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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-76069-1
Client Project/Site: PFAS Testing

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

Attn: Ty Fadness

Sandra Fredrick

Authorized for release by:
7/14/2021 11:28:33 AM

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Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Isotope Dilution Summary 12
QC Sample Results 14
QC Association Summary 19
Lab Chronicle 20
Certification Summary 21
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 25

Definitions/Glossary

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

Job ID: 320-76069-1

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

Job ID: 320-76069-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-76069-1

Comments
No additional comments.

Receipt
The samples were received on 7/13/2021 9:45 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 0.4º C.

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

Organic Prep
Method 3535: The following samples were preserved with trizma: Entry Point Line 2 (320-76069-1), Entry Point Line 2 DUP (320-76069-2) and Entry Point Line 2 FB (320-76069-3). Thus, the MB, LCS and LCSD also contain trizma. 3535_PFC Aqueous preparation batch 320-506141

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-506141. 3535_PFC 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: 320-76069-1

Client Sample ID: Entry Point Line 2 — Lab Sample ID: 320-76069-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.6	J	4.7	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.1	J	1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.37	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.90	J	1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.25	J	1.9	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.0		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	1.3	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.6		1.9	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.9	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Entry Point Line 2 DUP — Lab Sample ID: 320-76069-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.8	J	4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.63	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.1	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.91	J	1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.8		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	1.2	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.8		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.4	J	1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Entry Point Line 2 FB — Lab Sample ID: 320-76069-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2

Date Collected: 07/12/21 08:45
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-1

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**	4.7	2.2	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorohexanoic acid (PFHxA)	**1.1**	**J**	1.9	0.54	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoroheptanoic acid (PFHpA)	**0.37**	**J**	1.9	0.23	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorooctanoic acid (PFOA)	**0.90**	**J**	1.9	0.79	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorononanoic acid (PFNA)	**0.25**	**J**	1.9	0.25	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.83		1.9	0.83	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.88		1.9	0.88	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorobutanesulfonic acid (PFBS)	**2.0**		1.9	0.19	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoropentanesulfonic acid (PFPeS)	**1.3**	**J**	1.9	0.28	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorohexanesulfonic acid (PFHxS)	**3.6**		1.9	0.53	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorooctanesulfonic acid (PFOS)	**2.0**		1.9	0.51	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		07/13/21 11:34	07/13/21 17:44	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		07/13/21 11:34	07/13/21 17:44	1
NEtFOSA	<0.81		1.9	0.81	ng/L		07/13/21 11:34	07/13/21 17:44	1
NMeFOSA	<0.40		1.9	0.40	ng/L		07/13/21 11:34	07/13/21 17:44	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		07/13/21 11:34	07/13/21 17:44	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		07/13/21 11:34	07/13/21 17:44	1
NMeFOSE	<1.3		3.7	1.3	ng/L		07/13/21 11:34	07/13/21 17:44	1
NEtFOSE	<0.79		1.9	0.79	ng/L		07/13/21 11:34	07/13/21 17:44	1
4:2 FTS	<0.22		1.9	0.22	ng/L		07/13/21 11:34	07/13/21 17:44	1
6:2 FTS	<2.3		4.7	2.3	ng/L		07/13/21 11:34	07/13/21 17:44	1
8:2 FTS	<0.43		1.9	0.43	ng/L		07/13/21 11:34	07/13/21 17:44	1
10:2 FTS	<0.63		1.9	0.63	ng/L		07/13/21 11:34	07/13/21 17:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		07/13/21 11:34	07/13/21 17:44	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		07/13/21 11:34	07/13/21 17:44	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		07/13/21 11:34	07/13/21 17:44	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		07/13/21 11:34	07/13/21 17:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*56*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:44*	*1*
13C5 PFPeA	*70*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:44*	*1*
13C2 PFHxA	*72*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:44*	*1*
13C4 PFHpA	*75*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:44*	*1*
13C4 PFOA	*74*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:44*	*1*

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2
Date Collected: 07/12/21 08:45
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-1
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	79		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 PFDA	77		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 PFUnA	77		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 PFDoA	78		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 PFTeDA	75		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 PFHxDA	80		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C3 PFBS	85		25 - 150	07/13/21 11:34	07/13/21 17:44	1
18O2 PFHxS	75		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C4 PFOS	78		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C8 FOSA	76		10 - 150	07/13/21 11:34	07/13/21 17:44	1
d3-NMeFOSAA	66		25 - 150	07/13/21 11:34	07/13/21 17:44	1
d5-NEtFOSAA	69		25 - 150	07/13/21 11:34	07/13/21 17:44	1
d-N-MeFOSA-M	65		10 - 150	07/13/21 11:34	07/13/21 17:44	1
d-N-EtFOSA-M	62		10 - 150	07/13/21 11:34	07/13/21 17:44	1
d7-N-MeFOSE-M	60		10 - 150	07/13/21 11:34	07/13/21 17:44	1
d9-N-EtFOSE-M	62		10 - 150	07/13/21 11:34	07/13/21 17:44	1
M2-4:2 FTS	90		25 - 150	07/13/21 11:34	07/13/21 17:44	1
M2-6:2 FTS	87		25 - 150	07/13/21 11:34	07/13/21 17:44	1
M2-8:2 FTS	83		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C3 HFPO-DA	74		25 - 150	07/13/21 11:34	07/13/21 17:44	1
13C2 10:2 FTS	87		25 - 150	07/13/21 11:34	07/13/21 17:44	1

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2 DUP

Date Collected: 07/12/21 08:47
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.8**	**J**	4.6	2.2	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoropentanoic acid (PFPeA)	**0.63**	**J**	1.8	0.45	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorohexanoic acid (PFHxA)	**1.1**	**J**	1.8	0.53	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorooctanoic acid (PFOA)	**0.91**	**J**	1.8	0.77	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.86		1.8	0.86	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorobutanesulfonic acid (PFBS)	**1.8**		1.8	0.18	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoropentanesulfonic acid (PFPeS)	**1.2**	**J**	1.8	0.27	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorohexanesulfonic acid (PFHxS)	**3.8**		1.8	0.52	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorooctanesulfonic acid (PFOS)	**1.4**	**J**	1.8	0.49	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		07/13/21 11:34	07/14/21 07:05	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		07/13/21 11:34	07/14/21 07:05	1
NEtFOSA	<0.79		1.8	0.79	ng/L		07/13/21 11:34	07/14/21 07:05	1
NMeFOSA	<0.39		1.8	0.39	ng/L		07/13/21 11:34	07/14/21 07:05	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		07/13/21 11:34	07/14/21 07:05	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		07/13/21 11:34	07/14/21 07:05	1
NMeFOSE	<1.3		3.6	1.3	ng/L		07/13/21 11:34	07/14/21 07:05	1
NEtFOSE	<0.77		1.8	0.77	ng/L		07/13/21 11:34	07/14/21 07:05	1
4:2 FTS	<0.22		1.8	0.22	ng/L		07/13/21 11:34	07/14/21 07:05	1
6:2 FTS	<2.3		4.6	2.3	ng/L		07/13/21 11:34	07/14/21 07:05	1
8:2 FTS	<0.42		1.8	0.42	ng/L		07/13/21 11:34	07/14/21 07:05	1
10:2 FTS	<0.61		1.8	0.61	ng/L		07/13/21 11:34	07/14/21 07:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		07/13/21 11:34	07/14/21 07:05	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		07/13/21 11:34	07/14/21 07:05	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		07/13/21 11:34	07/14/21 07:05	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		07/13/21 11:34	07/14/21 07:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*79*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:05*	*1*
13C5 PFPeA	*51*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:05*	*1*
13C2 PFHxA	*94*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:05*	*1*
13C4 PFHpA	*79*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:05*	*1*
13C4 PFOA	*98*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:05*	*1*

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2 DUP

Date Collected: 07/12/21 08:47
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-2

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	96		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 PFDA	116		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 PFUnA	104		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 PFDoA	108		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 PFTeDA	116		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 PFHxDA	143		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C3 PFBS	89		25 - 150	07/13/21 11:34	07/14/21 07:05	1
18O2 PFHxS	87		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C4 PFOS	109		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C8 FOSA	108		10 - 150	07/13/21 11:34	07/14/21 07:05	1
d3-NMeFOSAA	100		25 - 150	07/13/21 11:34	07/14/21 07:05	1
d5-NEtFOSAA	104		25 - 150	07/13/21 11:34	07/14/21 07:05	1
d-N-MeFOSA-M	96		10 - 150	07/13/21 11:34	07/14/21 07:05	1
d-N-EtFOSA-M	97		10 - 150	07/13/21 11:34	07/14/21 07:05	1
d7-N-MeFOSE-M	86		10 - 150	07/13/21 11:34	07/14/21 07:05	1
d9-N-EtFOSE-M	96		10 - 150	07/13/21 11:34	07/14/21 07:05	1
M2-4:2 FTS	113		25 - 150	07/13/21 11:34	07/14/21 07:05	1
M2-6:2 FTS	102		25 - 150	07/13/21 11:34	07/14/21 07:05	1
M2-8:2 FTS	146		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C3 HFPO-DA	89		25 - 150	07/13/21 11:34	07/14/21 07:05	1
13C2 10:2 FTS	129		25 - 150	07/13/21 11:34	07/14/21 07:05	1

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2 FB

Date Collected: 07/12/21 08:49
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-3

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		07/13/21 11:34	07/14/21 07:14	1
Perfluoropentanoic acid (PFPeA)	<0.43		1.7	0.43	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorohexanoic acid (PFHxA)	<0.51		1.7	0.51	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.7	0.22	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorooctanoic acid (PFOA)	<0.74		1.7	0.74	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorononanoic acid (PFNA)	<0.24		1.7	0.24	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoroundecanoic acid (PFUnA)	<0.96		1.7	0.96	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.7	0.48	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.7	0.64	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.78		1.7	0.78	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.82		1.7	0.82	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorobutanesulfonic acid (PFBS)	<0.17		1.7	0.17	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.7	0.50	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.7	0.17	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.7	0.47	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.7	0.85	ng/L		07/13/21 11:34	07/14/21 07:14	1
Perfluorooctanesulfonamide (FOSA)	<0.85		1.7	0.85	ng/L		07/13/21 11:34	07/14/21 07:14	1
NEtFOSA	<0.76		1.7	0.76	ng/L		07/13/21 11:34	07/14/21 07:14	1
NMeFOSA	<0.37		1.7	0.37	ng/L		07/13/21 11:34	07/14/21 07:14	1
NMeFOSAA	<1.0		4.4	1.0	ng/L		07/13/21 11:34	07/14/21 07:14	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		07/13/21 11:34	07/14/21 07:14	1
NMeFOSE	<1.2		3.5	1.2	ng/L		07/13/21 11:34	07/14/21 07:14	1
NEtFOSE	<0.74		1.7	0.74	ng/L		07/13/21 11:34	07/14/21 07:14	1
4:2 FTS	<0.21		1.7	0.21	ng/L		07/13/21 11:34	07/14/21 07:14	1
6:2 FTS	<2.2		4.4	2.2	ng/L		07/13/21 11:34	07/14/21 07:14	1
8:2 FTS	<0.40		1.7	0.40	ng/L		07/13/21 11:34	07/14/21 07:14	1
10:2 FTS	<0.58		1.7	0.58	ng/L		07/13/21 11:34	07/14/21 07:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.7	0.35	ng/L		07/13/21 11:34	07/14/21 07:14	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		07/13/21 11:34	07/14/21 07:14	1
9Cl-PF3ONS	<0.21		1.7	0.21	ng/L		07/13/21 11:34	07/14/21 07:14	1
11Cl-PF3OUdS	<0.28		1.7	0.28	ng/L		07/13/21 11:34	07/14/21 07:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C5 PFPeA	*86*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C2 PFHxA	*101*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C4 PFHpA	*99*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C4 PFOA	*95*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C5 PFNA	*99*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C2 PFDA	*98*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*
13C2 PFUnA	*101*		*25 - 150*	*07/13/21 11:34*	*07/14/21 07:14*	*1*

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2 FB
Date Collected: 07/12/21 08:49
Date Received: 07/13/21 09:45

Lab Sample ID: 320-76069-3
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	98		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C2 PFTeDA	102		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C2 PFHxDA	109		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C3 PFBS	104		25 - 150	07/13/21 11:34	07/14/21 07:14	1
18O2 PFHxS	92		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C4 PFOS	96		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C8 FOSA	100		10 - 150	07/13/21 11:34	07/14/21 07:14	1
d3-NMeFOSAA	98		25 - 150	07/13/21 11:34	07/14/21 07:14	1
d5-NEtFOSAA	98		25 - 150	07/13/21 11:34	07/14/21 07:14	1
d-N-MeFOSA-M	87		10 - 150	07/13/21 11:34	07/14/21 07:14	1
d-N-EtFOSA-M	84		10 - 150	07/13/21 11:34	07/14/21 07:14	1
d7-N-MeFOSE-M	92		10 - 150	07/13/21 11:34	07/14/21 07:14	1
d9-N-EtFOSE-M	95		10 - 150	07/13/21 11:34	07/14/21 07:14	1
M2-4:2 FTS	92		25 - 150	07/13/21 11:34	07/14/21 07:14	1
M2-6:2 FTS	99		25 - 150	07/13/21 11:34	07/14/21 07:14	1
M2-8:2 FTS	106		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C3 HFPO-DA	99		25 - 150	07/13/21 11:34	07/14/21 07:14	1
13C2 10:2 FTS	107		25 - 150	07/13/21 11:34	07/14/21 07:14	1

Isotope Dilution Summary

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

Job ID: 320-76069-1

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)
320-76069-1	Entry Point Line 2	56	70	72	75	74	79	77	77
320-76069-2	Entry Point Line 2 DUP	79	51	94	79	98	96	116	104
320-76069-3	Entry Point Line 2 FB	94	86	101	99	95	99	98	101
LCS 320-506141/2-A	Lab Control Sample	79	76	75	79	78	80	79	77
LCSD 320-506141/3-A	Lab Control Sample Dup	79	78	77	81	77	79	78	83
MB 320-506141/1-A	Method Blank	75	76	72	78	75	81	79	76

		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)
320-76069-1	Entry Point Line 2	78	75	80	85	75	78	76	66
320-76069-2	Entry Point Line 2 DUP	108	116	143	89	87	109	108	100
320-76069-3	Entry Point Line 2 FB	98	102	109	104	92	96	100	98
LCS 320-506141/2-A	Lab Control Sample	80	74	76	85	77	82	76	71
LCSD 320-506141/3-A	Lab Control Sample Dup	82	75	80	88	80	80	78	71
MB 320-506141/1-A	Method Blank	76	74	79	84	75	75	75	69

		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)
320-76069-1	Entry Point Line 2	69	65	62	60	62	90	87	83
320-76069-2	Entry Point Line 2 DUP	104	96	97	86	96	113	102	146
320-76069-3	Entry Point Line 2 FB	98	87	84	92	95	92	99	106
LCS 320-506141/2-A	Lab Control Sample	74	67	67	63	71	73	79	84
LCSD 320-506141/3-A	Lab Control Sample Dup	71	71	70	65	71	76	81	84
MB 320-506141/1-A	Method Blank	72	66	64	54	62	75	80	75

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		HFPODA	M102FTS
Lab Sample ID	Client Sample ID	(25-150)	(25-150)
320-76069-1	Entry Point Line 2	74	87
320-76069-2	Entry Point Line 2 DUP	89	129
320-76069-3	Entry Point Line 2 FB	99	107
LCS 320-506141/2-A	Lab Control Sample	78	86
LCSD 320-506141/3-A	Lab Control Sample Dup	80	90
MB 320-506141/1-A	Method Blank	76	85

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

Isotope Dilution Summary

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

Job ID: 320-76069-1

PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
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

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-506141/1-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506141

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		07/13/21 11:34	07/13/21 17:16	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		07/13/21 11:34	07/13/21 17:16	1
NEtFOSA	<0.87		2.0	0.87	ng/L		07/13/21 11:34	07/13/21 17:16	1
NMeFOSA	<0.43		2.0	0.43	ng/L		07/13/21 11:34	07/13/21 17:16	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		07/13/21 11:34	07/13/21 17:16	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		07/13/21 11:34	07/13/21 17:16	1
NMeFOSE	<1.4		4.0	1.4	ng/L		07/13/21 11:34	07/13/21 17:16	1
NEtFOSE	<0.85		2.0	0.85	ng/L		07/13/21 11:34	07/13/21 17:16	1
4:2 FTS	<0.24		2.0	0.24	ng/L		07/13/21 11:34	07/13/21 17:16	1
6:2 FTS	<2.5		5.0	2.5	ng/L		07/13/21 11:34	07/13/21 17:16	1
8:2 FTS	<0.46		2.0	0.46	ng/L		07/13/21 11:34	07/13/21 17:16	1
10:2 FTS	<0.67		2.0	0.67	ng/L		07/13/21 11:34	07/13/21 17:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		07/13/21 11:34	07/13/21 17:16	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		07/13/21 11:34	07/13/21 17:16	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		07/13/21 11:34	07/13/21 17:16	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		07/13/21 11:34	07/13/21 17:16	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*75*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*
13C5 PFPeA	*76*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*
13C2 PFHxA	*72*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*
13C4 PFHpA	*78*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*
13C4 PFOA	*75*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*
13C5 PFNA	*81*		*25 - 150*	*07/13/21 11:34*	*07/13/21 17:16*	*1*

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

Lab Sample ID: MB 320-506141/1-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506141

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	79		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C2 PFUnA	76		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C2 PFDoA	76		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C2 PFTeDA	74		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C2 PFHxDA	79		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C3 PFBS	84		25 - 150	07/13/21 11:34	07/13/21 17:16	1
18O2 PFHxS	75		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C4 PFOS	75		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C8 FOSA	75		10 - 150	07/13/21 11:34	07/13/21 17:16	1
d3-NMeFOSAA	69		25 - 150	07/13/21 11:34	07/13/21 17:16	1
d5-NEtFOSAA	72		25 - 150	07/13/21 11:34	07/13/21 17:16	1
d-N-MeFOSA-M	66		10 - 150	07/13/21 11:34	07/13/21 17:16	1
d-N-EtFOSA-M	64		10 - 150	07/13/21 11:34	07/13/21 17:16	1
d7-N-MeFOSE-M	54		10 - 150	07/13/21 11:34	07/13/21 17:16	1
d9-N-EtFOSE-M	62		10 - 150	07/13/21 11:34	07/13/21 17:16	1
M2-4:2 FTS	75		25 - 150	07/13/21 11:34	07/13/21 17:16	1
M2-6:2 FTS	80		25 - 150	07/13/21 11:34	07/13/21 17:16	1
M2-8:2 FTS	75		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C3 HFPO-DA	76		25 - 150	07/13/21 11:34	07/13/21 17:16	1
13C2 10:2 FTS	85		25 - 150	07/13/21 11:34	07/13/21 17:16	1

Lab Sample ID: LCS 320-506141/2-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	39.3		ng/L		98	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	44.0		ng/L		110	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	42.8		ng/L		107	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	42.0		ng/L		105	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	43.1		ng/L		108	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.0		ng/L		102	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	39.3		ng/L		98	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	45.7		ng/L		114	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	41.4		ng/L		103	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	38.0		ng/L		95	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	44.5		ng/L		111	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	51.1		ng/L		128	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	39.2		ng/L		98	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	34.1		ng/L		96	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	33.6		ng/L		89	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.5		ng/L		103	60 - 135

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

Lab Sample ID: LCS 320-506141/2-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.0		ng/L		97	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	37.0		ng/L		100	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	36.8		ng/L		96	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	37.1		ng/L		96	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.6		ng/L		97	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	40.8		ng/L		102	60 - 135
NEtFOSA	40.0	41.1		ng/L		103	60 - 135
NMeFOSA	40.0	41.4		ng/L		103	60 - 135
NMeFOSAA	40.0	39.9		ng/L		100	60 - 135
NEtFOSAA	40.0	43.9		ng/L		110	60 - 135
NMeFOSE	40.0	46.2		ng/L		115	60 - 135
NEtFOSE	40.0	42.0		ng/L		105	60 - 135
4:2 FTS	37.4	33.1		ng/L		89	60 - 135
6:2 FTS	37.9	39.3		ng/L		104	60 - 135
8:2 FTS	38.3	41.9		ng/L		109	60 - 135
10:2 FTS	38.6	32.8		ng/L		85	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	37.0		ng/L		98	60 - 135
HFPO-DA (GenX)	40.0	43.3		ng/L		108	60 - 135
9Cl-PF3ONS	37.3	37.0		ng/L		99	60 - 135
11Cl-PF3OUdS	37.7	32.4		ng/L		86	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*79*		*25 - 150*
13C5 PFPeA	*76*		*25 - 150*
13C2 PFHxA	*75*		*25 - 150*
13C4 PFHpA	*79*		*25 - 150*
13C4 PFOA	*78*		*25 - 150*
13C5 PFNA	*80*		*25 - 150*
13C2 PFDA	*79*		*25 - 150*
13C2 PFUnA	*77*		*25 - 150*
13C2 PFDoA	*80*		*25 - 150*
13C2 PFTeDA	*74*		*25 - 150*
13C2 PFHxDA	*76*		*25 - 150*
13C3 PFBS	*85*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*82*		*25 - 150*
13C8 FOSA	*76*		*10 - 150*
d3-NMeFOSAA	*71*		*25 - 150*
d5-NEtFOSAA	*74*		*25 - 150*
d-N-MeFOSA-M	*67*		*10 - 150*
d-N-EtFOSA-M	*67*		*10 - 150*
d7-N-MeFOSE-M	*63*		*10 - 150*
d9-N-EtFOSE-M	*71*		*10 - 150*

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

Lab Sample ID: LCS 320-506141/2-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506141

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-4:2 FTS	*73*		*25 - 150*
M2-6:2 FTS	*79*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*
13C3 HFPO-DA	*78*		*25 - 150*
13C2 10:2 FTS	*86*		*25 - 150*

Lab Sample ID: LCSD 320-506141/3-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 506141

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	39.7		ng/L		99	60 - 135	1	30
Perfluoropentanoic acid (PFPeA)			40.0	42.2		ng/L		106	60 - 135	4	30
Perfluorohexanoic acid (PFHxA)			40.0	40.9		ng/L		102	60 - 135	4	30
Perfluoroheptanoic acid (PFHpA)			40.0	40.3		ng/L		101	60 - 135	4	30
Perfluorooctanoic acid (PFOA)			40.0	44.3		ng/L		111	60 - 135	3	30
Perfluorononanoic acid (PFNA)			40.0	42.3		ng/L		106	60 - 135	3	30
Perfluorodecanoic acid (PFDA)			40.0	42.4		ng/L		106	60 - 135	7	30
Perfluoroundecanoic acid (PFUnA)			40.0	41.1		ng/L		103	60 - 135	11	30
Perfluorododecanoic acid (PFDoA)			40.0	39.8		ng/L		99	60 - 135	4	30
Perfluorotridecanoic acid (PFTrDA)			40.0	40.1		ng/L		100	60 - 135	5	30
Perfluorotetradecanoic acid (PFTeA)			40.0	37.9		ng/L		95	60 - 135	16	30
Perfluoro-n-hexadecanoic acid (PFHxDA)			40.0	40.5		ng/L		101	60 - 135	23	30
Perfluoro-n-octadecanoic acid (PFODA)			40.0	31.2		ng/L		78	60 - 135	23	30
Perfluorobutanesulfonic acid (PFBS)			35.4	33.9		ng/L		96	60 - 135	1	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	34.7		ng/L		93	60 - 135	3	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	36.9		ng/L		101	60 - 135	2	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	40.1		ng/L		105	60 - 135	8	30
Perfluorooctanesulfonic acid (PFOS)			37.1	39.6		ng/L		107	60 - 135	7	30
Perfluorononanesulfonic acid (PFNS)			38.4	39.4		ng/L		103	60 - 135	7	30
Perfluorodecanesulfonic acid (PFDS)			38.6	38.9		ng/L		101	60 - 135	5	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	40.6		ng/L		105	60 - 135	8	30
Perfluorooctanesulfonamide (FOSA)			40.0	40.8		ng/L		102	60 - 135	0	30
NEtFOSA			40.0	42.6		ng/L		106	60 - 135	4	30
NMeFOSA			40.0	41.0		ng/L		103	60 - 135	1	30
NMeFOSAA			40.0	42.6		ng/L		106	60 - 135	6	30
NEtFOSAA			40.0	44.3		ng/L		111	60 - 135	1	30
NMeFOSE			40.0	43.9		ng/L		110	60 - 135	5	30

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

Lab Sample ID: LCSD 320-506141/3-A
Matrix: Water
Analysis Batch: 506240

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 506141

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NEtFOSE			40.0	41.6		ng/L		104	60 - 135	1	30
4:2 FTS			37.4	34.1		ng/L		91	60 - 135	3	30
6:2 FTS			37.9	39.1		ng/L		103	60 - 135	1	30
8:2 FTS			38.3	41.3		ng/L		108	60 - 135	1	30
10:2 FTS			38.6	32.0		ng/L		83	60 - 135	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.7	37.5		ng/L		100	60 - 135	1	30
HFPO-DA (GenX)			40.0	42.1		ng/L		105	60 - 135	3	30
9Cl-PF3ONS			37.3	39.3		ng/L		105	60 - 135	6	30
11Cl-PF3OUdS			37.7	34.7		ng/L		92	60 - 135	7	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*79*		*25 - 150*
13C5 PFPeA	*78*		*25 - 150*
13C2 PFHxA	*77*		*25 - 150*
13C4 PFHpA	*81*		*25 - 150*
13C4 PFOA	*77*		*25 - 150*
13C5 PFNA	*79*		*25 - 150*
13C2 PFDA	*78*		*25 - 150*
13C2 PFUnA	*83*		*25 - 150*
13C2 PFDoA	*82*		*25 - 150*
13C2 PFTeDA	*75*		*25 - 150*
13C2 PFHxDA	*80*		*25 - 150*
13C3 PFBS	*88*		*25 - 150*
18O2 PFHxS	*80*		*25 - 150*
13C4 PFOS	*80*		*25 - 150*
13C8 FOSA	*78*		*10 - 150*
d3-NMeFOSAA	*71*		*25 - 150*
d5-NEtFOSAA	*71*		*25 - 150*
d-N-MeFOSA-M	*71*		*10 - 150*
d-N-EtFOSA-M	*70*		*10 - 150*
d7-N-MeFOSE-M	*65*		*10 - 150*
d9-N-EtFOSE-M	*71*		*10 - 150*
M2-4:2 FTS	*76*		*25 - 150*
M2-6:2 FTS	*81*		*25 - 150*
M2-8:2 FTS	*84*		*25 - 150*
13C3 HFPO-DA	*80*		*25 - 150*
13C2 10:2 FTS	*90*		*25 - 150*

QC Association Summary

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

Job ID: 320-76069-1

LCMS

Prep Batch: 506141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76069-1	Entry Point Line 2	Total/NA	Water	3535	
320-76069-2	Entry Point Line 2 DUP	Total/NA	Water	3535	
320-76069-3	Entry Point Line 2 FB	Total/NA	Water	3535	
MB 320-506141/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-506141/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-506141/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 506240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76069-1	Entry Point Line 2	Total/NA	Water	537 (modified)	506141
MB 320-506141/1-A	Method Blank	Total/NA	Water	537 (modified)	506141
LCS 320-506141/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	506141
LCSD 320-506141/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	506141

Analysis Batch: 506431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76069-2	Entry Point Line 2 DUP	Total/NA	Water	537 (modified)	506141
320-76069-3	Entry Point Line 2 FB	Total/NA	Water	537 (modified)	506141

Lab Chronicle

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

Job ID: 320-76069-1

Client Sample ID: Entry Point Line 2

Lab Sample ID: 320-76069-1

Date Collected: 07/12/21 08:45

Matrix: Water

Date Received: 07/13/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			267.3 mL	10.0 mL	506141	07/13/21 11:34	LN	TAL SAC
Total/NA	Analysis	537 (modified)		1			506240	07/13/21 17:44	K1S	TAL SAC

Client Sample ID: Entry Point Line 2 DUP

Lab Sample ID: 320-76069-2

Date Collected: 07/12/21 08:47

Matrix: Water

Date Received: 07/13/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.7 mL	10.0 mL	506141	07/13/21 11:34	LN	TAL SAC
Total/NA	Analysis	537 (modified)		1			506431	07/14/21 07:05	JY1	TAL SAC

Client Sample ID: Entry Point Line 2 FB

Lab Sample ID: 320-76069-3

Date Collected: 07/12/21 08:49

Matrix: Water

Date Received: 07/13/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			286.8 mL	10.0 mL	506141	07/13/21 11:34	LN	TAL SAC
Total/NA	Analysis	537 (modified)		1			506431	07/14/21 07:14	JY1	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, 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: 320-76069-1

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-21

Method Summary

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

Job ID: 320-76069-1

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 TestAmerica, 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: 320-76069-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-76069-1	Entry Point Line 2	Water	07/12/21 08:45	07/13/21 09:45	
320-76069-2	Entry Point Line 2 DUP	Water	07/12/21 08:47	07/13/21 09:45	
320-76069-3	Entry Point Line 2 FB	Water	07/12/21 08:49	07/13/21 09:45	

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: 320-41250-10066.1
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: 203 S Farwell	Due Date Requested: ASAP - please expedite. Thank you!
City: Eau Claire	TAT Requested (days):
State, Zip: WI, 54701	Compliance Project: Δ Yes Δ No
Phone:	PO #: Purchase Order Requested
Email: Tyler.Fadness@EauclaireWi.Gov	WO #:
Project Name: PFAS Testing	Project #: 32012617
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 - PFAS, Extended List (36 Analytes)	PFC_IDA_WI - PFAS, Standard List (36 Analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Entry Point Line 2	7/12/21	0845	G	Water			X			
Entry Point Line 2 DUP	7/12/21	0847	G	Water			X			
Entry Point Line 2 FB	7/12/21	0849	G	Water			X			
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

320-76069 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: Tyler Fadness	Date/Time: 7/12/21 1000	Company: City of Eau Claire	Received by:	Date/Time: 7/13/21 945	Company: ETAS
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.: 1445407	Cooler Temperature(s) °C and Other Remarks: 0.4

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 320-76069-1

Login Number: 76069
List Number: 1
Creator: Fredrick, Sandie

List Source: Eurofins TestAmerica, Sacramento

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	1445467
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	
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	