eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-210589-1
Client Project/Site: PFAS Testing

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

Attn: Ty Fadness

Authorized for release by:
1/10/2022 8:54:03 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Job ID: 500-210589-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-210589-1

Comments
No additional comments.

Receipt
The samples were received on 1/7/2022 11:35 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 0.9º C.

LCMS
No analytical or quality issues were noted, other than those described 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 320-556696. Method Code: 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: 500-210589-1

Client Sample ID: Entry Point-Line 1 — Lab Sample ID: 500-210589-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.6	J	4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.83	J	1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.2	J	1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.64	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.0		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.66	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	1.5	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	9.6		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.23	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.0		1.8	0.48	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EP-Field Blank — Lab Sample ID: 500-210589-2

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

Job ID: 500-210589-1

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

Sample Summary

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

Job ID: 500-210589-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-210589-1	Entry Point-Line 1	Water	01/05/22 11:23	01/07/22 11:35
500-210589-2	EP-Field Blank	Water	01/05/22 11:25	01/07/22 11:35

Client Sample ID: Entry Point-Line 1

Date Collected: 01/05/22 11:23
Date Received: 01/07/22 11:35

Lab Sample ID: 500-210589-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.6**	**J**	4.4	2.1	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoropentanoic acid (PFPeA)	**0.83**	**J**	1.8	0.43	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorohexanoic acid (PFHxA)	**1.2**	**J**	1.8	0.51	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoroheptanoic acid (PFHpA)	**0.64**	**J**	1.8	0.22	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorooctanoic acid (PFOA)	**2.0**		1.8	0.75	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorononanoic acid (PFNA)	**0.66**	**J**	1.8	0.24	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.79		1.8	0.79	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.83		1.8	0.83	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorobutanesulfonic acid (PFBS)	**1.9**		1.8	0.18	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoropentanesulfonic acid (PFPeS)	**1.5**	**J**	1.8	0.27	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorohexanesulfonic acid (PFHxS)	**9.6**		1.8	0.51	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	**0.23**	**J**	1.8	0.17	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorooctanesulfonic acid (PFOS)	**4.0**		1.8	0.48	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.86		1.8	0.86	ng/L		01/07/22 12:37	01/08/22 09:17	1
Perfluorooctanesulfonamide (FOSA)	<0.87		1.8	0.87	ng/L		01/07/22 12:37	01/08/22 09:17	1
NEtFOSA	<0.77		1.8	0.77	ng/L		01/07/22 12:37	01/08/22 09:17	1
NMeFOSA	<0.38		1.8	0.38	ng/L		01/07/22 12:37	01/08/22 09:17	1
NMeFOSAA	<1.1		4.4	1.1	ng/L		01/07/22 12:37	01/08/22 09:17	1
NEtFOSAA	<1.2		4.4	1.2	ng/L		01/07/22 12:37	01/08/22 09:17	1
NMeFOSE	<1.2		3.5	1.2	ng/L		01/07/22 12:37	01/08/22 09:17	1
NEtFOSE	<0.75		1.8	0.75	ng/L		01/07/22 12:37	01/08/22 09:17	1
4:2 FTS	<0.21		1.8	0.21	ng/L		01/07/22 12:37	01/08/22 09:17	1
6:2 FTS	<2.2		4.4	2.2	ng/L		01/07/22 12:37	01/08/22 09:17	1
8:2 FTS	<0.41		1.8	0.41	ng/L		01/07/22 12:37	01/08/22 09:17	1
10:2 FTS	<0.59		1.8	0.59	ng/L		01/07/22 12:37	01/08/22 09:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		01/07/22 12:37	01/08/22 09:17	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		01/07/22 12:37	01/08/22 09:17	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		01/07/22 12:37	01/08/22 09:17	1
11Cl-PF3OUdS	<0.28		1.8	0.28	ng/L		01/07/22 12:37	01/08/22 09:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*58*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:17*	*1*
13C5 PFPeA	*77*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:17*	*1*
13C2 PFHxA	*74*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:17*	*1*
13C4 PFHpA	*78*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:17*	*1*
13C4 PFOA	*78*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:17*	*1*

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

Job ID: 500-210589-1

Client Sample ID: Entry Point-Line 1

Date Collected: 01/05/22 11:23
Date Received: 01/07/22 11:35

Lab Sample ID: 500-210589-1

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	78		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 PFDA	77		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 PFUnA	78		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 PFDoA	69		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 PFTeDA	65		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 PFHxDA	63		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C3 PFBS	78		25 - 150	01/07/22 12:37	01/08/22 09:17	1
18O2 PFHxS	69		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C4 PFOS	65		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C8 FOSA	69		10 - 150	01/07/22 12:37	01/08/22 09:17	1
d3-NMeFOSAA	76		25 - 150	01/07/22 12:37	01/08/22 09:17	1
d5-NEtFOSAA	78		25 - 150	01/07/22 12:37	01/08/22 09:17	1
d-N-MeFOSA-M	63		10 - 150	01/07/22 12:37	01/08/22 09:17	1
d-N-EtFOSA-M	59		10 - 150	01/07/22 12:37	01/08/22 09:17	1
d7-N-MeFOSE-M	58		10 - 150	01/07/22 12:37	01/08/22 09:17	1
d9-N-EtFOSE-M	59		10 - 150	01/07/22 12:37	01/08/22 09:17	1
M2-4:2 FTS	102		25 - 150	01/07/22 12:37	01/08/22 09:17	1
M2-6:2 FTS	103		25 - 150	01/07/22 12:37	01/08/22 09:17	1
M2-8:2 FTS	89		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C3 HFPO-DA	70		25 - 150	01/07/22 12:37	01/08/22 09:17	1
13C2 10:2 FTS	80		25 - 150	01/07/22 12:37	01/08/22 09:17	1

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

Job ID: 500-210589-1

Client Sample ID: EP-Field Blank

Date Collected: 01/05/22 11:25
Date Received: 01/07/22 11:35

Lab Sample ID: 500-210589-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.4	2.1	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoropentanoic acid (PFPeA)	<0.43		1.7	0.43	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorohexanoic acid (PFHxA)	<0.51		1.7	0.51	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.7	0.22	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorooctanoic acid (PFOA)	<0.74		1.7	0.74	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorononanoic acid (PFNA)	<0.24		1.7	0.24	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoroundecanoic acid (PFUnA)	<0.96		1.7	0.96	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.7	0.48	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.7	0.64	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.78		1.7	0.78	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.82		1.7	0.82	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.17		1.7	0.17	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.7	0.50	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.7	0.17	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.7	0.47	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.7	0.85	ng/L		01/07/22 12:37	01/08/22 09:27	1
Perfluorooctanesulfonamide (FOSA)	<0.85		1.7	0.85	ng/L		01/07/22 12:37	01/08/22 09:27	1
NEtFOSA	<0.76		1.7	0.76	ng/L		01/07/22 12:37	01/08/22 09:27	1
NMeFOSA	<0.38		1.7	0.38	ng/L		01/07/22 12:37	01/08/22 09:27	1
NMeFOSAA	<1.0		4.4	1.0	ng/L		01/07/22 12:37	01/08/22 09:27	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		01/07/22 12:37	01/08/22 09:27	1
NMeFOSE	<1.2		3.5	1.2	ng/L		01/07/22 12:37	01/08/22 09:27	1
NEtFOSE	<0.74		1.7	0.74	ng/L		01/07/22 12:37	01/08/22 09:27	1
4:2 FTS	<0.21		1.7	0.21	ng/L		01/07/22 12:37	01/08/22 09:27	1
6:2 FTS	<2.2		4.4	2.2	ng/L		01/07/22 12:37	01/08/22 09:27	1
8:2 FTS	<0.40		1.7	0.40	ng/L		01/07/22 12:37	01/08/22 09:27	1
10:2 FTS	<0.58		1.7	0.58	ng/L		01/07/22 12:37	01/08/22 09:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.7	0.35	ng/L		01/07/22 12:37	01/08/22 09:27	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		01/07/22 12:37	01/08/22 09:27	1
9Cl-PF3ONS	<0.21		1.7	0.21	ng/L		01/07/22 12:37	01/08/22 09:27	1
11Cl-PF3OUdS	<0.28		1.7	0.28	ng/L		01/07/22 12:37	01/08/22 09:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C5 PFPeA	*89*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C2 PFHxA	*92*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C4 PFHpA	*93*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C4 PFOA	*97*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C5 PFNA	*99*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C2 PFDA	*99*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*
13C2 PFUnA	*98*		*25 - 150*	*01/07/22 12:37*	*01/08/22 09:27*	*1*

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

Job ID: 500-210589-1

Client Sample ID: EP-Field Blank
Date Collected: 01/05/22 11:25
Date Received: 01/07/22 11:35

Lab Sample ID: 500-210589-2
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	100		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C2 PFTeDA	96		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C2 PFHxDA	87		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C3 PFBS	99		25 - 150	01/07/22 12:37	01/08/22 09:27	1
18O2 PFHxS	84		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C4 PFOS	89		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C8 FOSA	88		10 - 150	01/07/22 12:37	01/08/22 09:27	1
d3-NMeFOSAA	99		25 - 150	01/07/22 12:37	01/08/22 09:27	1
d5-NEtFOSAA	101		25 - 150	01/07/22 12:37	01/08/22 09:27	1
d-N-MeFOSA-M	82		10 - 150	01/07/22 12:37	01/08/22 09:27	1
d-N-EtFOSA-M	80		10 - 150	01/07/22 12:37	01/08/22 09:27	1
d7-N-MeFOSE-M	82		10 - 150	01/07/22 12:37	01/08/22 09:27	1
d9-N-EtFOSE-M	82		10 - 150	01/07/22 12:37	01/08/22 09:27	1
M2-4:2 FTS	123		25 - 150	01/07/22 12:37	01/08/22 09:27	1
M2-6:2 FTS	122		25 - 150	01/07/22 12:37	01/08/22 09:27	1
M2-8:2 FTS	113		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C3 HFPO-DA	91		25 - 150	01/07/22 12:37	01/08/22 09:27	1
13C2 10:2 FTS	117		25 - 150	01/07/22 12:37	01/08/22 09:27	1

Definitions/Glossary

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

Job ID: 500-210589-1

Qualifiers

LCMS

Qualifier	Qualifier Description
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: 500-210589-1

LCMS

Prep Batch: 556696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-210589-1	Entry Point-Line 1	Total/NA	Water	3535	
500-210589-2	EP-Field Blank	Total/NA	Water	3535	
MB 320-556696/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-556696/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-556696/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 556841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-210589-1	Entry Point-Line 1	Total/NA	Water	537 (modified)	556696
500-210589-2	EP-Field Blank	Total/NA	Water	537 (modified)	556696
MB 320-556696/1-A	Method Blank	Total/NA	Water	537 (modified)	556696
LCS 320-556696/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	556696
LCSD 320-556696/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	556696

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-556696/1-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556696

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		01/07/22 12:37	01/08/22 08:47	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		01/07/22 12:37	01/08/22 08:47	1
NEtFOSA	<0.87		2.0	0.87	ng/L		01/07/22 12:37	01/08/22 08:47	1
NMeFOSA	<0.43		2.0	0.43	ng/L		01/07/22 12:37	01/08/22 08:47	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		01/07/22 12:37	01/08/22 08:47	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		01/07/22 12:37	01/08/22 08:47	1
NMeFOSE	<1.4		4.0	1.4	ng/L		01/07/22 12:37	01/08/22 08:47	1
NEtFOSE	<0.85		2.0	0.85	ng/L		01/07/22 12:37	01/08/22 08:47	1
4:2 FTS	<0.24		2.0	0.24	ng/L		01/07/22 12:37	01/08/22 08:47	1
6:2 FTS	<2.5		5.0	2.5	ng/L		01/07/22 12:37	01/08/22 08:47	1
8:2 FTS	<0.46		2.0	0.46	ng/L		01/07/22 12:37	01/08/22 08:47	1
10:2 FTS	<0.67		2.0	0.67	ng/L		01/07/22 12:37	01/08/22 08:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		01/07/22 12:37	01/08/22 08:47	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		01/07/22 12:37	01/08/22 08:47	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		01/07/22 12:37	01/08/22 08:47	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		01/07/22 12:37	01/08/22 08:47	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*81*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*
13C5 PFPeA	*82*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*
13C2 PFHxA	*89*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*
13C4 PFHpA	*85*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*
13C4 PFOA	*92*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*
13C5 PFNA	*90*		*25 - 150*	*01/07/22 12:37*	*01/08/22 08:47*	*1*

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

Lab Sample ID: MB 320-556696/1-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556696

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	85		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C2 PFUnA	91		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C2 PFDoA	88		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C2 PFTeDA	87		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C2 PFHxDA	81		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C3 PFBS	89		25 - 150	01/07/22 12:37	01/08/22 08:47	1
18O2 PFHxS	76		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C4 PFOS	83		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C8 FOSA	80		10 - 150	01/07/22 12:37	01/08/22 08:47	1
d3-NMeFOSAA	90		25 - 150	01/07/22 12:37	01/08/22 08:47	1
d5-NEtFOSAA	105		25 - 150	01/07/22 12:37	01/08/22 08:47	1
d-N-MeFOSA-M	70		10 - 150	01/07/22 12:37	01/08/22 08:47	1
d-N-EtFOSA-M	71		10 - 150	01/07/22 12:37	01/08/22 08:47	1
d7-N-MeFOSE-M	73		10 - 150	01/07/22 12:37	01/08/22 08:47	1
d9-N-EtFOSE-M	75		10 - 150	01/07/22 12:37	01/08/22 08:47	1
M2-4:2 FTS	117		25 - 150	01/07/22 12:37	01/08/22 08:47	1
M2-6:2 FTS	117		25 - 150	01/07/22 12:37	01/08/22 08:47	1
M2-8:2 FTS	114		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C3 HFPO-DA	81		25 - 150	01/07/22 12:37	01/08/22 08:47	1
13C2 10:2 FTS	108		25 - 150	01/07/22 12:37	01/08/22 08:47	1

Lab Sample ID: LCS 320-556696/2-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	41.7		ng/L		104	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	37.2		ng/L		93	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	41.2		ng/L		103	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	39.6		ng/L		99	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	38.0		ng/L		95	60 - 135
Perfluorononanoic acid (PFNA)	40.0	42.7		ng/L		107	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	41.1		ng/L		103	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	43.0		ng/L		108	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	39.7		ng/L		99	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	41.9		ng/L		105	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	41.9		ng/L		105	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	42.4		ng/L		106	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	35.5		ng/L		89	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	32.3		ng/L		91	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	33.9		ng/L		90	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.0		ng/L		99	60 - 135

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

Lab Sample ID: LCS 320-556696/2-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.8		ng/L		104	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	38.3		ng/L		103	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	39.8		ng/L		104	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	40.8		ng/L		106	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	40.1		ng/L		104	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	42.2		ng/L		106	60 - 135
NEtFOSA	40.0	43.5		ng/L		109	60 - 135
NMeFOSA	40.0	41.5		ng/L		104	60 - 135
NMeFOSAA	40.0	42.4		ng/L		106	60 - 135
NEtFOSAA	40.0	38.8		ng/L		97	60 - 135
NMeFOSE	40.0	42.4		ng/L		106	60 - 135
NEtFOSE	40.0	39.6		ng/L		99	60 - 135
4:2 FTS	37.4	40.3		ng/L		108	60 - 135
6:2 FTS	37.9	40.6		ng/L		107	60 - 135
8:2 FTS	38.3	40.5		ng/L		106	60 - 135
10:2 FTS	38.6	40.8		ng/L		106	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	42.4		ng/L		112	60 - 135
HFPO-DA (GenX)	40.0	40.6		ng/L		102	60 - 135
9Cl-PF3ONS	37.3	39.1		ng/L		105	60 - 135
11Cl-PF3OUdS	37.7	40.5		ng/L		107	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*77*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*84*		*25 - 150*
13C4 PFHpA	*87*		*25 - 150*
13C4 PFOA	*91*		*25 - 150*
13C5 PFNA	*82*		*25 - 150*
13C2 PFDA	*88*		*25 - 150*
13C2 PFUnA	*89*		*25 - 150*
13C2 PFDoA	*85*		*25 - 150*
13C2 PFTeDA	*85*		*25 - 150*
13C2 PFHxDA	*79*		*25 - 150*
13C3 PFBS	*90*		*25 - 150*
18O2 PFHxS	*80*		*25 - 150*
13C4 PFOS	*81*		*25 - 150*
13C8 FOSA	*80*		*10 - 150*
d3-NMeFOSAA	*90*		*25 - 150*
d5-NEtFOSAA	*95*		*25 - 150*
d-N-MeFOSA-M	*74*		*10 - 150*
d-N-EtFOSA-M	*72*		*10 - 150*
d7-N-MeFOSE-M	*70*		*10 - 150*
d9-N-EtFOSE-M	*72*		*10 - 150*

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

Lab Sample ID: LCS 320-556696/2-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556696

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*112*		*25 - 150*
M2-6:2 FTS	*111*		*25 - 150*
M2-8:2 FTS	*105*		*25 - 150*
13C3 HFPO-DA	*81*		*25 - 150*
13C2 10:2 FTS	*104*		*25 - 150*

Lab Sample ID: LCSD 320-556696/3-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 556696

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	38.1		ng/L		95	60 - 135	9	30
Perfluoropentanoic acid (PFPeA)			40.0	39.1		ng/L		98	60 - 135	5	30
Perfluorohexanoic acid (PFHxA)			40.0	41.1		ng/L		103	60 - 135	0	30
Perfluoroheptanoic acid (PFHpA)			40.0	39.5		ng/L		99	60 - 135	0	30
Perfluorooctanoic acid (PFOA)			40.0	37.9		ng/L		95	60 - 135	0	30
Perfluorononanoic acid (PFNA)			40.0	42.3		ng/L		106	60 - 135	1	30
Perfluorodecanoic acid (PFDA)			40.0	40.2		ng/L		100	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)			40.0	42.0		ng/L		105	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)			40.0	39.8		ng/L		100	60 - 135	0	30
Perfluorotridecanoic acid (PFTrDA)			40.0	41.5		ng/L		104	60 - 135	1	30
Perfluorotetradecanoic acid (PFTeA)			40.0	38.4		ng/L		96	60 - 135	9	30
Perfluoro-n-hexadecanoic acid (PFHxDA)			40.0	40.6		ng/L		102	60 - 135	4	30
Perfluoro-n-octadecanoic acid (PFODA)			40.0	37.9		ng/L		95	60 - 135	7	30
Perfluorobutanesulfonic acid (PFBS)			35.4	30.7		ng/L		87	60 - 135	5	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	33.2		ng/L		88	60 - 135	2	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	36.6		ng/L		100	60 - 135	2	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	37.2		ng/L		98	60 - 135	7	30
Perfluorooctanesulfonic acid (PFOS)			37.1	34.4		ng/L		93	60 - 135	11	30
Perfluorononanesulfonic acid (PFNS)			38.4	36.2		ng/L		94	60 - 135	10	30
Perfluorodecanesulfonic acid (PFDS)			38.6	38.2		ng/L		99	60 - 135	7	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	35.5		ng/L		92	60 - 135	12	30
Perfluorooctanesulfonamide (FOSA)			40.0	41.4		ng/L		103	60 - 135	2	30
NEtFOSA			40.0	43.0		ng/L		108	60 - 135	1	30
NMeFOSA			40.0	41.9		ng/L		105	60 - 135	1	30
NMeFOSAA			40.0	42.1		ng/L		105	60 - 135	1	30
NEtFOSAA			40.0	41.2		ng/L		103	60 - 135	6	30
NMeFOSE			40.0	42.4		ng/L		106	60 - 135	0	30

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

Lab Sample ID: LCSD 320-556696/3-A
Matrix: Water
Analysis Batch: 556841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 556696

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NEtFOSE			40.0	40.4		ng/L		101	60 - 135	2	30
4:2 FTS			37.4	41.1		ng/L		110	60 - 135	2	30
6:2 FTS			37.9	43.2		ng/L		114	60 - 135	6	30
8:2 FTS			38.3	41.4		ng/L		108	60 - 135	2	30
10:2 FTS			38.6	41.6		ng/L		108	60 - 135	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.7	38.2		ng/L		101	60 - 135	10	30
HFPO-DA (GenX)			40.0	40.8		ng/L		102	60 - 135	0	30
9Cl-PF3ONS			37.3	36.0		ng/L		96	60 - 135	9	30
11Cl-PF3OUdS			37.7	35.6		ng/L		94	60 - 135	13	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*92*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*
13C2 PFHxA	*97*		*25 - 150*
13C4 PFHpA	*97*		*25 - 150*
13C4 PFOA	*102*		*25 - 150*
13C5 PFNA	*95*		*25 - 150*
13C2 PFDA	*102*		*25 - 150*
13C2 PFUnA	*99*		*25 - 150*
13C2 PFDoA	*97*		*25 - 150*
13C2 PFTeDA	*98*		*25 - 150*
13C2 PFHxDA	*93*		*25 - 150*
13C3 PFBS	*102*		*25 - 150*
18O2 PFHxS	*87*		*25 - 150*
13C4 PFOS	*99*		*25 - 150*
13C8 FOSA	*90*		*10 - 150*
d3-NMeFOSAA	*104*		*25 - 150*
d5-NEtFOSAA	*107*		*25 - 150*
d-N-MeFOSA-M	*81*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*81*		*10 - 150*
d9-N-EtFOSE-M	*82*		*10 - 150*
M2-4:2 FTS	*127*		*25 - 150*
M2-6:2 FTS	*124*		*25 - 150*
M2-8:2 FTS	*113*		*25 - 150*
13C3 HFPO-DA	*93*		*25 - 150*
13C2 10:2 FTS	*113*		*25 - 150*

Lab Chronicle

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

Job ID: 500-210589-1

Client Sample ID: Entry Point-Line 1

Lab Sample ID: 500-210589-1

Date Collected: 01/05/22 11:23

Matrix: Water

Date Received: 01/07/22 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			556696	01/07/22 12:37	RAC	TAL SAC
Total/NA	Analysis	537 (modified)		1	556841	01/08/22 09:17	RS1	TAL SAC

Client Sample ID: EP-Field Blank

Lab Sample ID: 500-210589-2

Date Collected: 01/05/22 11:25

Matrix: Water

Date Received: 01/07/22 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			556696	01/07/22 12:37	RAC	TAL SAC
Total/NA	Analysis	537 (modified)		1	556841	01/08/22 09:27	RS1	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: 500-210589-1

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

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Ty Fadness	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-97752-43001.1
Client Contact: Ty Fadness	Phone: 715-839-6121	E-Mail: sandra.fredrick@eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: City of Eau Claire	PWSID:			Job #:
Address: 1000 Ferry Street	Due Date Requested: 1-7-22			
City: Eau Claire	TAT Requested (days): 1-Day TAT			
State, Zip: WI, 54703	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 50210879-00			
Email: Tyler.Fadness@EauclaireWi.Gov	WO #:			
Project Name: PFAS Testing	Project #: 50019745			
Site:	SSOW#:			

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 (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		
Entry Point - Line 1	01/05/22	1123	6	Water			X		
EP - Field Blank	01/05/22	1125	G	Water			X		
				Water					
				Water					
				Water					
				Water					
				Water					

500-210589 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]	1/5/22 1230	City of EC	[signature]	1/7/22 1135	EET
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.9 c

Ver: 06/08/2021

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-156257.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: Wisconsin	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): State - Wisconsin		Job #: 500-210589-1
Address: 880 Riverside Parkway,	Due Date Requested: 1/10/2022			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: PFAS Testing	Project #: 50019745			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	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_WU3535_PFC_28D PFAS, Extended List (18 Analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Entry Point-Line 1 (500-210589-1)	1/5/22	11:23 Central		Water			X	2	
EP-Field Blank (500-210589-2)	1/5/22	11:25 Central		Water			X	2	

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:

Note: Since laboratory accreditations are subject to change, Eurofins North Central places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins North Central laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins North Central attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins North Central.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/4/22 1135	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0 °C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 500-210589-1

Login Number: 210589
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

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	
Sample custody seals, if present, are intact.	True	
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	
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.	True	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 500-210589-1

Login Number: 210589
List Number: 2
Creator: Her, David A

List Source: Eurofins Sacramento
List Creation: 01/07/22 12:09 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.	N/A	
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	0.9 C
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

500-210589 Field Sheet

Job: _____

Tracking # : 5416 05 93 7857

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: L-01 Corr. Factor: (+ / -) _____ °C

Ice L Wet W Gel _____ Other _____

Cooler Custody Seal: -

Cooler ID: -

Temp Observed: 0.9 °C Corrected: 0.1 °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: DK Date: 1/7/22

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☐	☐	☐
Samples compromised/tampered with?	☐	☐	☐
Sample containers have legible labels?	☐	☐	☐
Sample custody seal?	☐	☐	☐
Containers are not broken or leaking?	☐	☐	☐
Sample date/times are provided?	☐	☐	☐
Appropriate containers are used?	☐	☐	☐
Sample bottles are completely filled?	☐	☐	☐
Sample preservatives verified?	☐	☐	☐
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")

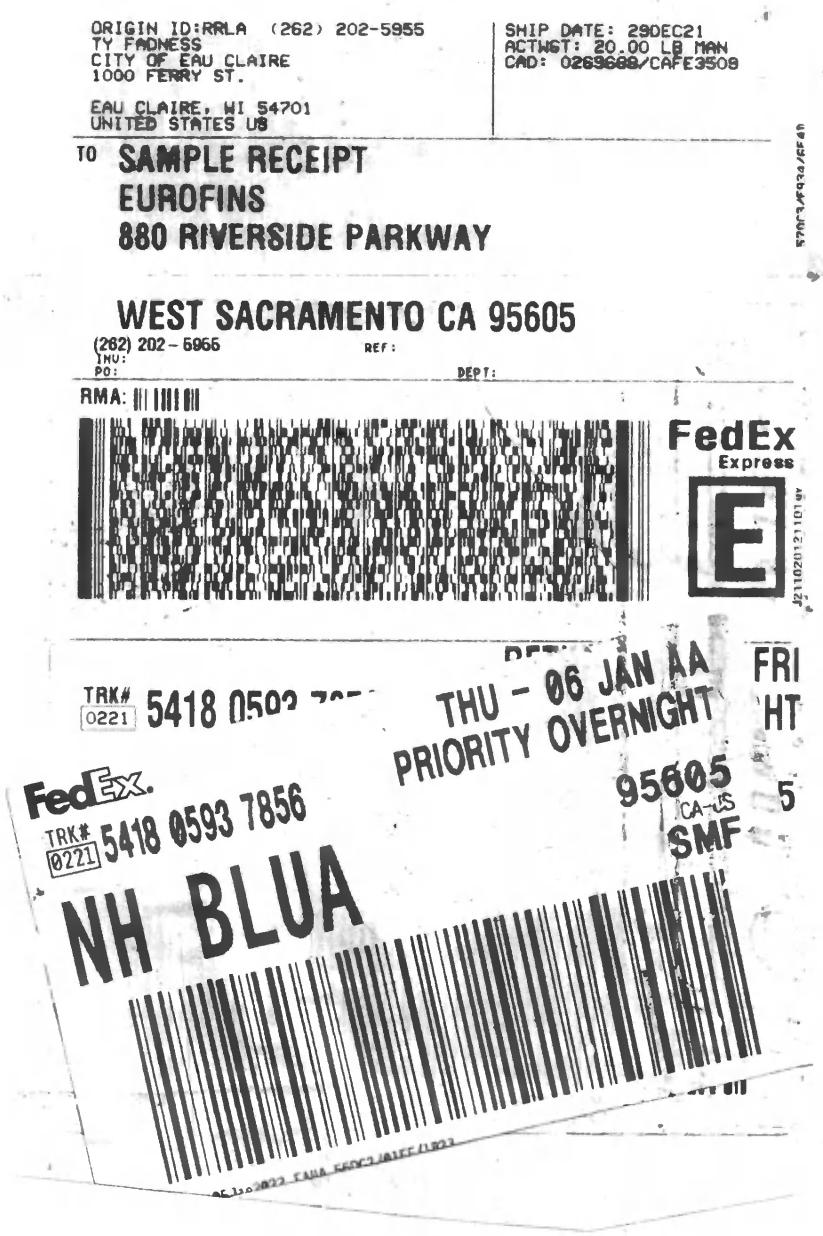
Initials: DK Date: 1/7/22

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: DK Date: 1/7/22


ORIGIN ID:RRLA (262) 202-5955
TY FADNESS
CITY OF EAU CLAIRE
1000 FERRY ST.
EAU CLAIRE, WI 54701
UNITED STATES US
SHIP DATE: 29DEC21
ACTWGT: 20.00 LB MAN
CAD: 0269688/CAFE3508
TO SAMPLE RECEIPT
EUROFINS
880 RIVERSIDE PARKWAY
WEST SACRAMENTO CA 95605
(262) 202-5955
INV:
PO:
REF:
DEPT:
RMA:
FedEx
Express
TRK# 0221 5418 0503
THU - 06 JAN AA
PRIORITY OVERNIGHT
FRI
HT
FedEx.
TRK# 0221 5418 0593 7856
95605
CA-US
SMF
5
NH BLUA

Isotope Dilution Summary

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

Job ID: 500-210589-1

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)
500-210589-1	Entry Point-Line 1	58	77	74	78	78	78	77	78
500-210589-2	EP-Field Blank	91	89	92	93	97	99	99	98
LCS 320-556696/2-A	Lab Control Sample	77	84	84	87	91	82	88	89
LCSD 320-556696/3-A	Lab Control Sample Dup	92	94	97	97	102	95	102	99
MB 320-556696/1-A	Method Blank	81	82	89	85	92	90	85	91

		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)
500-210589-1	Entry Point-Line 1	69	65	63	78	69	65	69	76
500-210589-2	EP-Field Blank	100	96	87	99	84	89	88	99
LCS 320-556696/2-A	Lab Control Sample	85	85	79	90	80	81	80	90
LCSD 320-556696/3-A	Lab Control Sample Dup	97	98	93	102	87	99	90	104
MB 320-556696/1-A	Method Blank	88	87	81	89	76	83	80	90

		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)
500-210589-1	Entry Point-Line 1	78	63	59	58	59	102	103	89
500-210589-2	EP-Field Blank	101	82	80	82	82	123	122	113
LCS 320-556696/2-A	Lab Control Sample	95	74	72	70	72	112	111	105
LCSD 320-556696/3-A	Lab Control Sample Dup	107	81	81	81	82	127	124	113
MB 320-556696/1-A	Method Blank	105	70	71	73	75	117	117	114

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		HFPODA	M102FTS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)
500-210589-1	Entry Point-Line 1	70	80
500-210589-2	EP-Field Blank	91	117
LCS 320-556696/2-A	Lab Control Sample	81	104
LCSD 320-556696/3-A	Lab Control Sample Dup	93	113
MB 320-556696/1-A	Method Blank	81	108

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: 500-210589-1

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