eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ty Fadness
City of Eau Claire
1000 Ferry Street
Eau Claire, Wisconsin 54703

Generated 4/11/2023 3:20:10 PM

JOB DESCRIPTION

PFAS Testing

JOB NUMBER

500-231839-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

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Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization

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Authorized for release by
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Table of Contents

Job ID: 500-231839-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-231839-1

Comments
No additional comments.

Receipt
The samples were received on 4/6/2023 9:50 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 2.9º C.

LCMS
Method 537 (modified): The following sample has chromatographic interferences that could adversely impact the identification and quantitation of target analyte: Perfluorobutanoic acid (PFBA). This interference could cause false positive results: 2nd Qtr EP-Line1 (500-231839-1).

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 320-666117.
Method: 3535_PFC_28D
Matrix: Aqueous

Method 3535: Elevated reporting limits are provided for the following samples due to insufficient sample provided for preparation: EP Field Blank (500-231839-2)..
preparation batch 320-666117
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: 500-231839-1

Client Sample ID: 2nd Qtr EP-Line1 — Lab Sample ID: 500-231839-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.0	J C	4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.6	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.62	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.6	J	1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.8		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	2.7		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	14		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.31	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.6		1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EP Field Blank — Lab Sample ID: 500-231839-2

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 500-231839-1

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

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

Sample Summary

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

Job ID: 500-231839-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-231839-1	2nd Qtr EP-Line1	Water	04/05/23 10:50	04/06/23 09:50
500-231839-2	EP Field Blank	Water	04/05/23 10:53	04/06/23 09:50

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

Job ID: 500-231839-1

Client Sample ID: 2nd Qtr EP-Line1

Date Collected: 04/05/23 10:50
Date Received: 04/06/23 09:50

Lab Sample ID: 500-231839-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.0**	**J C**	4.5	2.2	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoropentanoic acid (PFPeA)	**1.6**	**J**	1.8	0.44	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorohexanoic acid (PFHxA)	**1.5**	**J**	1.8	0.53	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoroheptanoic acid (PFHpA)	**0.62**	**J**	1.8	0.23	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorooctanoic acid (PFOA)	**1.6**	**J**	1.8	0.77	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.85		1.8	0.85	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorobutanesulfonic acid (PFBS)	**3.8**		1.8	0.18	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoropentanesulfonic acid (PFPeS)	**2.7**		1.8	0.27	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorohexanesulfonic acid (PFHxS)	**14**		1.8	0.52	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.31**	**J**	1.8	0.17	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorooctanesulfonic acid (PFOS)	**4.6**		1.8	0.49	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		04/07/23 07:14	04/10/23 13:45	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		04/07/23 07:14	04/10/23 13:45	1
NEtFOSA	<0.79		1.8	0.79	ng/L		04/07/23 07:14	04/10/23 13:45	1
NMeFOSA	<0.39		1.8	0.39	ng/L		04/07/23 07:14	04/10/23 13:45	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		04/07/23 07:14	04/10/23 13:45	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		04/07/23 07:14	04/10/23 13:45	1
NMeFOSE	<1.3		3.6	1.3	ng/L		04/07/23 07:14	04/10/23 13:45	1
NEtFOSE	<0.77		1.8	0.77	ng/L		04/07/23 07:14	04/10/23 13:45	1
4:2 FTS	<0.22		1.8	0.22	ng/L		04/07/23 07:14	04/10/23 13:45	1
6:2 FTS	<2.3		4.5	2.3	ng/L		04/07/23 07:14	04/10/23 13:45	1
8:2 FTS	<0.42		1.8	0.42	ng/L		04/07/23 07:14	04/10/23 13:45	1
10:2 FTS	<0.61		1.8	0.61	ng/L		04/07/23 07:14	04/10/23 13:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		04/07/23 07:14	04/10/23 13:45	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		04/07/23 07:14	04/10/23 13:45	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		04/07/23 07:14	04/10/23 13:45	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		04/07/23 07:14	04/10/23 13:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:45*	*1*
13C5 PFPeA	*98*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:45*	*1*
13C2 PFHxA	*100*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:45*	*1*
13C4 PFHpA	*103*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:45*	*1*
13C4 PFOA	*101*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:45*	*1*

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

Job ID: 500-231839-1

Client Sample ID: 2nd Qtr EP-Line1
Date Collected: 04/05/23 10:50
Date Received: 04/06/23 09:50

Lab Sample ID: 500-231839-1
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	100		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 PFDA	102		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 PFUnA	100		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 PFDoA	93		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 PFTeDA	98		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 PFHxDA	104		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C3 PFBS	91		25 - 150	04/07/23 07:14	04/10/23 13:45	1
18O2 PFHxS	93		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C4 PFOS	92		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C8 FOSA	100		10 - 150	04/07/23 07:14	04/10/23 13:45	1
d3-NMeFOSAA	100		25 - 150	04/07/23 07:14	04/10/23 13:45	1
d5-NEtFOSAA	101		25 - 150	04/07/23 07:14	04/10/23 13:45	1
d-N-MeFOSA-M	94		10 - 150	04/07/23 07:14	04/10/23 13:45	1
d-N-EtFOSA-M	88		10 - 150	04/07/23 07:14	04/10/23 13:45	1
d7-N-MeFOSE-M	83		10 - 150	04/07/23 07:14	04/10/23 13:45	1
d9-N-EtFOSE-M	80		10 - 150	04/07/23 07:14	04/10/23 13:45	1
M2-4:2 FTS	124		25 - 150	04/07/23 07:14	04/10/23 13:45	1
M2-6:2 FTS	122		25 - 150	04/07/23 07:14	04/10/23 13:45	1
M2-8:2 FTS	118		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C3 HFPO-DA	95		25 - 150	04/07/23 07:14	04/10/23 13:45	1
13C2 10:2 FTS	99		25 - 150	04/07/23 07:14	04/10/23 13:45	1

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

Job ID: 500-231839-1

Client Sample ID: EP Field Blank

Date Collected: 04/05/23 10:53
Date Received: 04/06/23 09:50

Lab Sample ID: 500-231839-2

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.5		5.3	2.5	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoropentanoic acid (PFPeA)	<0.52		2.1	0.52	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorohexanoic acid (PFHxA)	<0.61		2.1	0.61	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoroheptanoic acid (PFHpA)	<0.26		2.1	0.26	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorooctanoic acid (PFOA)	<0.89		2.1	0.89	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorononanoic acid (PFNA)	<0.28		2.1	0.28	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorodecanoic acid (PFDA)	<0.33		2.1	0.33	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoroundecanoic acid (PFUnA)	<1.2		2.1	1.2	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorododecanoic acid (PFDoA)	<0.58		2.1	0.58	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorotridecanoic acid (PFTrDA)	<1.4		2.1	1.4	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.77		2.1	0.77	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.94		2.1	0.94	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.99		2.1	0.99	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.21		2.1	0.21	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.32		2.1	0.32	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.60		2.1	0.60	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.20		2.1	0.20	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.57		2.1	0.57	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorononanesulfonic acid (PFNS)	<0.39		2.1	0.39	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.34		2.1	0.34	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorododecanesulfonic acid (PFDoS)	<1.0		2.1	1.0	ng/L		04/07/23 07:14	04/10/23 13:55	1
Perfluorooctanesulfonamide (FOSA)	<1.0		2.1	1.0	ng/L		04/07/23 07:14	04/10/23 13:55	1
NEtFOSA	<0.91		2.1	0.91	ng/L		04/07/23 07:14	04/10/23 13:55	1
NMeFOSA	<0.45		2.1	0.45	ng/L		04/07/23 07:14	04/10/23 13:55	1
NMeFOSAA	<1.3		5.3	1.3	ng/L		04/07/23 07:14	04/10/23 13:55	1
NEtFOSAA	<1.4		5.3	1.4	ng/L		04/07/23 07:14	04/10/23 13:55	1
NMeFOSE	<1.5		4.2	1.5	ng/L		04/07/23 07:14	04/10/23 13:55	1
NEtFOSE	<0.89		2.1	0.89	ng/L		04/07/23 07:14	04/10/23 13:55	1
4:2 FTS	<0.25		2.1	0.25	ng/L		04/07/23 07:14	04/10/23 13:55	1
6:2 FTS	<2.6		5.3	2.6	ng/L		04/07/23 07:14	04/10/23 13:55	1
8:2 FTS	<0.48		2.1	0.48	ng/L		04/07/23 07:14	04/10/23 13:55	1
10:2 FTS	<0.70		2.1	0.70	ng/L		04/07/23 07:14	04/10/23 13:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.42		2.1	0.42	ng/L		04/07/23 07:14	04/10/23 13:55	1
HFPO-DA (GenX)	<1.6		4.2	1.6	ng/L		04/07/23 07:14	04/10/23 13:55	1
9Cl-PF3ONS	<0.25		2.1	0.25	ng/L		04/07/23 07:14	04/10/23 13:55	1
11Cl-PF3OUdS	<0.34		2.1	0.34	ng/L		04/07/23 07:14	04/10/23 13:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C5 PFPeA	*99*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C2 PFHxA	*98*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C4 PFHpA	*99*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C4 PFOA	*97*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C5 PFNA	*100*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C2 PFDA	*104*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*
13C2 PFUnA	*98*		*25 - 150*	*04/07/23 07:14*	*04/10/23 13:55*	*1*

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

Job ID: 500-231839-1

Client Sample ID: EP Field Blank
Date Collected: 04/05/23 10:53
Date Received: 04/06/23 09:50

Lab Sample ID: 500-231839-2
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	94		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C2 PFTeDA	92		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C2 PFHxDA	100		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C3 PFBS	92		25 - 150	04/07/23 07:14	04/10/23 13:55	1
18O2 PFHxS	92		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C4 PFOS	94		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C8 FOSA	91		10 - 150	04/07/23 07:14	04/10/23 13:55	1
d3-NMeFOSAA	99		25 - 150	04/07/23 07:14	04/10/23 13:55	1
d5-NEtFOSAA	96		25 - 150	04/07/23 07:14	04/10/23 13:55	1
d-N-MeFOSA-M	84		10 - 150	04/07/23 07:14	04/10/23 13:55	1
d-N-EtFOSA-M	82		10 - 150	04/07/23 07:14	04/10/23 13:55	1
d7-N-MeFOSE-M	81		10 - 150	04/07/23 07:14	04/10/23 13:55	1
d9-N-EtFOSE-M	80		10 - 150	04/07/23 07:14	04/10/23 13:55	1
M2-4:2 FTS	125		25 - 150	04/07/23 07:14	04/10/23 13:55	1
M2-6:2 FTS	121		25 - 150	04/07/23 07:14	04/10/23 13:55	1
M2-8:2 FTS	115		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C3 HFPO-DA	94		25 - 150	04/07/23 07:14	04/10/23 13:55	1
13C2 10:2 FTS	100		25 - 150	04/07/23 07:14	04/10/23 13:55	1

Definitions/Glossary

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

Job ID: 500-231839-1

Qualifiers

LCMS

Qualifier	Qualifier Description
C	See Case Narrative
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.
¤	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: 500-231839-1

LCMS

Prep Batch: 666117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-231839-1	2nd Qtr EP-Line1	Total/NA	Water	3535	
500-231839-2	EP Field Blank	Total/NA	Water	3535	
MB 320-666117/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-666117/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-666117/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 666569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-231839-1	2nd Qtr EP-Line1	Total/NA	Water	537 (modified)	666117
500-231839-2	EP Field Blank	Total/NA	Water	537 (modified)	666117
MB 320-666117/1-A	Method Blank	Total/NA	Water	537 (modified)	666117
LCS 320-666117/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	666117
LCSD 320-666117/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	666117

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-666117/1-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666117

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		04/07/23 07:14	04/10/23 10:32	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		04/07/23 07:14	04/10/23 10:32	1
NEtFOSA	<0.87		2.0	0.87	ng/L		04/07/23 07:14	04/10/23 10:32	1
NMeFOSA	<0.43		2.0	0.43	ng/L		04/07/23 07:14	04/10/23 10:32	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		04/07/23 07:14	04/10/23 10:32	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		04/07/23 07:14	04/10/23 10:32	1
NMeFOSE	<1.4		4.0	1.4	ng/L		04/07/23 07:14	04/10/23 10:32	1
NEtFOSE	<0.85		2.0	0.85	ng/L		04/07/23 07:14	04/10/23 10:32	1
4:2 FTS	<0.24		2.0	0.24	ng/L		04/07/23 07:14	04/10/23 10:32	1
6:2 FTS	<2.5		5.0	2.5	ng/L		04/07/23 07:14	04/10/23 10:32	1
8:2 FTS	<0.46		2.0	0.46	ng/L		04/07/23 07:14	04/10/23 10:32	1
10:2 FTS	<0.67		2.0	0.67	ng/L		04/07/23 07:14	04/10/23 10:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		04/07/23 07:14	04/10/23 10:32	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		04/07/23 07:14	04/10/23 10:32	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		04/07/23 07:14	04/10/23 10:32	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		04/07/23 07:14	04/10/23 10:32	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*100*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*
13C5 PFPeA	*101*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*
13C2 PFHxA	*100*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*
13C4 PFHpA	*103*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*
13C4 PFOA	*103*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*
13C5 PFNA	*103*		*25 - 150*	*04/07/23 07:14*	*04/10/23 10:32*	*1*

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

Lab Sample ID: MB 320-666117/1-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666117

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	105		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C2 PFUnA	103		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C2 PFDoA	96		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C2 PFTeDA	95		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C2 PFHxDA	99		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C3 PFBS	96		25 - 150	04/07/23 07:14	04/10/23 10:32	1
18O2 PFHxS	96		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C4 PFOS	99		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C8 FOSA	98		10 - 150	04/07/23 07:14	04/10/23 10:32	1
d3-NMeFOSAA	101		25 - 150	04/07/23 07:14	04/10/23 10:32	1
d5-NEtFOSAA	105		25 - 150	04/07/23 07:14	04/10/23 10:32	1
d-N-MeFOSA-M	90		10 - 150	04/07/23 07:14	04/10/23 10:32	1
d-N-EtFOSA-M	87		10 - 150	04/07/23 07:14	04/10/23 10:32	1
d7-N-MeFOSE-M	91		10 - 150	04/07/23 07:14	04/10/23 10:32	1
d9-N-EtFOSE-M	86		10 - 150	04/07/23 07:14	04/10/23 10:32	1
M2-4:2 FTS	115		25 - 150	04/07/23 07:14	04/10/23 10:32	1
M2-6:2 FTS	125		25 - 150	04/07/23 07:14	04/10/23 10:32	1
M2-8:2 FTS	121		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C3 HFPO-DA	95		25 - 150	04/07/23 07:14	04/10/23 10:32	1
13C2 10:2 FTS	109		25 - 150	04/07/23 07:14	04/10/23 10:32	1

Lab Sample ID: LCS 320-666117/2-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666117

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	40.0	45.8		ng/L		114	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	43.0		ng/L		107	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	45.9		ng/L		115	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	46.4		ng/L		116	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	45.8		ng/L		115	60 - 135
Perfluorononanoic acid (PFNA)	40.0	48.3		ng/L		121	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	45.7		ng/L		114	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	45.5		ng/L		114	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	46.4		ng/L		116	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	45.3		ng/L		113	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	43.9		ng/L		110	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	46.2		ng/L		115	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	49.1		ng/L		123	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	42.2		ng/L		119	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.6	43.5		ng/L		116	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	41.0		ng/L		112	60 - 135

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

Lab Sample ID: LCS 320-666117/2-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666117

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanesulfonic acid (PFHpS)	38.2	42.5		ng/L		111	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.2	41.3		ng/L		111	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	41.7		ng/L		108	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	39.5		ng/L		102	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	37.0		ng/L		95	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	46.1		ng/L		115	60 - 135
NEtFOSA	40.0	46.0		ng/L		115	60 - 135
NMeFOSA	40.0	47.9		ng/L		120	60 - 135
NMeFOSAA	40.0	46.2		ng/L		115	60 - 135
NEtFOSAA	40.0	42.8		ng/L		107	60 - 135
NMeFOSE	40.0	44.6		ng/L		112	60 - 135
NEtFOSE	40.0	44.4		ng/L		111	60 - 135
4:2 FTS	37.5	46.3		ng/L		123	60 - 135
6:2 FTS	38.1	42.9		ng/L		113	60 - 135
8:2 FTS	38.4	42.6		ng/L		111	60 - 135
10:2 FTS	38.6	41.5		ng/L		107	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	47.4		ng/L		125	60 - 135
HFPO-DA (GenX)	40.0	44.5		ng/L		111	60 - 135
9Cl-PF3ONS	37.4	43.1		ng/L		115	60 - 135
11Cl-PF3OUdS	37.8	39.6		ng/L		105	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*99*		*25 - 150*
13C5 PFPeA	*103*		*25 - 150*
13C2 PFHxA	*99*		*25 - 150*
13C4 PFHpA	*102*		*25 - 150*
13C4 PFOA	*103*		*25 - 150*
13C5 PFNA	*101*		*25 - 150*
13C2 PFDA	*103*		*25 - 150*
13C2 PFUnA	*95*		*25 - 150*
13C2 PFDoA	*92*		*25 - 150*
13C2 PFTeDA	*88*		*25 - 150*
13C2 PFHxDA	*95*		*25 - 150*
13C3 PFBS	*95*		*25 - 150*
18O2 PFHxS	*96*		*25 - 150*
13C4 PFOS	*97*		*25 - 150*
13C8 FOSA	*93*		*10 - 150*
d3-NMeFOSAA	*98*		*25 - 150*
d5-NEtFOSAA	*95*		*25 - 150*
d-N-MeFOSA-M	*79*		*10 - 150*
d-N-EtFOSA-M	*78*		*10 - 150*
d7-N-MeFOSE-M	*80*		*10 - 150*
d9-N-EtFOSE-M	*80*		*10 - 150*

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

Lab Sample ID: LCS 320-666117/2-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666117

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-4:2 FTS	117		25 - 150
M2-6:2 FTS	130		25 - 150
M2-8:2 FTS	119		25 - 150
13C3 HFPO-DA	95		25 - 150
13C2 10:2 FTS	102		25 - 150

Lab Sample ID: LCSD 320-666117/3-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 666117

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	44.0		ng/L		110	60 - 135	4	30
Perfluoropentanoic acid (PFPeA)			40.0	42.6		ng/L		107	60 - 135	1	30
Perfluorohexanoic acid (PFHxA)			40.0	43.9		ng/L		110	60 - 135	4	30
Perfluoroheptanoic acid (PFHpA)			40.0	45.9		ng/L		115	60 - 135	1	30
Perfluorooctanoic acid (PFOA)			40.0	45.5		ng/L		114	60 - 135	1	30
Perfluorononanoic acid (PFNA)			40.0	47.8		ng/L		120	60 - 135	1	30
Perfluorodecanoic acid (PFDA)			40.0	46.7		ng/L		117	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)			40.0	44.1		ng/L		110	60 - 135	3	30
Perfluorododecanoic acid (PFDoA)			40.0	43.8		ng/L		109	60 - 135	6	30
Perfluorotridecanoic acid (PFTrDA)			40.0	44.0		ng/L		110	60 - 135	3	30
Perfluorotetradecanoic acid (PFTeA)			40.0	41.1		ng/L		103	60 - 135	6	30
Perfluoro-n-hexadecanoic acid (PFHxDA)			40.0	46.2		ng/L		115	60 - 135	0	30
Perfluoro-n-octadecanoic acid (PFODA)			40.0	53.4		ng/L		133	60 - 135	8	30
Perfluorobutanesulfonic acid (PFBS)			35.5	41.3		ng/L		116	60 - 135	2	30
Perfluoropentanesulfonic acid (PFPeS)			37.6	46.2		ng/L		123	60 - 135	6	30
Perfluorohexanesulfonic acid (PFHxS)			36.5	40.2		ng/L		110	60 - 135	2	30
Perfluoroheptanesulfonic acid (PFHpS)			38.2	43.2		ng/L		113	60 - 135	2	30
Perfluorooctanesulfonic acid (PFOS)			37.2	41.2		ng/L		111	60 - 135	0	30
Perfluorononanesulfonic acid (PFNS)			38.5	42.8		ng/L		111	60 - 135	3	30
Perfluorodecanesulfonic acid (PFDS)			38.6	39.9		ng/L		104	60 - 135	1	30
Perfluorododecanesulfonic acid (PFDoS)			38.8	40.9		ng/L		105	60 - 135	10	30
Perfluorooctanesulfonamide (FOSA)			40.0	44.0		ng/L		110	60 - 135	5	30
NEtFOSA			40.0	44.1		ng/L		110	60 - 135	4	30
NMeFOSA			40.0	42.3		ng/L		106	60 - 135	12	30
NMeFOSAA			40.0	48.0		ng/L		120	60 - 135	4	30
NEtFOSAA			40.0	42.9		ng/L		107	60 - 135	0	30
NMeFOSE			40.0	42.1		ng/L		105	60 - 135	6	30

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

Lab Sample ID: LCSD 320-666117/3-A
Matrix: Water
Analysis Batch: 666569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 666117

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSE			40.0	42.5		ng/L		106	60 - 135	4	30
4:2 FTS			37.5	44.3		ng/L		118	60 - 135	4	30
6:2 FTS			38.1	44.4		ng/L		117	60 - 135	4	30
8:2 FTS			38.4	43.2		ng/L		113	60 - 135	1	30
10:2 FTS			38.6	39.7		ng/L		103	60 - 135	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.8	47.9		ng/L		127	60 - 135	1	30
HFPO-DA (GenX)			40.0	41.3		ng/L		103	60 - 135	7	30
9Cl-PF3ONS			37.4	43.0		ng/L		115	60 - 135	0	30
11Cl-PF3OUdS			37.8	41.3		ng/L		109	60 - 135	4	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*98*		*25 - 150*
13C5 PFPeA	*105*		*25 - 150*
13C2 PFHxA	*104*		*25 - 150*
13C4 PFHpA	*100*		*25 - 150*
13C4 PFOA	*101*		*25 - 150*
13C5 PFNA	*99*		*25 - 150*
13C2 PFDA	*98*		*25 - 150*
13C2 PFUnA	*98*		*25 - 150*
13C2 PFDoA	*97*		*25 - 150*
13C2 PFTeDA	*96*		*25 - 150*
13C2 PFHxDA	*101*		*25 - 150*
13C3 PFBS	*93*		*25 - 150*
18O2 PFHxS	*95*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*95*		*10 - 150*
d3-NMeFOSAA	*94*		*25 - 150*
d5-NEtFOSAA	*102*		*25 - 150*
d-N-MeFOSA-M	*83*		*10 - 150*
d-N-EtFOSA-M	*79*		*10 - 150*
d7-N-MeFOSE-M	*82*		*10 - 150*
d9-N-EtFOSE-M	*82*		*10 - 150*
M2-4:2 FTS	*119*		*25 - 150*
M2-6:2 FTS	*123*		*25 - 150*
M2-8:2 FTS	*116*		*25 - 150*
13C3 HFPO-DA	*98*		*25 - 150*
13C2 10:2 FTS	*105*		*25 - 150*

Lab Chronicle

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

Job ID: 500-231839-1

Client Sample ID: 2nd Qtr EP-Line1

Lab Sample ID: 500-231839-1

Date Collected: 04/05/23 10:50

Matrix: Water

Date Received: 04/06/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			666117	EJR	EET SAC	04/07/23 07:14
Total/NA	Analysis	537 (modified)		1	666569	RS1	EET SAC	04/10/23 13:45

Client Sample ID: EP Field Blank

Lab Sample ID: 500-231839-2

Date Collected: 04/05/23 10:53

Matrix: Water

Date Received: 04/06/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			666117	EJR	EET SAC	04/07/23 07:14
Total/NA	Analysis	537 (modified)		1	666569	RS1	EET SAC	04/10/23 13:55

Laboratory References:

EET 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: 500-231839-1

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-23

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Ty Fadness	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-110646-43307.1
Client Contact: Ty Fadness	Phone: 715-839-6121	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: City of Eau Claire	PWSID:			Job #:
Address: 1000 Ferry Street	Due Date Requested: 4/17/23			
City: Eau Claire	TAT Requested (days): Standard TAT			
State, Zip: WI, 54703	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 50220192-00			
Email: Tyler.Fadness@EauclaireWi.Gov	WO #:			
Project Name: PFAS Testing	Project #: 50019745			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Extended List (36 Analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
2nd Qtr EP - Line 1	4/5/23	1050		Water			X		
EP Field Blank	4/5/23	1053		Water			X		
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

500-231839 Chain of Custody

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/5/23 1200	C. Ty of EC	[signature]	4/6/23 950	ESSTest
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No (Yes circled) | Custody Seal No.: 211033 | Cooler Temperature(s) °C and Other Remarks: 2.9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 500-231839-1

Login Number: 231839
List Number: 1
Creator: Pratali, Sandra A

List Source: Eurofins Sacramento
List Creation: 04/06/23 08:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2110333
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	2.9
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?	False	Received project as a subcontract.
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento
Sample Receiving Notes

500-231839 Field Sheet

Job:____

Tracking # : 6283 9315 9113

SO / PO / 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: C10 Corr. Factor: (+ / -) _____°C

Ice_____ Wet_____ Gel _____ Other _____

Cooler Custody Seal: 2110333

Cooler ID: _____

Temp Observed: 2.9 °C Corrected: 2.9 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: JF Date: 4/6/23

Unpacking/Labeling The Samples	Yes	No	NA
COC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Containers are not broken or leaking?	☑	☐	☐
Sample custody seal?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☑	☐
Is the Field Sampler's name on COC?	☑	☐	☐
Samples require splitting/compositing?	☐	☑	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: SP Date: 4.6.23

Notes:_____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☑	☐	☐

Initials: SP Date: 4.6.23

WR322E

Isotope Dilution Summary

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

Job ID: 500-231839-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	PFHxA	C4PFHA	PFOA	PFNA	PFDA	PFUnA
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
500-231839-1	2nd Qtr EP-Line1	82	98	100	103	101	100	102	100
500-231839-2	EP Field Blank	96	99	98	99	97	100	104	98
LCS 320-666117/2-A	Lab Control Sample	99	103	99	102	103	101	103	95
LCSD 320-666117/3-A	Lab Control Sample Dup	98	105	104	100	101	99	98	98
MB 320-666117/1-A	Method Blank	100	101	100	103	103	103	105	103

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	PFHxDA	C3PFBS	PFHxS	PFOS	PFOSA	d3NMFOS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(10-150)	(25-150)
500-231839-1	2nd Qtr EP-Line1	93	98	104	91	93	92	100	100
500-231839-2	EP Field Blank	94	92	100	92	92	94	91	99
LCS 320-666117/2-A	Lab Control Sample	92	88	95	95	96	97	93	98
LCSD 320-666117/3-A	Lab Control Sample Dup	97	96	101	93	95	94	95	94
MB 320-666117/1-A	Method Blank	96	95	99	96	96	99	98	101

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		d5NEFOS	dMeFOSA	dEtFOSA	NMFM	NEFM	M242FTS	M262FTS	M282FTS
Lab Sample ID	Client Sample ID	(25-150)	(10-150)	(10-150)	(10-150)	(10-150)	(25-150)	(25-150)	(25-150)
500-231839-1	2nd Qtr EP-Line1	101	94	88	83	80	124	122	118
500-231839-2	EP Field Blank	96	84	82	81	80	125	121	115
LCS 320-666117/2-A	Lab Control Sample	95	79	78	80	80	117	130	119
LCSD 320-666117/3-A	Lab Control Sample Dup	102	83	79	82	82	119	123	116
MB 320-666117/1-A	Method Blank	105	90	87	91	86	115	125	121

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		HFPODA	M102FTS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)
500-231839-1	2nd Qtr EP-Line1	95	99
500-231839-2	EP Field Blank	94	100
LCS 320-666117/2-A	Lab Control Sample	95	102
LCSD 320-666117/3-A	Lab Control Sample Dup	98	105
MB 320-666117/1-A	Method Blank	95	109

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
PFDoA = 13C2 PFDoA
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

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

Job ID: 500-231839-1

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