Type:I-Investigation

### Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyzed past the 14 days holding time: Method EPA Method 537.1 analyzed on 05/12/22 1100

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 05/12/22 11:00	Analysis Date: 05/13/22 11:2	.7			
PFBS (375-73-5)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFHxA (307-24-4)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
HFPO-DA (13252-13-6)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFHpA (375-85-9)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFHxS (355-46-4)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
DONA (919005-14-4)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFNA (375-95-1)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFOS (1763-23-1)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
9CI-PF3ONS (756426-58-1)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFDA (335-76-2)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
N-MeFOSAA (2355-31-9)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
N-EtFOSAA (2991-50-6)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFUnA (2058-94-8)	EPA Method 537.1	<0.978	ng/L	0.978	0.978



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 615886002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 05/12/22 11:00	Analysis Date: 05/13/22 11:2	27			
PFOA (335-67-1)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
11CI-PF3OUdS (763051-92-9)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFDoA (307-55-1)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFTrDA (72629-94-8)	EPA Method 537.1	<0.978	ng/L	0.978	0.978
PFTeDA (376-06-7)	EPA Method 537.1	<0.978	ng/L	0.978	0.978



Laboratory Report

Environmental Health Division

WSLH Sample: 615886002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 622321001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:54 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: E 29TH ST Location of Sample: WELL 6 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-6PWS ID#:77201652WI Unique Well#:BH549Entry Point ID:4Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 13:23	3			
PFBA (375-22-4)	WSLH PFAS in Water	6.47	ng/L	0.312	0.903
PFPeA (2706-90-3)	WSLH PFAS in Water	3.49	ng/L	0.135	0.903
PFBS (375-73-5)	WSLH PFAS in Water	3.07	ng/L	0.209	0.903
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.171	ng/L	0.171	0.903
PFHxA (307-24-4)	WSLH PFAS in Water	4.06	ng/L	0.184	0.903
PFPeS (2706-91-4)	WSLH PFAS in Water	0.687F	ng/L	0.123	0.903
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.903
PFHpA (375-85-9)	WSLH PFAS in Water	2.27	ng/L	0.135	0.903
PFHxS (355-46-4)	WSLH PFAS in Water	12.8	ng/L	0.128	0.903
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.903
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.246	ng/L	0.246	0.903
PFOA (335-67-1)	WSLH PFAS in Water	6.35	ng/L	0.0975	0.903
PFHpS (375-92-8)	WSLH PFAS in Water	0.215F	ng/L	0.171	0.903
PFOS (1763-23-1)	WSLH PFAS in Water	7.83	ng/L	0.129	0.903
PFNA (375-95-1)	WSLH PFAS in Water	0.246F	ng/L	0.134	0.903
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.164	ng/L	0.164	0.903
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.236	ng/L	0.236	0.903



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 622321001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 13:2	3			
PFDA (335-76-2)	WSLH PFAS in Water	<0.147	ng/L	0.147	0.903
PFNS (68259-12-1)	WSLH PFAS in Water	<0.164	ng/L	0.164	0.903
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.198	ng/L	0.198	0.903
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.191	ng/L	0.191	0.903
FOSA (754-91-6)	WSLH PFAS in Water	<0.140	ng/L	0.140	0.903
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.200	ng/L	0.200	0.903
PFDS (335-77-3)	WSLH PFAS in Water	<0.232	ng/L	0.232	0.903
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.134	ng/L	0.134	0.903
PFDoA (307-55-1)	WSLH PFAS in Water	<0.245	ng/L	0.245	0.903
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.223	ng/L	0.223	0.903
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.903
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.903	ng/L	0.903	1.81
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.254	ng/L	0.254	0.903
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.626	ng/L	0.626	1.81
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.191	ng/L	0.191	0.903
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.158	ng/L	0.158	0.903



Laboratory Report

Environmental Health Division

WSLH Sample: 622321001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 622321002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:54 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: E 29TH ST Location of Sample: WELL 6 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-6PWS ID#:77201652WI Unique Well#:BH549Entry Point ID:4Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

### Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 13:54	4			
PFBA (375-22-4)	WSLH PFAS in Water	<0.353	ng/L	0.353	1.02
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.153	ng/L	0.153	1.02
PFBS (375-73-5)	WSLH PFAS in Water	<0.235	ng/L	0.235	1.02
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.194	ng/L	0.194	1.02
PFHxA (307-24-4)	WSLH PFAS in Water	<0.208	ng/L	0.208	1.02
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.139	ng/L	0.139	1.02
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.196	ng/L	0.196	1.02
PFHpA (375-85-9)	WSLH PFAS in Water	<0.153	ng/L	0.153	1.02
PFHxS (355-46-4)	WSLH PFAS in Water	<0.145	ng/L	0.145	1.02
DONA (919005-14-4)	WSLH PFAS in Water	<0.130	ng/L	0.130	1.02
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.277	ng/L	0.277	1.02
PFOA (335-67-1)	WSLH PFAS in Water	<0.110	ng/L	0.110	1.02
PFHpS (375-92-8)	WSLH PFAS in Water	<0.194	ng/L	0.194	1.02
PFOS (1763-23-1)	WSLH PFAS in Water	<0.146	ng/L	0.146	1.02
PFNA (375-95-1)	WSLH PFAS in Water	<0.151	ng/L	0.151	1.02



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 622321002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 13:5	4			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.185	ng/L	0.185	1.02
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.267	ng/L	0.267	1.02
PFDA (335-76-2)	WSLH PFAS in Water	<0.166	ng/L	0.166	1.02
PFNS (68259-12-1)	WSLH PFAS in Water	<0.185	ng/L	0.185	1.02
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.223	ng/L	0.223	1.02
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.216	ng/L	0.216	1.02
FOSA (754-91-6)	WSLH PFAS in Water	<0.158	ng/L	0.158	1.02
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.226	ng/L	0.226	1.02
PFDS (335-77-3)	WSLH PFAS in Water	<0.262	ng/L	0.262	1.02
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.152	ng/L	0.152	1.02
PFDoA (307-55-1)	WSLH PFAS in Water	<0.276	ng/L	0.276	1.02
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.252	ng/L	0.252	1.02
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.197	ng/L	0.197	1.02
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<1.02	ng/L	1.02	2.04
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.286	ng/L	0.286	1.02
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.707	ng/L	0.707	2.04
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.216	ng/L	0.216	1.02
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.178	ng/L	0.178	1.02



Laboratory Report

Environmental Health Division

WSLH Sample: 622321002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 622323001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To: MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 12:06 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: EAST 29TH ST Location of Sample: SOUTHSIDE BOOSTER STATION Monitor Point ID:EP200PWS ID#:77201652WI Unique Well#:200Entry Point ID:200Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 14:28	5			
PFBA (375-22-4)	WSLH PFAS in Water	7.79	ng/L	0.314	0.907
PFPeA (2706-90-3)	WSLH PFAS in Water	13.0	ng/L	0.136	0.907
PFBS (375-73-5)	WSLH PFAS in Water	5.08	ng/L	0.210	0.907
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.172	ng/L	0.172	0.907
PFHxA (307-24-4)	WSLH PFAS in Water	11.3	ng/L	0.185	0.907
PFPeS (2706-91-4)	WSLH PFAS in Water	3.05	ng/L	0.123	0.907
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.907
PFHpA (375-85-9)	WSLH PFAS in Water	4.25	ng/L	0.136	0.907
PFHxS (355-46-4)	WSLH PFAS in Water	22.5	ng/L	0.129	0.907
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.907
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.907
PFOA (335-67-1)	WSLH PFAS in Water	4.90	ng/L	0.0980	0.907
PFHpS (375-92-8)	WSLH PFAS in Water	0.533F	ng/L	0.172	0.907
PFOS (1763-23-1)	WSLH PFAS in Water	23.7	ng/L	0.130	0.907
PFNA (375-95-1)	WSLH PFAS in Water	0.359F	ng/L	0.134	0.907
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.165	ng/L	0.165	0.907
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.238	ng/L	0.238	0.907



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 622323001

Prep Date: 06/03/22 08:45 Analysis Date: 06/10/22 14:25   PFDA (335-76-2) WSLH PFAS in Water <0.148 ng/L 0.148   PFNS (68259-12-1) WSLH PFAS in Water <0.165 ng/L 0.165	0.907 0.907 0.907 0.907
	0.907 0.907 0.907
PENS (68259-12-1) WSLH PEAS in Water 10.165 ng/ 0.165	0.907 0.907
PFNS (68259-12-1) WSLH PFAS in Water <0.165 ng/L 0.165	0.907
N-MeFOSAA (2355-31-9) WSLH PFAS in Water <0.199 ng/L 0.199	
N-EtFOSAA (2991-50-6) WSLH PFAS in Water <0.192 ng/L 0.192	
FOSA (754-91-6) WSLH PFAS in Water <0.141 ng/L 0.141	0.907
PFUnA (2058-94-8) WSLH PFAS in Water <0.201 ng/L 0.201	0.907
PFDS (335-77-3) WSLH PFAS in Water <0.233 ng/L 0.233	0.907
11CI-PF3OUdS (763051-92-9) WSLH PFAS in Water <0.135 ng/L 0.135	0.907
PFDoA (307-55-1) WSLH PFAS in Water <0.246 ng/L 0.246	0.907
PFDoS (79780-39-5) WSLH PFAS in Water <0.224 ng/L 0.224	0.907
PFTrDA (72629-94-8) WSLH PFAS in Water <0.175 ng/L 0.175	0.907
N-MeFOSA (31506-32-8) WSLH PFAS in Water <0.907 ng/L 0.907	1.81
N-MeFOSE (24448-09-7) WSLH PFAS in Water <0.255 ng/L 0.255	0.907
N-EtFOSA (4151-50-2) WSLH PFAS in Water <0.630 ng/L 0.630	1.81
N-EtFOSE (1691-99-2) WSLH PFAS in Water <0.192 ng/L 0.192	0.907
PFTeDA (376-06-7) WSLH PFAS in Water <0.159 ng/L 0.159	0.907



Laboratory Report

Environmental Health Division

WSLH Sample: 622323001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 622323002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To: MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670

Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 12:06 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: EAST 29TH ST Location of Sample: SOUTHSIDE BOOSTER STATION Monitor Point ID:EP200PWS ID#:77201652WI Unique Well#:200Entry Point ID:200Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

### Sample Comments

FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 14:4	1			
PFBA (375-22-4)	WSLH PFAS in Water	<0.348	ng/L	0.348	1.01
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.151	ng/L	0.151	1.01
PFBS (375-73-5)	WSLH PFAS in Water	<0.232	ng/L	0.232	1.01
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.191	ng/L	0.191	1.01
PFHxA (307-24-4)	WSLH PFAS in Water	<0.205	ng/L	0.205	1.01
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.137	ng/L	0.137	1.01
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.193	ng/L	0.193	1.01
PFHpA (375-85-9)	WSLH PFAS in Water	<0.151	ng/L	0.151	1.01
PFHxS (355-46-4)	WSLH PFAS in Water	<0.143	ng/L	0.143	1.01
DONA (919005-14-4)	WSLH PFAS in Water	<0.129	ng/L	0.129	1.01
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.274	ng/L	0.274	1.01
PFOA (335-67-1)	WSLH PFAS in Water	<0.109	ng/L	0.109	1.01
PFHpS (375-92-8)	WSLH PFAS in Water	<0.191	ng/L	0.191	1.01
PFOS (1763-23-1)	WSLH PFAS in Water	<0.144	ng/L	0.144	1.01
PFNA (375-95-1)	WSLH PFAS in Water	<0.149	ng/L	0.149	1.01



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 622323002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 14:4	1			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.183	ng/L	0.183	1.01
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.264	ng/L	0.264	1.01
PFDA (335-76-2)	WSLH PFAS in Water	<0.164	ng/L	0.164	1.01
PFNS (68259-12-1)	WSLH PFAS in Water	<0.183	ng/L	0.183	1.01
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.220	ng/L	0.220	1.01
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.213	ng/L	0.213	1.01
FOSA (754-91-6)	WSLH PFAS in Water	<0.156	ng/L	0.156	1.01
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.223	ng/L	0.223	1.01
PFDS (335-77-3)	WSLH PFAS in Water	<0.259	ng/L	0.259	1.01
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.150	ng/L	0.150	1.01
PFDoA (307-55-1)	WSLH PFAS in Water	<0.273	ng/L	0.273	1.01
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.249	ng/L	0.249	1.01
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.194	ng/L	0.194	1.01
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<1.01	ng/L	1.01	2.01
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.283	ng/L	0.283	1.01
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.698	ng/L	0.698	2.01
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.213	ng/L	0.213	1.01
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.176	ng/L	0.176	1.01



Laboratory Report

Environmental Health Division

WSLH Sample: 622323002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

#### Environmental Health Division

#### WSLH Sample: 622325001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:00 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: EAST 29TH ST Location of Sample: WELL 5 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-5PWS ID#:77201652WI Unique Well#:TU524Entry Point ID:5Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 15:5	8			
PFBA (375-22-4)	WSLH PFAS in Water	4.87	ng/L	0.315	0.909
PFPeA (2706-90-3)	WSLH PFAS in Water	3.03	ng/L	0.136	0.909
PFBS (375-73-5)	WSLH PFAS in Water	1.83	ng/L	0.210	0.909
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.909
PFHxA (307-24-4)	WSLH PFAS in Water	2.15	ng/L	0.186	0.909
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.124	ng/L	0.124	0.909
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.909
PFHpA (375-85-9)	WSLH PFAS in Water	0.575F	ng/L	0.136	0.909
PFHxS (355-46-4)	WSLH PFAS in Water	0.562F	ng/L	0.129	0.909
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.909
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.909
PFOA (335-67-1)	WSLH PFAS in Water	0.971	ng/L	0.0982	0.909
PFHpS (375-92-8)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.909
PFOS (1763-23-1)	WSLH PFAS in Water	0.811F	ng/L	0.130	0.909
PFNA (375-95-1)	WSLH PFAS in Water	<0.135	ng/L	0.135	0.909
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.165	ng/L	0.165	0.909
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.238	ng/L	0.238	0.909



# Laboratory Report

Environmental Health Division

#### WSLH Sample: 622325001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 15:58	8			
PFDA (335-76-2)	WSLH PFAS in Water	<0.148	ng/L	0.148	0.909
PFNS (68259-12-1)	WSLH PFAS in Water	<0.165	ng/L	0.165	0.909
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.909
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.909
FOSA (754-91-6)	WSLH PFAS in Water	<0.141	ng/L	0.141	0.909
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.202	ng/L	0.202	0.909
PFDS (335-77-3)	WSLH PFAS in Water	<0.234	ng/L	0.234	0.909
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.135	ng/L	0.135	0.909
PFDoA (307-55-1)	WSLH PFAS in Water	<0.246	ng/L	0.246	0.909
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.225	ng/L	0.225	0.909
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.909
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.909	ng/L	0.909	1.82
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.256	ng/L	0.256	0.909
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.631	ng/L	0.631	1.82
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.909
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.159	ng/L	0.159	0.909



Laboratory Report

Environmental Health Division

WSLH Sample: 622325001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

#### **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 622325002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:00 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: EAST 29TH ST Location of Sample: WELL 5 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-5PWS ID#:77201652WI Unique Well#:TU524Entry Point ID:5Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

# Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:14	4			
PFBA (375-22-4)	WSLH PFAS in Water	<0.339	ng/L	0.339	0.980
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.147	ng/L	0.147	0.980
PFBS (375-73-5)	WSLH PFAS in Water	<0.226	ng/L	0.226	0.980
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.186	ng/L	0.186	0.980
PFHxA (307-24-4)	WSLH PFAS in Water	<0.200	ng/L	0.200	0.980
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.133	ng/L	0.133	0.980
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.188	ng/L	0.188	0.980
PFHpA (375-85-9)	WSLH PFAS in Water	<0.147	ng/L	0.147	0.980
PFHxS (355-46-4)	WSLH PFAS in Water	<0.139	ng/L	0.139	0.980
DONA (919005-14-4)	WSLH PFAS in Water	<0.125	ng/L	0.125	0.980
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.266	ng/L	0.266	0.980
PFOA (335-67-1)	WSLH PFAS in Water	<0.106	ng/L	0.106	0.980
PFHpS (375-92-8)	WSLH PFAS in Water	<0.186	ng/L	0.186	0.980
PFOS (1763-23-1)	WSLH PFAS in Water	<0.140	ng/L	0.140	0.980
PFNA (375-95-1)	WSLH PFAS in Water	<0.145	ng/L	0.145	0.980



# Laboratory Report

Environmental Health Division

### WSLH Sample: 622325002

# **PFAS** in Water

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:1	4			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.178	ng/L	0.178	0.980
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.257	ng/L	0.257	0.980
PFDA (335-76-2)	WSLH PFAS in Water	<0.160	ng/L	0.160	0.980
PFNS (68259-12-1)	WSLH PFAS in Water	<0.178	ng/L	0.178	0.980
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.215	ng/L	0.215	0.980
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.208	ng/L	0.208	0.980
FOSA (754-91-6)	WSLH PFAS in Water	<0.152	ng/L	0.152	0.980
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.217	ng/L	0.217	0.980
PFDS (335-77-3)	WSLH PFAS in Water	<0.252	ng/L	0.252	0.980
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.146	ng/L	0.146	0.980
PFDoA (307-55-1)	WSLH PFAS in Water	<0.265	ng/L	0.265	0.980
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.242	ng/L	0.242	0.980
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.189	ng/L	0.189	0.980
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.980	ng/L	0.980	1.96
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.275	ng/L	0.275	0.980
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.680	ng/L	0.680	1.96
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.208	ng/L	0.208	0.980
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.171	ng/L	0.171	0.980

The internal standard QC limit has failed low.



Laboratory Report

Environmental Health Division

WSLH Sample: 622325002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 622326001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:44 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: E 29TH ST Location of Sample: WELL 25 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-25PWS ID#:77201652WI Unique Well#:BH551Entry Point ID:6Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:29	9			
PFBA (375-22-4)	WSLH PFAS in Water	19.3	ng/L	0.315	0.909
PFPeA (2706-90-3)	WSLH PFAS in Water	52.1	ng/L	0.136	0.909
PFBS (375-73-5)	WSLH PFAS in Water	18.0	ng/L	0.210	0.909
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.909
PFHxA (307-24-4)	WSLH PFAS in Water	49.0	ng/L	0.186	0.909
PFPeS (2706-91-4)	WSLH PFAS in Water	15.9	ng/L	0.124	0.909
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.909
PFHpA (375-85-9)	WSLH PFAS in Water	17.2	ng/L	0.136	0.909
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.909
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	0.744F	ng/L	0.247	0.909
PFOA (335-67-1)	WSLH PFAS in Water	15.7	ng/L	0.0982	0.909
PFHpS (375-92-8)	WSLH PFAS in Water	4.23	ng/L	0.173	0.909
PFNA (375-95-1)	WSLH PFAS in Water	1.69	ng/L	0.135	0.909
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.909
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.238	ng/L	0.238	0.909
PFDA (335-76-2)	WSLH PFAS in Water	0.264F	ng/L	0.148	0.909
PFNS (68259-12-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.909



# Laboratory Report

Environmental Health Division

### WSLH Sample: 622326001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:2	9			
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.909
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.909
FOSA (754-91-6)	WSLH PFAS in Water	<0.141	ng/L	0.141	0.909
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.202	ng/L	0.202	0.909
PFDS (335-77-3)	WSLH PFAS in Water	<0.234	ng/L	0.234	0.909
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.135	ng/L	0.135	0.909
PFDoA (307-55-1)	WSLH PFAS in Water	<0.246	ng/L	0.246	0.909
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.225	ng/L	0.225	0.909
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.176	ng/L	0.176	0.909
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.909	ng/L	0.909	1.82
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.256	ng/L	0.256	0.909
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.631	ng/L	0.631	1.82
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.909
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.159	ng/L	0.159	0.909
Prep Date: 06/03/22 08:45	Analysis Date: 06/16/22 16:1	9			
PFHxS (355-46-4)	WSLH PFAS in Water	95.6	ng/L	1.29	9.09
PFOS (1763-23-1)	WSLH PFAS in Water	101	ng/L	1.30	9.09



Laboratory Report

Environmental Health Division

WSLH Sample: 622326001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 622326002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:44 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: E 29TH ST Location of Sample: WELL 25 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-25PWS ID#:77201652WI Unique Well#:BH551Entry Point ID:6Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

# Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:4	5			
PFBA (375-22-4)	WSLH PFAS in Water	<0.355	ng/L	0.355	1.03
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.154	ng/L	0.154	1.03
PFBS (375-73-5)	WSLH PFAS in Water	<0.237	ng/L	0.237	1.03
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.195	ng/L	0.195	1.03
PFHxA (307-24-4)	WSLH PFAS in Water	<0.209	ng/L	0.209	1.03
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.140	ng/L	0.140	1.03
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.197	ng/L	0.197	1.03
PFHpA (375-85-9)	WSLH PFAS in Water	<0.154	ng/L	0.154	1.03
PFHxS (355-46-4)	WSLH PFAS in Water	<0.146	ng/L	0.146	1.03
DONA (919005-14-4)	WSLH PFAS in Water	<0.131	ng/L	0.131	1.03
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.279	ng/L	0.279	1.03
PFOA (335-67-1)	WSLH PFAS in Water	<0.111	ng/L	0.111	1.03
PFHpS (375-92-8)	WSLH PFAS in Water	<0.195	ng/L	0.195	1.03
PFOS (1763-23-1)	WSLH PFAS in Water	<0.147	ng/L	0.147	1.03
PFNA (375-95-1)	WSLH PFAS in Water	<0.152	ng/L	0.152	1.03



# Laboratory Report

Environmental Health Division

### WSLH Sample: 622326002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 16:4	5			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.187	ng/L	0.187	1.03
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.269	ng/L	0.269	1.03
PFDA (335-76-2)	WSLH PFAS in Water	<0.167	ng/L	0.167	1.03
PFNS (68259-12-1)	WSLH PFAS in Water	<0.187	ng/L	0.187	1.03
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.225	ng/L	0.225	1.03
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.218	ng/L	0.218	1.03
FOSA (754-91-6)	WSLH PFAS in Water	<0.159	ng/L	0.159	1.03
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.228	ng/L	0.228	1.03
PFDS (335-77-3)	WSLH PFAS in Water	<0.264	ng/L	0.264	1.03
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.153	ng/L	0.153	1.03
PFDoA (307-55-1)	WSLH PFAS in Water	<0.278	ng/L	0.278	1.03
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.254	ng/L	0.254	1.03
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.198	ng/L	0.198	1.03
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<1.03	ng/L	1.03	2.05
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.288	ng/L	0.288	1.03
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.712	ng/L	0.712	2.05
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.218	ng/L	0.218	1.03
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.180	ng/L	0.180	1.03



Laboratory Report

Environmental Health Division

WSLH Sample: 622326002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 622327001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:27 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: S WASHINGTON AVE Location of Sample: WELL 4 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-4PWS ID#:77201652WI Unique Well#:WL772Entry Point ID:25Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 17:0	0			
PFBA (375-22-4)	WSLH PFAS in Water	3.06	ng/L	0.315	0.910
PFPeA (2706-90-3)	WSLH PFAS in Water	0.613F	ng/L	0.136	0.910
PFBS (375-73-5)	WSLH PFAS in Water	1.38	ng/L	0.210	0.910
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.910
PFHxA (307-24-4)	WSLH PFAS in Water	0.735F	ng/L	0.186	0.910
PFPeS (2706-91-4)	WSLH PFAS in Water	0.125F	ng/L	0.124	0.910
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.910
PFHpA (375-85-9)	WSLH PFAS in Water	0.418F	ng/L	0.136	0.910
PFHxS (355-46-4)	WSLH PFAS in Water	0.951	ng/L	0.129	0.910
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.910
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.910
PFOA (335-67-1)	WSLH PFAS in Water	1.39	ng/L	0.0983	0.910
PFHpS (375-92-8)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.910
PFOS (1763-23-1)	WSLH PFAS in Water	1.28	ng/L	0.130	0.910
PFNA (375-95-1)	WSLH PFAS in Water	0.158F	ng/L	0.135	0.910
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.910
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.238	ng/L	0.238	0.910



# Laboratory Report

Environmental Health Division

## WSLH Sample: 622327001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 17:0	0			
PFDA (335-76-2)	WSLH PFAS in Water	<0.148	ng/L	0.148	0.910
PFNS (68259-12-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.910
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.910
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.910
FOSA (754-91-6)	WSLH PFAS in Water	<0.141	ng/L	0.141	0.910
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.202	ng/L	0.202	0.910
PFDS (335-77-3)	WSLH PFAS in Water	<0.234	ng/L	0.234	0.910
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.136	ng/L	0.136	0.910
PFDoA (307-55-1)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.910
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.225	ng/L	0.225	0.910
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.176	ng/L	0.176	0.910
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.910	ng/L	0.910	1.82
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.256	ng/L	0.256	0.910
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.631	ng/L	0.631	1.82
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.193	ng/L	0.193	0.910
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.159	ng/L	0.159	0.910



Laboratory Report

Environmental Health Division

WSLH Sample: 622327001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

## Environmental Health Division

## WSLH Sample: 622327002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 05/31/2022 11:27 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: S WASHINGTON AVE Location of Sample: WELL 4 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-4PWS ID#:77201652WI Unique Well#:WL772Entry Point ID:25Date Received:6/1/2022Date Reported:6/22/2022Sample Type:I-Investigation

# Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 17:10	6			
PFBA (375-22-4)	WSLH PFAS in Water	<0.356	ng/L	0.356	1.03
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.154	ng/L	0.154	1.03
PFBS (375-73-5)	WSLH PFAS in Water	<0.238	ng/L	0.238	1.03
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.196	ng/L	0.196	1.03
PFHxA (307-24-4)	WSLH PFAS in Water	<0.210	ng/L	0.210	1.03
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.140	ng/L	0.140	1.03
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.198	ng/L	0.198	1.03
PFHpA (375-85-9)	WSLH PFAS in Water	<0.154	ng/L	0.154	1.03
PFHxS (355-46-4)	WSLH PFAS in Water	<0.146	ng/L	0.146	1.03
DONA (919005-14-4)	WSLH PFAS in Water	<0.132	ng/L	0.132	1.03
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.280	ng/L	0.280	1.03
PFOA (335-67-1)	WSLH PFAS in Water	<0.111	ng/L	0.111	1.03
PFHpS (375-92-8)	WSLH PFAS in Water	<0.196	ng/L	0.196	1.03
PFOS (1763-23-1)	WSLH PFAS in Water	<0.147	ng/L	0.147	1.03
PFNA (375-95-1)	WSLH PFAS in Water	<0.152	ng/L	0.152	1.03



# Laboratory Report

Environmental Health Division

## WSLH Sample: 622327002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/03/22 08:45	Analysis Date: 06/10/22 17:1	6			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.187	ng/L	0.187	1.03
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.270	ng/L	0.270	1.03
PFDA (335-76-2)	WSLH PFAS in Water	<0.168	ng/L	0.168	1.03
PFNS (68259-12-1)	WSLH PFAS in Water	<0.187	ng/L	0.187	1.03
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.225	ng/L	0.225	1.03
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.218	ng/L	0.218	1.03
FOSA (754-91-6)	WSLH PFAS in Water	<0.159	ng/L	0.159	1.03
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.228	ng/L	0.228	1.03
PFDS (335-77-3)	WSLH PFAS in Water	<0.264	ng/L	0.264	1.03
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.153	ng/L	0.153	1.03
PFDoA (307-55-1)	WSLH PFAS in Water	<0.279	ng/L	0.279	1.03
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.254	ng/L	0.254	1.03
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.199	ng/L	0.199	1.03
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<1.03	ng/L	1.03	2.06
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.289	ng/L	0.289	1.03
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.714	ng/L	0.714	2.06
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.218	ng/L	0.218	1.03
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.180	ng/L	0.180	1.03



Laboratory Report

Environmental Health Division

WSLH Sample: 622327002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 623593001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 08:55 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: WEST 17TH ST Location of Sample: WELL 8 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-8PWS ID#:77201652WI Unique Well#:HJ142Entry Point ID:8Date Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 11:23	7			
PFBA (375-22-4)	WSLH PFAS in Water	2.17	ng/L	0.310	0.896
PFPeA (2706-90-3)	WSLH PFAS in Water	0.284F	ng/L	0.134	0.896
PFBS (375-73-5)	WSLH PFAS in Water	0.970	ng/L	0.207	0.896
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.170	ng/L	0.170	0.896
PFHxA (307-24-4)	WSLH PFAS in Water	0.327F	ng/L	0.183	0.896
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.122	ng/L	0.122	0.896
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.172	ng/L	0.172	0.896
PFHpA (375-85-9)	WSLH PFAS in Water	0.157F	ng/L	0.134	0.896
PFHxS (355-46-4)	WSLH PFAS in Water	1.27	ng/L	0.127	0.896
DONA (919005-14-4)	WSLH PFAS in Water	<0.115	ng/L	0.115	0.896
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.244	ng/L	0.244	0.896
PFOA (335-67-1)	WSLH PFAS in Water	1.05	ng/L	0.0967	0.896
PFHpS (375-92-8)	WSLH PFAS in Water	<0.170	ng/L	0.170	0.896
PFOS (1763-23-1)	WSLH PFAS in Water	0.475F	ng/L	0.128	0.896
PFNA (375-95-1)	WSLH PFAS in Water	0.313F	ng/L	0.133	0.896
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.163	ng/L	0.163	0.896
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.235	ng/L	0.235	0.896



# Laboratory Report

Environmental Health Division

## WSLH Sample: 623593001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 11:23	7			
PFDA (335-76-2)	WSLH PFAS in Water	<0.146	ng/L	0.146	0.896
PFNS (68259-12-1)	WSLH PFAS in Water	<0.163	ng/L	0.163	0.896
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.196	ng/L	0.196	0.896
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.190	ng/L	0.190	0.896
FOSA (754-91-6)	WSLH PFAS in Water	<0.139	ng/L	0.139	0.896
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.896
PFDS (335-77-3)	WSLH PFAS in Water	<0.230	ng/L	0.230	0.896
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.133	ng/L	0.133	0.896
PFDoA (307-55-1)	WSLH PFAS in Water	<0.243	ng/L	0.243	0.896
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.221	ng/L	0.221	0.896
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.173	ng/L	0.173	0.896
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.896	ng/L	0.896	1.79
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.252	ng/L	0.252	0.896
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.622	ng/L	0.622	1.79
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.190	ng/L	0.190	0.896
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.157	ng/L	0.157	0.896



Laboratory Report

Environmental Health Division

WSLH Sample: 623593001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

## Environmental Health Division

## WSLH Sample: 623593002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 08:55 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: WEST 17TH ST Location of Sample: WELL 8 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-8PWS ID#:77201652WI Unique Well#:HJ142Entry Point ID:8Date Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

# Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:0	0			
PFBA (375-22-4)	WSLH PFAS in Water	<0.338	ng/L	0.338	0.976
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.146	ng/L	0.146	0.976
PFBS (375-73-5)	WSLH PFAS in Water	<0.225	ng/L	0.225	0.976
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.185	ng/L	0.185	0.976
PFHxA (307-24-4)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.976
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.133	ng/L	0.133	0.976
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.187	ng/L	0.187	0.976
PFHpA (375-85-9)	WSLH PFAS in Water	<0.146	ng/L	0.146	0.976
PFHxS (355-46-4)	WSLH PFAS in Water	<0.139	ng/L	0.139	0.976
DONA (919005-14-4)	WSLH PFAS in Water	<0.125	ng/L	0.125	0.976
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.265	ng/L	0.265	0.976
PFOA (335-67-1)	WSLH PFAS in Water	<0.105	ng/L	0.105	0.976
PFHpS (375-92-8)	WSLH PFAS in Water	<0.185	ng/L	0.185	0.976
PFOS (1763-23-1)	WSLH PFAS in Water	<0.140	ng/L	0.140	0.976
PFNA (375-95-1)	WSLH PFAS in Water	<0.144	ng/L	0.144	0.976



# Laboratory Report

Environmental Health Division

### WSLH Sample: 623593002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:0	0			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.178	ng/L	0.178	0.976
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.256	ng/L	0.256	0.976
PFDA (335-76-2)	WSLH PFAS in Water	<0.159	ng/L	0.159	0.976
PFNS (68259-12-1)	WSLH PFAS in Water	<0.178	ng/L	0.178	0.976
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.214	ng/L	0.214	0.976
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.207	ng/L	0.207	0.976
FOSA (754-91-6)	WSLH PFAS in Water	<0.151	ng/L	0.151	0.976
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.217	ng/L	0.217	0.976
PFDS (335-77-3)	WSLH PFAS in Water	<0.251	ng/L	0.251	0.976
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.145	ng/L	0.145	0.976
PFDoA (307-55-1)	WSLH PFAS in Water	<0.264	ng/L	0.264	0.976
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.241	ng/L	0.241	0.976
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.188	ng/L	0.188	0.976
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.976	ng/L	0.976	1.95
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.274	ng/L	0.274	0.976
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.677	ng/L	0.677	1.95
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.207	ng/L	0.207	0.976
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.171	ng/L	0.171	0.976



Laboratory Report

Environmental Health Division

WSLH Sample: 623593002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# Responsible Party



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 623594001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 10:20 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: 2000 S CENTRAL AVE Location of Sample: WILDWOOD BOOSTER STATION Monitor Point ID:EP300PWS ID#:77201652WI Unique Well#:Entry Point ID:State Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:1	5			
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.135	ng/L	0.135	0.907
PFDoA (307-55-1)	WSLH PFAS in Water	<0.246	ng/L	0.246	0.907
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.224	ng/L	0.224	0.907
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.907
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.907	ng/L	0.907	1.81
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.255	ng/L	0.255	0.907
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.630	ng/L	0.630	1.81
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.192	ng/L	0.192	0.907
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.159	ng/L	0.159	0.907
PFBA (375-22-4)	WSLH PFAS in Water	3.08	ng/L	0.314	0.907
PFPeA (2706-90-3)	WSLH PFAS in Water	0.504F	ng/L	0.136	0.907
PFBS (375-73-5)	WSLH PFAS in Water	1.18	ng/L	0.210	0.907
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.172	ng/L	0.172	0.907
PFHxA (307-24-4)	WSLH PFAS in Water	0.439F	ng/L	0.185	0.907
PFPeS (2706-91-4)	WSLH PFAS in Water	0.222F	ng/L	0.123	0.907
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.907
PFHpA (375-85-9)	WSLH PFAS in Water	0.249F	ng/L	0.136	0.907



# Laboratory Report

Environmental Health Division

## WSLH Sample: 623594001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:1	5			
PFHxS (355-46-4)	WSLH PFAS in Water	1.85	ng/L	0.129	0.907
DONA (919005-14-4)	WSLH PFAS in Water	<0.116	ng/L	0.116	0.907
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.907
PFOA (335-67-1)	WSLH PFAS in Water	1.41	ng/L	0.0980	0.907
PFHpS (375-92-8)	WSLH PFAS in Water	<0.172	ng/L	0.172	0.907
PFOS (1763-23-1)	WSLH PFAS in Water	3.99	ng/L	0.130	0.907
PFNA (375-95-1)	WSLH PFAS in Water	0.302F	ng/L	0.134	0.907
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.165	ng/L	0.165	0.907
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.238	ng/L	0.238	0.907
PFDA (335-76-2)	WSLH PFAS in Water	<0.148	ng/L	0.148	0.907
PFNS (68259-12-1)	WSLH PFAS in Water	<0.165	ng/L	0.165	0.907
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.199	ng/L	0.199	0.907
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.192	ng/L	0.192	0.907
FOSA (754-91-6)	WSLH PFAS in Water	<0.141	ng/L	0.141	0.907
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.201	ng/L	0.201	0.907
PFDS (335-77-3)	WSLH PFAS in Water	<0.233	ng/L	0.233	0.907



Laboratory Report

Environmental Health Division

WSLH Sample: 623594001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 623594002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449 Invoice To: MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670

Customer ID: 77201652

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 10:20 Collected By: J DIERICKX County: 72 - Wood Source Code: E - Entry Point Collection Address: 2000 S CENTRAL AVE Location of Sample: WILDWOOD BOOSTER STATION Monitor Point ID:EP300PWS ID#:77201652WI Unique Well#:Entry Point ID:State Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

# Sample Comments

FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:3	1			
PFBA (375-22-4)	WSLH PFAS in Water	<0.345	ng/L	0.345	0.996
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.149	ng/L	0.149	0.996
PFBS (375-73-5)	WSLH PFAS in Water	<0.230	ng/L	0.230	0.996
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.189	ng/L	0.189	0.996
PFHxA (307-24-4)	WSLH PFAS in Water	<0.203	ng/L	0.203	0.996
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.135	ng/L	0.135	0.996
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.191	ng/L	0.191	0.996
PFHpA (375-85-9)	WSLH PFAS in Water	<0.149	ng/L	0.149	0.996
PFHxS (355-46-4)	WSLH PFAS in Water	<0.141	ng/L	0.141	0.996
DONA (919005-14-4)	WSLH PFAS in Water	<0.127	ng/L	0.127	0.996
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.271	ng/L	0.271	0.996
PFOA (335-67-1)	WSLH PFAS in Water	<0.108	ng/L	0.108	0.996
PFHpS (375-92-8)	WSLH PFAS in Water	<0.189	ng/L	0.189	0.996
PFOS (1763-23-1)	WSLH PFAS in Water	<0.142	ng/L	0.142	0.996
PFNA (375-95-1)	WSLH PFAS in Water	<0.147	ng/L	0.147	0.996



# Laboratory Report

Environmental Health Division

### WSLH Sample: 623594002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:3	1			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.181	ng/L	0.181	0.996
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.261	ng/L	0.261	0.996
PFDA (335-76-2)	WSLH PFAS in Water	<0.162	ng/L	0.162	0.996
PFNS (68259-12-1)	WSLH PFAS in Water	<0.181	ng/L	0.181	0.996
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.218	ng/L	0.218	0.996
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.211	ng/L	0.211	0.996
FOSA (754-91-6)	WSLH PFAS in Water	<0.154	ng/L	0.154	0.996
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.221	ng/L	0.221	0.996
PFDS (335-77-3)	WSLH PFAS in Water	<0.256	ng/L	0.256	0.996
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.148	ng/L	0.148	0.996
PFDoA (307-55-1)	WSLH PFAS in Water	<0.270	ng/L	0.270	0.996
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.246	ng/L	0.246	0.996
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.192	ng/L	0.192	0.996
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.996	ng/L	0.996	1.99
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.280	ng/L	0.280	0.996
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.691	ng/L	0.691	1.99
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.211	ng/L	0.211	0.996
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.996



Laboratory Report

Environmental Health Division

WSLH Sample: 623594002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 623595001

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 10:10 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: S RADDIS AVE Location of Sample: WELL 10 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-10PWS ID#:77201652WI Unique Well#:PG961Entry Point ID:10Date Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:4	6			
PFBA (375-22-4)	WSLH PFAS in Water	3.88	ng/L	0.316	0.913
PFPeA (2706-90-3)	WSLH PFAS in Water	0.710F	ng/L	0.137	0.913
PFBS (375-73-5)	WSLH PFAS in Water	1.28	ng/L	0.211	0.913
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.913
PFHxA (307-24-4)	WSLH PFAS in Water	0.564F	ng/L	0.186	0.913
PFPeS (2706-91-4)	WSLH PFAS in Water	0.280F	ng/L	0.124	0.913
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.175	ng/L	0.175	0.913
PFHpA (375-85-9)	WSLH PFAS in Water	0.347F	ng/L	0.137	0.913
PFHxS (355-46-4)	WSLH PFAS in Water	2.32	ng/L	0.130	0.913
DONA (919005-14-4)	WSLH PFAS in Water	<0.117	ng/L	0.117	0.913
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.248	ng/L	0.248	0.913
PFOA (335-67-1)	WSLH PFAS in Water	1.42	ng/L	0.0986	0.913
PFHpS (375-92-8)	WSLH PFAS in Water	<0.174	ng/L	0.174	0.913
PFOS (1763-23-1)	WSLH PFAS in Water	7.31	ng/L	0.131	0.913
PFNA (375-95-1)	WSLH PFAS in Water	0.324F	ng/L	0.135	0.913
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.913
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.239	ng/L	0.239	0.913



# Laboratory Report

Environmental Health Division

## WSLH Sample: 623595001

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 13:4	6			
PFDA (335-76-2)	WSLH PFAS in Water	<0.149	ng/L	0.149	0.913
PFNS (68259-12-1)	WSLH PFAS in Water	<0.166	ng/L	0.166	0.913
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.200	ng/L	0.200	0.913
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.194	ng/L	0.194	0.913
FOSA (754-91-6)	WSLH PFAS in Water	<0.142	ng/L	0.142	0.913
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.203	ng/L	0.203	0.913
PFDS (335-77-3)	WSLH PFAS in Water	<0.235	ng/L	0.235	0.913
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.136	ng/L	0.136	0.913
PFDoA (307-55-1)	WSLH PFAS in Water	<0.247	ng/L	0.247	0.913
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.226	ng/L	0.226	0.913
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.176	ng/L	0.176	0.913
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.913	ng/L	0.913	1.83
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.257	ng/L	0.257	0.913
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.634	ng/L	0.634	1.83
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.194	ng/L	0.194	0.913
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.160	ng/L	0.160	0.913



Laboratory Report

Environmental Health Division

WSLH Sample: 623595001

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**



# Laboratory Report

### Environmental Health Division

## WSLH Sample: 623595002

Report To:

JOHN RICHMOND 2000 S. CENTRAL AVE MARSHFIELD, WI 54449

System Name: MARSHFIELD UTILITIES City: MARSHFIELD Collection Date/Time: 06/06/2022 10:10 Collected By: J DIERICKX County: 72 - Wood Source Code: W-Well Collection Address: S RADDIS AVE Location of Sample: WELL 10 Invoice To:

MARSHFIELD CITY CLERK PO BOX 727 MARSHFIELD, WI 54449-0670 Customer ID: 77201652

Monitor Point ID:W-10PWS ID#:77201652WI Unique Well#:PG961Entry Point ID:10Date Received:6/7/2022Date Reported:6/28/2022Sample Type:I-Investigation

# Sample Comments

#### FIELD REAGENT BLANK (FRB)

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 14:0	2			
PFBA (375-22-4)	WSLH PFAS in Water	<0.335	ng/L	0.335	0.968
PFPeA (2706-90-3)	WSLH PFAS in Water	<0.145	ng/L	0.145	0.968
PFBS (375-73-5)	WSLH PFAS in Water	<0.224	ng/L	0.224	0.968
4:2 FTSA (757124-72-4)	WSLH PFAS in Water	<0.184	ng/L	0.184	0.968
PFHxA (307-24-4)	WSLH PFAS in Water	<0.198	ng/L	0.198	0.968
PFPeS (2706-91-4)	WSLH PFAS in Water	<0.132	ng/L	0.132	0.968
HFPO-DA (13252-13-6)	WSLH PFAS in Water	<0.186	ng/L	0.186	0.968
PFHpA (375-85-9)	WSLH PFAS in Water	<0.145	ng/L	0.145	0.968
PFHxS (355-46-4)	WSLH PFAS in Water	<0.137	ng/L	0.137	0.968
DONA (919005-14-4)	WSLH PFAS in Water	<0.124	ng/L	0.124	0.968
6:2 FTSA (27619-97-2)	WSLH PFAS in Water	<0.263	ng/L	0.263	0.968
PFOA (335-67-1)	WSLH PFAS in Water	<0.105	ng/L	0.105	0.968
PFHpS (375-92-8)	WSLH PFAS in Water	<0.184	ng/L	0.184	0.968
PFOS (1763-23-1)	WSLH PFAS in Water	<0.138	ng/L	0.138	0.968
PFNA (375-95-1)	WSLH PFAS in Water	<0.143	ng/L	0.143	0.968



# Laboratory Report

Environmental Health Division

### WSLH Sample: 623595002

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date: 06/16/22 08:35	Analysis Date: 06/21/22 14:0	2			
9CI-PF3ONS (756426-58-1)	WSLH PFAS in Water	<0.176	ng/L	0.176	0.968
8:2 FTSA (39108-34-4)	WSLH PFAS in Water	<0.254	ng/L	0.254	0.968
PFDA (335-76-2)	WSLH PFAS in Water	<0.158	ng/L	0.158	0.968
PFNS (68259-12-1)	WSLH PFAS in Water	<0.176	ng/L	0.176	0.968
N-MeFOSAA (2355-31-9)	WSLH PFAS in Water	<0.212	ng/L	0.212	0.968
N-EtFOSAA (2991-50-6)	WSLH PFAS in Water	<0.205	ng/L	0.205	0.968
FOSA (754-91-6)	WSLH PFAS in Water	<0.150	ng/L	0.150	0.968
PFUnA (2058-94-8)	WSLH PFAS in Water	<0.215	ng/L	0.215	0.968
PFDS (335-77-3)	WSLH PFAS in Water	<0.249	ng/L	0.249	0.968
11CI-PF3OUdS (763051-92-9)	WSLH PFAS in Water	<0.144	ng/L	0.144	0.968
PFDoA (307-55-1)	WSLH PFAS in Water	<0.262	ng/L	0.262	0.968
PFDoS (79780-39-5)	WSLH PFAS in Water	<0.239	ng/L	0.239	0.968
PFTrDA (72629-94-8)	WSLH PFAS in Water	<0.187	ng/L	0.187	0.968
N-MeFOSA (31506-32-8)	WSLH PFAS in Water	<0.968	ng/L	0.968	1.94
N-MeFOSE (24448-09-7)	WSLH PFAS in Water	<0.272	ng/L	0.272	0.968
N-EtFOSA (4151-50-2)	WSLH PFAS in Water	<0.672	ng/L	0.672	1.94
N-EtFOSE (1691-99-2)	WSLH PFAS in Water	<0.205	ng/L	0.205	0.968
PFTeDA (376-06-7)	WSLH PFAS in Water	<0.169	ng/L	0.169	0.968



Laboratory Report

Environmental Health Division

WSLH Sample: 623595002

WDNR LAB ID:113133790 NELAP LAB ID:2091

EPA LAB ID:WI00007, WI00008 WI DATCP ID:105-415

#### List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification (for PFAS the LOQ = MRL) ND = None detected. Results are less than the LOD F next to result = Result is between LOD and LOQ Z next to result = Result is between 0 (zero) and LOD if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes

see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

# **Responsible Party**