



Eau Claire Water/Wastewater Utilities
1000 Ferry Street
Eau Claire, WI 54703

Project: UCMR5 Testing SE1
Project Number: UCMR5 Testing
Project Manager: Ty Fadness

Reported:
2/27/23 14:57

Work Order:
CB00621

Sample Results

Sample: EP500

CB00621-01 (DW) Sampled: 01/18/23 14:46

Analyte	Result	Qualifier	Dilution	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Metals												
Lithium, Total	ND		1		9.0		ug/L	1/23/23 15:14	1/24/23 9:57	RAB	EPA 200.7, Rev 4.4	1

Surrogate: Yttrium 200.7 STD	94%			Limits:	60-125%			1/25/23 15:14	1/24/23 9:57	RAB	EPA 200.7, Rev 4.4	
Semi-Volatiles												
perfluorobutanoic acid (PFBA)	ND		1		0.0050		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1		0.0040		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoropentanoic acid (PFPeA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorobutanesulfonic acid (PFBS)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1		0.020		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorohexanoic acid (PFHxA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoropentanesulfonic acid (PFPeS)	ND		1		0.0040		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		1		0.0050		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoroheptanoic acid (PFHpA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorohexanesulfonic acid (PFHxS)	0.011		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	ND		1		0.0050		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoroheptanesulfonic acid (PFHpS)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorooctanoic acid (PFOA)	ND		1		0.0040		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorononanoic acid (PFNA)	ND		1		0.0040		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorooctanesulfonic acid (PFOS)	ND		1		0.0040		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1		0.0020		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorodecanoic acid (PFDA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	ND		1		0.0050		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluoroundecanoic acid (PFUnA)	ND		1		0.0020		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.



Eau Claire Water/Wastewater Utilities
1000 Ferry Street
Eau Claire, WI 54703

Project: UCMR5 Testing SE1
Project Number: UCMR5 Testing
Project Manager: Ty Fadness

Reported:
2/27/23 14:57

Work Order:
CB00621

Sample Results (Continued)

Sample: EP500 (Continued)

CB00621-01 (DW) Sampled: 01/18/23 14:46

Analyte	Result	Qualifier	Dilution	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles (Continued)												
11-chloroicosasfluoro-3-oxaundecane-1-sulfonic acid (11CI-PF30UdS)	ND		1		0.0050		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
perfluorododecanoic acid (PFDoA)	ND		1		0.0030		ug/L	2/1/23 5:27	2/1/23 23:58	RAW	EPA 533	1
Surrogate: (EIS) MFF6A	98%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M5FF6A	100%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M3PFBS	95%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M2-4:2FTS	128%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M5FF7xA	96%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M4FF7xA	98%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M3FF7xA	100%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M2-6:2FTS	97%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M8FFCA	92%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M9FFNA	90%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M6FFOS	99%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M2-8:2FTS	81%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M6FFCA	83%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M7FFCA	89%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) MFFDcA	96%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
Surrogate: (EIS) M3HFPOdA	94%			Limits: 70-130%				2/1/23 5:27	2/1/23 23:58	RAW	EFA 533	
n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1		0.0060		ug/L	1/26/23 5:24	1/26/23 15:31	RAW	EPA 537.1, Rev 2.0	1
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1		0.0050		ug/L	1/26/23 5:24	1/26/23 15:31	RAW	EPA 537.1, Rev 2.0	1
perfluorotridecanoic acid (PFTrDA)	ND		1		0.0070		ug/L	1/26/23 5:24	1/26/23 15:31	RAW	EPA 537.1, Rev 2.0	1
perfluorotetradecanoic acid (PFTA)	ND		1		0.0080		ug/L	1/26/23 5:24	1/26/23 15:31	RAW	EPA 537.1, Rev 2.0	1
Surrogate: (SURK) C13-FF7xA	98%			Limits: 70-130%				1/26/23 5:24	1/26/23 15:31	RAW	EFA 537.1, Rev 2.0	
Surrogate: (SURK) C13-HFPOdA	93%			Limits: 70-130%				1/26/23 5:24	1/26/23 15:31	RAW	EFA 537.1, Rev 2.0	
Surrogate: (SURK) C13-FFCA	96%			Limits: 70-130%				1/26/23 5:24	1/26/23 15:31	RAW	EFA 537.1, Rev 2.0	
Surrogate: (SURK) a5-NEtFOSAA	90%			Limits: 70-130%				1/26/23 5:24	1/26/23 15:31	RAW	EFA 537.1, Rev 2.0	

Sample: EP500 Field Blank

CB00621-02 (DW) Sampled: 01/18/23 14:45

Analyte	Result	Qualifier	Dilution	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
---------	--------	-----------	----------	-----	-----	-----	-------	---------------	---------------	---------	--------	---------------

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.



Eau Claire Water/Wastewater Utilities
1000 Ferry Street
Eau Claire, WI 54703

Project: UCMR5 Testing SE1
Project Number: UCMR5 Testing
Project Manager: Ty Fadness

Reported:
2/27/23 14:57

Work Order:
CB00621

Sample Results (Continued)

Sample: EP500 Field Blank (Continued)

CB00621-02 (DW) Sampled: 01/18/23 14:45

Analyte	Result	Qualifier	Dilution	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles												
FBNA												
perfluorobutanoic acid (PFBA)	ND		1		0.0050		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1		0.0040		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoropentanoic acid (PFPeA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorobutanesulfonic acid (PFBS)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1		0.020		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorohexanoic acid (PFHxA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoropentanesulfonic acid (PFPeS)	ND		1		0.0040		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
hexafluoropropylene oxide dimer acid (HFPO DA)	ND		1		0.0050		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoroheptanoic acid (PFHpA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorohexanesulfonic acid (PFHxS)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	ND		1		0.0050		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoroheptanesulfonic acid (PFHpS)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorooctanoic acid (PFOA)	ND		1		0.0040		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorononanoic acid (PFNA)	ND		1		0.0040		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorooctanesulfonic acid (PFOS)	ND		1		0.0040		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1		0.0020		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorodecanoic acid (PFDA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	ND		1		0.0050		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluoroundecanoic acid (PFUnA)	ND		1		0.0020		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
11-chloroelcosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1		0.0050		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
perfluorododecanoic acid (PFDoA)	ND		1		0.0030		ug/L	2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	1
Surrogate: (EIS) MFPEA	101%			Limits: 70-130%				2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	
Surrogate: (EIS) M5FPFA	104%			Limits: 70-130%				2/9/23 5:30	2/10/23 15:00	RAW	EPA 533	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.



Eau Claire Water/Wastewater Utilities
1000 Ferry Street
Eau Claire, WI 54703

Project: UCMR5 Testing SE1
Project Number: UCMR5 Testing
Project Manager: Ty Fadness

Reported:
2/27/23 14:57

Work Order:
CB00621

Sample Results (Continued)

Sample: EP500 Field Blank (Continued)

CB00621-02 (DW) Sampled: 01/18/23 14:45

Analyte	Result	Qualifier	Dilution	LOD	LOQ	MCL	Units	Date Prepared	Date Analyzed	Analyst	Method	Lab Cert Code
Semi-Volatiles (Continued)												
FBNA												
Surrogate: (E1S) M3FFB8	103%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M2-4:2F7S	99%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M5FFHxA	98%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M4FFHcA	97%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M3FFHxS	95%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M2-6:2F7S	98%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M8FFCA	98%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M9FFNA	103%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M6FFOS	98%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M2-8:2F7S	102%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M6FFDA	102%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M7PFUcA	103%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) MFFDcA	100%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	
Surrogate: (E1S) M3HFPOcA	111%			Limits: 70-130%				2/5/23 5:30	2/16/23 15:00	RAW	EFA 533	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.



Eau Claire Water/Wastewater Utilities 1000 Ferry Street Eau Claire, WI 54703	Project: UCMR5 Testing SE1 Project Number: UCMR5 Testing Project Manager: Ty Fadness	Reported: 2/27/23 14:57	Work Order: CB00621
--	--	----------------------------	------------------------

List of Certifications

Code	Description	Number	Expires
1	EPA Laboratory ID No.	WI00034	1/1/26



Eau Claire Water/Wastewater Utilities 1000 Ferry Street Eau Claire, WI 54703	Project: UCMR5 Testing SE1 Project Number: UCMR5 Testing Project Manager: Ty Fadness	Reported: 2/27/23 14:57	Work Order: CB00621
--	--	----------------------------	------------------------

Qualifiers and Definitions

Item	Definition
FBNA	The field sample had no detects, therefore the corresponding trip blank/field reagent blank was not analyzed.
ND	Analyte NOT DETECTED at or above the LOD or MRL.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
NA	Not Applicable.
Dry	Dry Weight Basis.
Wet	Wet Weight Basis.
% Dry	Equal to: (mg/kg dry) / 10000.
1000 ug/L	Equal to: 1 mg/L.
MCL	Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.
RPD	Relative Percent Difference.
%REC	Percent Recovery.
Source	Sample that was matrix spiked or duplicated.

All LOD/LOQs adjusted to reflect preparation volumes, dilutions, and/or solids content.



Northern Lake Service

ENVIRONMENTAL ANALYTICAL LABORATORY

400 N Lake Ave | Crandon, WI 54520 | 800-278-1254 | www.nls.com

CB00621



UCMR5 Sample Collection and Chain of Custody Record Eau Claire Water/Wastewater Utilities -- UCMR5 Testing SE1

Bottle Order Number: C000123

(Client please fill in date/time)

Sample Point ID Code	Collection Date/Time	200.7	533	537.1
EP500	01/18/2023 1446	X	X	X
EP500 Field Blank	01/18/2023 1445		X	X

The EPA Unregulated Contaminant Monitoring Program has specific sample receipt temperature requirements. Samples received within 48 hours from collection must be received at < or = 10 C. Samples received greater than 48 hours from collection must be received at < or = 6 C

(Client please sign)

Collected by (Signature) *[Signature]*

Method of transport: *Field*

Sample Collection Comments (Optional)

(To be filled out by lab upon arrival)

Received at NLS by (Signature)	Date/Time	Rec Temp	200.7	533	537.1
<i>[Signature]</i>	1-19-23 1500	1.0°C	<input checked="" type="checkbox"/>	1.7	2.0

Remarks and other Information

IMPORTANT: To meet regulatory requirements, this form must be completed in detail and included in the cooler containing the samples described

For Lab Use Only										
Method 533	S1B1	S1B2	S2B1	S2B2	S3B1	S3B2	S4B1	S4B2	S5B1	S5B2
pH (6-8)	7.10	7.17								
Res Chlorine (<0.1)	<0.1	<0.1								
Method 537.1	S1B1	S1B2	S2B1	S2B2	S3B1	S3B2	S4B1	S4B2	S5B1	S5B2
pH (6-8)	7.22	7.24								
Res Chlorine (<0.1)	<0.1	<0.1								
Method 200.7	S1	S2	S3	S4	S5					
Acidified	X									



Northern Lake Service Inc.

ENVIRONMENTAL ANALYTICAL LABORATORY

400 N Lake Ave | Crandon, WI 54520 | 800-278-1254 | www.nlsiab.com

BOTTLE ORDER/PACKING LIST

Ship To:

Attn: Ty Fadness
Eau Claire Water/Wastewater Utilities
1000 Ferry Street
Eau Claire, WI 54703

Phone: 7158396117
Fax: 7155527281
Email:

Bottle Order Number: C000123

Date Submitted: 01/04/2023
Date Needed: 01/04/2023
Date Shipped: 01/01/1753

Shipping Method:
Tracking Number:

Project: UCMR5 Testing SE1

Order
Comments:

Container	Qty	Analysis	Matrix	Sample Count	Comments
EP500					
P 250 Trizma	1	UCMR5 EPA Method 537.1	DW	1	
P 250 Trizma	1	UCMR5 EPA Method 537.1	DW	1	
P 250 NP	1	UCMR5 Lithium by ICP	DW	1	
P 250 Ammonium Acetate	1	UCMR5 EPA Method 533	DW	1	
P 250 Ammonium Acetate	1	UCMR5 EPA Method 533	DW	1	
EP500 Field Blank					
P 250 Trizma	1	UCMR5 EPA Method 537.1	DW	1	
P 250 Trizma	1	UCMR5 EPA Method 537.1	DW	1	
P 250 Ammonium Acetate	1	UCMR5 EPA Method 533	DW	1	
P 250 Ammonium Acetate	1	UCMR5 EPA Method 533	DW	1	

UCMR5 537.1
UCMR5 533