

ANALYTICAL REPORT

Eurofins Chicago
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University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-218152-1
Client Project/Site: PFAS Testing

For:
City of Eau Claire
1000 Ferry Street
Eau Claire, Wisconsin 54703

Attn: Ty Fadness



Authorized for release by:
7/1/2022 5:10:41 PM

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results through



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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Job ID: 500-218152-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-218152-1**

Comments

No additional comments.

Receipt

The samples were received on 6/16/2022 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

LCMS

Method 537 (modified): The closing continuing calibration verification (CCV) standard associated with batch 320-599315 failed to meet acceptance limits for Perfluoro-n-octadecanoic acid (PFODA). This analyte is not a state regulated analyte; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-598242.

Method: 3535_PFC_28D

Matrix: Aqueous

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: Entry Point-Line 2

Lab Sample ID: 500-218152-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.9	J	4.7	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.3	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.49	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.2	J	1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.8		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	2.2		1.9	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	13		1.9	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.6		1.9	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EP-Field Blank

Lab Sample ID: 500-218152-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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- 16

Sample Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-218152-1	Entry Point-Line 2	Water	06/15/22 11:16	06/16/22 09:15
500-218152-2	EP-Field Blank	Water	06/15/22 11:18	06/16/22 09:15

- 1
- 2
- 3
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- 10
- 11
- 12
- 13
- 14
- 15
- 16

Client Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: Entry Point-Line 2

Lab Sample ID: 500-218152-1

Date Collected: 06/15/22 11:16

Matrix: Water

Date Received: 06/16/22 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.9	J	4.7	2.2	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoropentanoic acid (PFPeA)	1.3	J	1.9	0.46	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorohexanoic acid (PFHxA)	1.3	J	1.9	0.54	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoroheptanoic acid (PFHpA)	0.49	J	1.9	0.23	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorooctanoic acid (PFOA)	1.2	J	1.9	0.79	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.83		1.9	0.83	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.88	^c	1.9	0.88	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorobutanesulfonic acid (PFBS)	2.8		1.9	0.19	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoropentanesulfonic acid (PFPeS)	2.2		1.9	0.28	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorohexanesulfonic acid (PFHxS)	13		1.9	0.53	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.9	0.18	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorooctanesulfonic acid (PFOS)	4.6		1.9	0.51	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		06/24/22 07:05	06/28/22 17:11	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		06/24/22 07:05	06/28/22 17:11	1
NEtFOSA	<0.81		1.9	0.81	ng/L		06/24/22 07:05	06/28/22 17:11	1
NMeFOSA	<0.40		1.9	0.40	ng/L		06/24/22 07:05	06/28/22 17:11	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		06/24/22 07:05	06/28/22 17:11	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		06/24/22 07:05	06/28/22 17:11	1
NMeFOSE	<1.3		3.7	1.3	ng/L		06/24/22 07:05	06/28/22 17:11	1
NEtFOSE	<0.79		1.9	0.79	ng/L		06/24/22 07:05	06/28/22 17:11	1
4:2 FTS	<0.22		1.9	0.22	ng/L		06/24/22 07:05	06/28/22 17:11	1
6:2 FTS	<2.3		4.7	2.3	ng/L		06/24/22 07:05	06/28/22 17:11	1
8:2 FTS	<0.43		1.9	0.43	ng/L		06/24/22 07:05	06/28/22 17:11	1
10:2 FTS	<0.63		1.9	0.63	ng/L		06/24/22 07:05	06/28/22 17:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		06/24/22 07:05	06/28/22 17:11	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		06/24/22 07:05	06/28/22 17:11	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		06/24/22 07:05	06/28/22 17:11	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		06/24/22 07:05	06/28/22 17:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	95		25 - 150				06/24/22 07:05	06/28/22 17:11	1
13C5 PFPeA	90		25 - 150				06/24/22 07:05	06/28/22 17:11	1
13C2 PFHxA	94		25 - 150				06/24/22 07:05	06/28/22 17:11	1
13C4 PFHpA	100		25 - 150				06/24/22 07:05	06/28/22 17:11	1
13C4 PFOA	100		25 - 150				06/24/22 07:05	06/28/22 17:11	1

Eurofins Chicago

Client Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: Entry Point-Line 2

Lab Sample ID: 500-218152-1

Date Collected: 06/15/22 11:16

Matrix: Water

Date Received: 06/16/22 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<u>Isotope Dilution</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
13C5 PFNA	97		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 PFDA	94		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 PFUnA	103		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 PFDoA	85		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 PFTeDA	85		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 PFHxDA	91		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C3 PFBS	102		25 - 150	06/24/22 07:05	06/28/22 17:11	1
18O2 PFHxS	94		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C4 PFOS	89		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C8 FOSA	94		10 - 150	06/24/22 07:05	06/28/22 17:11	1
d3-NMeFOSAA	89		25 - 150	06/24/22 07:05	06/28/22 17:11	1
d5-NEtFOSAA	84		25 - 150	06/24/22 07:05	06/28/22 17:11	1
d-N-MeFOSA-M	82		10 - 150	06/24/22 07:05	06/28/22 17:11	1
d-N-EtFOSA-M	79		10 - 150	06/24/22 07:05	06/28/22 17:11	1
d7-N-MeFOSE-M	80		10 - 150	06/24/22 07:05	06/28/22 17:11	1
d9-N-EtFOSE-M	84		10 - 150	06/24/22 07:05	06/28/22 17:11	1
M2-4:2 FTS	95		25 - 150	06/24/22 07:05	06/28/22 17:11	1
M2-6:2 FTS	85		25 - 150	06/24/22 07:05	06/28/22 17:11	1
M2-8:2 FTS	100		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C3 HFPO-DA	94		25 - 150	06/24/22 07:05	06/28/22 17:11	1
13C2 10:2 FTS	89		25 - 150	06/24/22 07:05	06/28/22 17:11	1

Client Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: EP-Field Blank

Lab Sample ID: 500-218152-2

Date Collected: 06/15/22 11:18

Matrix: Water

Date Received: 06/16/22 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.5	2.2	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.8	0.22	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorooctanoic acid (PFOA)	<0.76		1.8	0.76	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorotridecanoic acid (PFTTrDA)	<1.2		1.8	1.2	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.80		1.8	0.80	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.84	^c	1.8	0.84	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		06/24/22 07:05	06/28/22 17:22	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		06/24/22 07:05	06/28/22 17:22	1
NEtFOSA	<0.78		1.8	0.78	ng/L		06/24/22 07:05	06/28/22 17:22	1
NMeFOSA	<0.39		1.8	0.39	ng/L		06/24/22 07:05	06/28/22 17:22	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		06/24/22 07:05	06/28/22 17:22	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		06/24/22 07:05	06/28/22 17:22	1
NMeFOSE	<1.3		3.6	1.3	ng/L		06/24/22 07:05	06/28/22 17:22	1
NEtFOSE	<0.76		1.8	0.76	ng/L		06/24/22 07:05	06/28/22 17:22	1
4:2 FTS	<0.22		1.8	0.22	ng/L		06/24/22 07:05	06/28/22 17:22	1
6:2 FTS	<2.2		4.5	2.2	ng/L		06/24/22 07:05	06/28/22 17:22	1
8:2 FTS	<0.41		1.8	0.41	ng/L		06/24/22 07:05	06/28/22 17:22	1
10:2 FTS	<0.60		1.8	0.60	ng/L		06/24/22 07:05	06/28/22 17:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		06/24/22 07:05	06/28/22 17:22	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		06/24/22 07:05	06/28/22 17:22	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		06/24/22 07:05	06/28/22 17:22	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		06/24/22 07:05	06/28/22 17:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	95		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C5 PFPeA	98		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C2 PFHxA	98		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C4 PFHpA	103		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C4 PFOA	102		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C5 PFNA	102		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C2 PFDA	95		25 - 150				06/24/22 07:05	06/28/22 17:22	1
13C2 PFUnA	105		25 - 150				06/24/22 07:05	06/28/22 17:22	1

Eurofins Chicago

Client Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: EP-Field Blank

Lab Sample ID: 500-218152-2

Date Collected: 06/15/22 11:18

Matrix: Water

Date Received: 06/16/22 09:15

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDoA	97		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C2 PFTeDA	92		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C2 PFHxDA	94		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C3 PFBS	97		25 - 150	06/24/22 07:05	06/28/22 17:22	1
18O2 PFHxS	99		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C4 PFOS	93		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C8 FOSA	95		10 - 150	06/24/22 07:05	06/28/22 17:22	1
d3-NMeFOSAA	95		25 - 150	06/24/22 07:05	06/28/22 17:22	1
d5-NEtFOSAA	94		25 - 150	06/24/22 07:05	06/28/22 17:22	1
d-N-MeFOSA-M	82		10 - 150	06/24/22 07:05	06/28/22 17:22	1
d-N-EtFOSA-M	86		10 - 150	06/24/22 07:05	06/28/22 17:22	1
d7-N-MeFOSE-M	92		10 - 150	06/24/22 07:05	06/28/22 17:22	1
d9-N-EtFOSE-M	96		10 - 150	06/24/22 07:05	06/28/22 17:22	1
M2-4:2 FTS	93		25 - 150	06/24/22 07:05	06/28/22 17:22	1
M2-6:2 FTS	104		25 - 150	06/24/22 07:05	06/28/22 17:22	1
M2-8:2 FTS	95		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C3 HFPO-DA	99		25 - 150	06/24/22 07:05	06/28/22 17:22	1
13C2 10:2 FTS	104		25 - 150	06/24/22 07:05	06/28/22 17:22	1

Definitions/Glossary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Qualifiers

LCMS

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

LCMS

Prep Batch: 598242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-218152-1	Entry Point-Line 2	Total/NA	Water	3535	
500-218152-2	EP-Field Blank	Total/NA	Water	3535	
MB 320-598242/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-598242/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-598242/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 599315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-218152-1	Entry Point-Line 2	Total/NA	Water	537 (modified)	598242
500-218152-2	EP-Field Blank	Total/NA	Water	537 (modified)	598242
MB 320-598242/1-A	Method Blank	Total/NA	Water	537 (modified)	598242
LCS 320-598242/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	598242
LCSD 320-598242/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	598242

QC Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-598242/1-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 598242

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		06/24/22 07:05	06/28/22 14:42	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		06/24/22 07:05	06/28/22 14:42	1
NEtFOSA	<0.87		2.0	0.87	ng/L		06/24/22 07:05	06/28/22 14:42	1
NMeFOSA	<0.43		2.0	0.43	ng/L		06/24/22 07:05	06/28/22 14:42	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		06/24/22 07:05	06/28/22 14:42	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		06/24/22 07:05	06/28/22 14:42	1
NMeFOSE	<1.4		4.0	1.4	ng/L		06/24/22 07:05	06/28/22 14:42	1
NEtFOSE	<0.85		2.0	0.85	ng/L		06/24/22 07:05	06/28/22 14:42	1
4:2 FTS	<0.24		2.0	0.24	ng/L		06/24/22 07:05	06/28/22 14:42	1
6:2 FTS	<2.5		5.0	2.5	ng/L		06/24/22 07:05	06/28/22 14:42	1
8:2 FTS	<0.46		2.0	0.46	ng/L		06/24/22 07:05	06/28/22 14:42	1
10:2 FTS	<0.67		2.0	0.67	ng/L		06/24/22 07:05	06/28/22 14:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		06/24/22 07:05	06/28/22 14:42	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		06/24/22 07:05	06/28/22 14:42	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		06/24/22 07:05	06/28/22 14:42	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		06/24/22 07:05	06/28/22 14:42	1
Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
13C4 PFBA	101		25 - 150	06/24/22 07:05	06/28/22 14:42	1			
13C5 PFPeA	99		25 - 150	06/24/22 07:05	06/28/22 14:42	1			
13C2 PFHxA	100		25 - 150	06/24/22 07:05	06/28/22 14:42	1			
13C4 PFHpA	100		25 - 150	06/24/22 07:05	06/28/22 14:42	1			
13C4 PFOA	105		25 - 150	06/24/22 07:05	06/28/22 14:42	1			
13C5 PFNA	97		25 - 150	06/24/22 07:05	06/28/22 14:42	1			

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QC Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-598242/1-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 598242

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFDA	98		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C2 PFUnA	102		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C2 PFDoA	89		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C2 PFTeDA	88		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C2 PFHxDA	83		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C3 PFBS	101		25 - 150	06/24/22 07:05	06/28/22 14:42	1
18O2 PFHxS	101		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C4 PFOS	90		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C8 FOSA	85		10 - 150	06/24/22 07:05	06/28/22 14:42	1
d3-NMeFOSAA	78		25 - 150	06/24/22 07:05	06/28/22 14:42	1
d5-NEtFOSAA	73		25 - 150	06/24/22 07:05	06/28/22 14:42	1
d-N-MeFOSA-M	77		10 - 150	06/24/22 07:05	06/28/22 14:42	1
d-N-EtFOSA-M	81		10 - 150	06/24/22 07:05	06/28/22 14:42	1
d7-N-MeFOSE-M	90		10 - 150	06/24/22 07:05	06/28/22 14:42	1
d9-N-EtFOSE-M	90		10 - 150	06/24/22 07:05	06/28/22 14:42	1
M2-4:2 FTS	79		25 - 150	06/24/22 07:05	06/28/22 14:42	1
M2-6:2 FTS	84		25 - 150	06/24/22 07:05	06/28/22 14:42	1
M2-8:2 FTS	85		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C3 HFPO-DA	92		25 - 150	06/24/22 07:05	06/28/22 14:42	1
13C2 10:2 FTS	88		25 - 150	06/24/22 07:05	06/28/22 14:42	1

Lab Sample ID: LCS 320-598242/2-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 598242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	40.0	40.4		ng/L		101	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	41.2		ng/L		103	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	39.2		ng/L		98	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.0		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.5		ng/L		104	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	43.1		ng/L		108	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	37.4		ng/L		94	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	41.1		ng/L		103	60 - 135
Perfluorotridecanoic acid (PFTTrDA)	40.0	38.6		ng/L		97	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	46.0		ng/L		115	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	42.0		ng/L		105	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	40.5		ng/L		101	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	36.9		ng/L		104	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	37.8		ng/L		101	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	37.4		ng/L		103	60 - 135

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QC Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-598242/2-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 598242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanesulfonic acid (PFHpS)	38.2	42.8		ng/L		112	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.2	40.8		ng/L		110	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	40.9		ng/L		106	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	43.7		ng/L		113	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	44.4		ng/L		115	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	44.0		ng/L		110	60 - 135
NEtFOSA	40.0	40.7		ng/L		102	60 - 135
NMeFOSA	40.0	43.7		ng/L		109	60 - 135
NMeFOSAA	40.0	41.0		ng/L		103	60 - 135
NEtFOSAA	40.0	44.0		ng/L		110	60 - 135
NMeFOSE	40.0	39.4		ng/L		99	60 - 135
NEtFOSE	40.0	44.6		ng/L		111	60 - 135
4:2 FTS	37.5	42.5		ng/L		113	60 - 135
6:2 FTS	38.1	43.0		ng/L		113	60 - 135
8:2 FTS	38.4	44.9		ng/L		117	60 - 135
10:2 FTS	38.6	43.3		ng/L		112	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	44.2		ng/L		117	60 - 135
HFPO-DA (GenX)	40.0	42.2		ng/L		105	60 - 135
9CI-PF3ONS	37.4	41.4		ng/L		111	60 - 135
11CI-PF3OUdS	37.8	41.7		ng/L		110	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	99		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	92		25 - 150
13C4 PFHpA	103		25 - 150
13C4 PFOA	102		25 - 150
13C5 PFNA	96		25 - 150
13C2 PFDA	94		25 - 150
13C2 PFUnA	106		25 - 150
13C2 PFDoA	95		25 - 150
13C2 PFTeDA	89		25 - 150
13C2 PFHxDA	95		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	97		25 - 150
13C4 PFOS	91		25 - 150
13C8 FOSA	87		10 - 150
d3-NMeFOSAA	83		25 - 150
d5-NEtFOSAA	80		25 - 150
d-N-MeFOSA-M	73		10 - 150
d-N-EtFOSA-M	81		10 - 150
d7-N-MeFOSE-M	93		10 - 150
d9-N-EtFOSE-M	86		10 - 150

QC Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-598242/2-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 598242

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
M2-4:2 FTS	77		25 - 150
M2-6:2 FTS	83		25 - 150
M2-8:2 FTS	80		25 - 150
13C3 HFPO-DA	102		25 - 150
13C2 10:2 FTS	82		25 - 150

Lab Sample ID: LCSD 320-598242/3-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 598242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Perfluorobutanoic acid (PFBA)	40.0	48.4		ng/L		121	60 - 135	7	30	
Perfluoropentanoic acid (PFPeA)	40.0	41.6		ng/L		104	60 - 135	3	30	
Perfluorohexanoic acid (PFHxA)	40.0	40.2		ng/L		100	60 - 135	3	30	
Perfluoroheptanoic acid (PFHpA)	40.0	39.2		ng/L		98	60 - 135	0	30	
Perfluorooctanoic acid (PFOA)	40.0	38.3		ng/L		96	60 - 135	2	30	
Perfluorononanoic acid (PFNA)	40.0	41.6		ng/L		104	60 - 135	0	30	
Perfluorodecanoic acid (PFDA)	40.0	43.5		ng/L		109	60 - 135	1	30	
Perfluoroundecanoic acid (PFUnA)	40.0	43.1		ng/L		108	60 - 135	14	30	
Perfluorododecanoic acid (PFDoA)	40.0	41.7		ng/L		104	60 - 135	1	30	
Perfluorotridecanoic acid (PFTrDA)	40.0	40.6		ng/L		101	60 - 135	5	30	
Perfluorotetradecanoic acid (PFTeA)	40.0	41.4		ng/L		103	60 - 135	11	30	
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	46.7		ng/L		117	60 - 135	10	30	
Perfluoro-n-octadecanoic acid (PFODA)	40.0	40.7		ng/L		102	60 - 135	1	30	
Perfluorobutanesulfonic acid (PFBS)	35.5	38.1		ng/L		107	60 - 135	3	30	
Perfluoropentanesulfonic acid (PFPeS)	37.5	37.7		ng/L		100	60 - 135	0	30	
Perfluorohexanesulfonic acid (PFHxS)	36.5	38.7		ng/L		106	60 - 135	3	30	
Perfluoroheptanesulfonic acid (PFHpS)	38.2	42.9		ng/L		112	60 - 135	0	30	
Perfluorooctanesulfonic acid (PFOS)	37.2	43.5		ng/L		117	60 - 135	6	30	
Perfluorononanesulfonic acid (PFNS)	38.5	45.4		ng/L		118	60 - 135	10	30	
Perfluorodecanesulfonic acid (PFDS)	38.6	48.4		ng/L		126	60 - 135	10	30	
Perfluorododecanesulfonic acid (PFDoS)	38.8	44.2		ng/L		114	60 - 135	0	30	
Perfluorooctanesulfonamide (FOSA)	40.0	42.0		ng/L		105	60 - 135	5	30	
NEtFOSA	40.0	43.2		ng/L		108	60 - 135	6	30	
NMeFOSA	40.0	43.8		ng/L		110	60 - 135	0	30	
NMeFOSAA	40.0	43.1		ng/L		108	60 - 135	5	30	
NEtFOSAA	40.0	43.9		ng/L		110	60 - 135	0	30	
NMeFOSE	40.0	40.1		ng/L		100	60 - 135	2	30	

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QC Sample Results

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-598242/3-A
Matrix: Water
Analysis Batch: 599315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 598242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSE	40.0	44.1		ng/L		110	60 - 135	1	30
4:2 FTS	37.5	40.4		ng/L		108	60 - 135	5	30
6:2 FTS	38.1	40.6		ng/L		107	60 - 135	6	30
8:2 FTS	38.4	42.0		ng/L		109	60 - 135	7	30
10:2 FTS	38.6	39.5		ng/L		102	60 - 135	9	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	44.8		ng/L		119	60 - 135	1	30
HFPO-DA (GenX)	40.0	46.7		ng/L		117	60 - 135	10	30
9Cl-PF3ONS	37.4	44.6		ng/L		119	60 - 135	7	30
11Cl-PF3OUdS	37.8	43.4		ng/L		115	60 - 135	4	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C4 PFBA	110		25 - 150
13C5 PFPeA	108		25 - 150
13C2 PFHxA	100		25 - 150
13C4 PFHpA	108		25 - 150
13C4 PFOA	109		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	103		25 - 150
13C2 PFDoA	99		25 - 150
13C2 PFTeDA	96		25 - 150
13C2 PFHxDA	93		25 - 150
13C3 PFBS	102		25 - 150
18O2 PFHxS	102		25 - 150
13C4 PFOS	92		25 - 150
13C8 FOSA	94		10 - 150
d3-NMeFOSAA	80		25 - 150
d5-NEtFOSAA	79		25 - 150
d-N-MeFOSA-M	82		10 - 150
d-N-EtFOSA-M	84		10 - 150
d7-N-MeFOSE-M	95		10 - 150
d9-N-EtFOSE-M	94		10 - 150
M2-4:2 FTS	85		25 - 150
M2-6:2 FTS	94		25 - 150
M2-8:2 FTS	81		25 - 150
13C3 HFPO-DA	95		25 - 150
13C2 10:2 FTS	90		25 - 150

Lab Chronicle

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Client Sample ID: Entry Point-Line 2

Lab Sample ID: 500-218152-1

Date Collected: 06/15/22 11:16

Matrix: Water

Date Received: 06/16/22 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			598242	06/24/22 07:05	EFG	TAL SAC
Total/NA	Analysis	537 (modified)		1	599315	06/28/22 17:11	D1R	TAL SAC

Client Sample ID: EP-Field Blank

Lab Sample ID: 500-218152-2

Date Collected: 06/15/22 11:18

Matrix: Water

Date Received: 06/16/22 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			598242	06/24/22 07:05	EFG	TAL SAC
Total/NA	Analysis	537 (modified)		1	599315	06/28/22 17:22	D1R	TAL SAC

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Laboratory: Eurofins Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

- 1
- 2
- 3
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- 7
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- 10
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- 14
- 15
- 16

euofins Sacramento

1 Riverside Parkway
 1st Sacramento, CA 95605
 Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

euofins Environment Testing
 America

Client Information	Sampler: Tyler Fadness	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-100726-43338.2
Client Contact: Fadness	Phone: 715-839-6111	E-Mail: Sandra.Fredrick@et.euofinsus.com	State of Origin:	Page: Page 2 of 2

Company: City of Eau Claire	Address: 300 Ferry Street	City: Eau Claire	State, Zip: WI, 54703	Phone: 500-218152 COC	Job #: 510-218152
Due Date Requested: 6/17/22 TAT Requested (days): 1-Day TAT Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 50220192-00 WO #: Project #: 50019745 SSOV#:					Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sediment, Dredge, Sludge, etc.)	Field Filtered Sample (Yes or No)	Performs MS/MSD Type of No	PFC, IDA, VI, PFAS, Extended List (99 Analytes)	Total Number of Containers	Special Instructions/Notes:
Entry Point - Line 2	6/15/22	1116	G	Water	X				
EP Field Blank	6/15/22	1118	G	Water	X				
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 6/15/22 1200	Company: C7S & EC	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Custody Seals Intact: Yes No Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Chain of Custody Record



Client Information
 Client Contact: **Tyler Fadness**
 Phone: **715-839-6121**
 City of Eau Claire
 Address: 1000 Ferry Street
 Eau Claire, WI 54703
 State, Zip: WI, 54703
 Phone:
 Email: Tyler.Fadness@EauClaireWI.Gov
 Project Name: PFAS Testing
 Site:

Sample Information
 Sampler: **Tyler Fadness**
 Lab #/M: **Fredrick, Sandie**
 E-Mail: Sandra.Fredrick@et.eurofinsus.com
 Carrier Tracking No(s):
 State of Origin:
 Page: Page 2 of 2
 Job #:

Analysis Requested
 Due Date Requested: **6/17/22**
 TAT Requested (days): **1-Day TAT**
 Compliance Project: Yes No
 PC #: 50220192-00
 WQ #:
 Project #: 50019745
 SSOV#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sediment, etc.)	Field Filtered Sample (Yes or No)	PC, IDA, WI - PFAS, Extended List (36 Analytes)	Preservation Code:	Special Instructions/Note:
Entry Point - Line 2	6/15/22	1116	G	Water	X	N		
EP Field Blank	6/15/22	1118	G	Water	X			
				Water				
				Water				
				Water				
				Water				
				Water				
				Water				
				Water				
				Water				

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: [Signature]
 Relinquished by: [Signature]
 Relinquished by: [Signature]

Custody Seal Intact: Yes No
 Custody Seal No.: **1955478**

Date: 6/15/22 1200
 Date/Time: 6/15/22 0915
 Date/Time: [Blank]
 Date/Time: [Blank]

Company: C.T.S of EC
 Company: [Blank]
 Company: [Blank]

Special Instructions/Note:
 500-218152 Chain of Custody

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Antichlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:

Carrier Tracking No(s):
 500-100726-43338.2

Method of Shipment:
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Received: [Signature]
 Received by: [Signature]
 Received by: [Signature]

Cooler Temperature(s) °C and Other Remarks:
 1.5C



Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 500-218152-1

Login Number: 218152

List Number: 1

Creator: Oropeza, Salvador

List Source: Eurofins Sacramento

List Creation: 06/16/22 06:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1955478
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



500-218152 Field Sheet

Tracking #: 5776 0547 5576

Job: _____

SO (P) / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Therm. ID: <u>Lob</u> Corr. Factor: (+ / -) <u>NA</u> °C	Notes: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	
Ice <input checked="" type="checkbox"/> Wet <input checked="" type="checkbox"/> Gel _____ Other _____		
Cooler Custody Seal: <u>1955478</u>		
Cooler ID: _____		
Temp Observed: <u>1.5</u> °C Corrected: <u>1.5</u> °C		
From: Temp Blank <input checked="" type="checkbox"/> Sample <input type="checkbox"/>		
Opening/Processing The Shipment		
Yes No NA		
Cooler compromised/tampered with? <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		
Cooler Temperature is acceptable? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Frozen samples show signs of thaw? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Initials: <u>SO</u> Date: <u>6-16-12</u>		
Unpacking/Labeling The Samples		
Yes No NA		
COC is complete w/o discrepancies? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Samples compromised/tampered with? <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		
Containers are not broken or leaking? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Sample custody seal? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Sample containers have legible labels? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Sample date/times are provided? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Appropriate containers are used? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Sample bottles are completely filled? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Sample preservatives verified? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Is the Field Sampler's name on COC? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Samples require splitting/compositing? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Samples w/o discrepancies? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Zero headspace?* <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Alkalinity has no headspace? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Perchlorate has headspace? (Methods 314, 331, 6850) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Multiphasic samples are not present? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<small>*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")</small>		
Initials: <u>SO</u> Date: <u>6-16-12</u>		
Trizma Lot #(s): _____		
Login Completion	Yes No NA	
Receipt Temperature on COC? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Samples received within hold time? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
NCM Filed? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Log Release checked in TALS? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		

Isotope Dilution Summary

Client: City of Eau Claire
Project/Site: PFAS Testing

Job ID: 500-218152-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-218152-1	Entry Point-Line 2	95	90	94	100	100	97	94	103
500-218152-2	EP-Field Blank	95	98	98	103	102	102	95	105
LCS 320-598242/2-A	Lab Control Sample	99	96	92	103	102	96	94	106
LCSD 320-598242/3-A	Lab Control Sample Dup	110	108	100	108	109	101	95	103
MB 320-598242/1-A	Method Blank	101	99	100	100	105	97	98	102

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)
500-218152-1	Entry Point-Line 2	85	85	91	102	94	89	94	89
500-218152-2	EP-Field Blank	97	92	94	97	99	93	95	95
LCS 320-598242/2-A	Lab Control Sample	95	89	95	97	97	91	87	83
LCSD 320-598242/3-A	Lab Control Sample Dup	99	96	93	102	102	92	94	80
MB 320-598242/1-A	Method Blank	89	88	83	101	101	90	85	78

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
500-218152-1	Entry Point-Line 2	84	82	79	80	84	95	85	100
500-218152-2	EP-Field Blank	94	82	86	92	96	93	104	95
LCS 320-598242/2-A	Lab Control Sample	80	73	81	93	86	77	83	80
LCSD 320-598242/3-A	Lab Control Sample Dup	79	82	84	95	94	85	94	81
MB 320-598242/1-A	Method Blank	73	77	81	90	90	79	84	85

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
500-218152-1	Entry Point-Line 2	94	89
500-218152-2	EP-Field Blank	99	104
LCS 320-598242/2-A	Lab Control Sample	102	82
LCSD 320-598242/3-A	Lab Control Sample Dup	95	90
MB 320-598242/1-A	Method Blank	92	88

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDaA = 13C2 PFDaA
PFTDA = 13C2 PFTeDA
PFHxDA = 13C2 PFHxDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M

Isotope Dilution Summary

Job ID: 500-218152-1

Client: City of Eau Claire
Project/Site: PFAS Testing

dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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