

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75783-2
Client Project/Site: PFAS Testing

For:

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

Attn: Ty Fadness



Authorized for release by:
7/9/2021 10:48:42 AM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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



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Definitions/Glossary

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

Job ID: 320-75783-2

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

Case Narrative

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

Job ID: 320-75783-2

Job ID: 320-75783-2

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75783-2

Comments

No additional comments.

Receipt

The samples were received on 7/7/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.7° C, 3.2° C and 3.8° 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: Raw Entry to WTP (320-75783-33) and Raw Entry to WTP FB (320-75783-34). Thus, the MB, LCS and LCSD also contain trizma. 3535_PFC Aqueous preparation batch 320-505028

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-505028. 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: 320-75783-2

Client Sample ID: Raw Entry to WTP

Lab Sample ID: 320-75783-33

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.2	J	4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.4		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.5		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.4	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.8		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.3		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	3.2		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	28		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.57	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.7		1.8	0.49	ng/L	1		537 (modified)	Total/NA
6:2 FTS	3.4	J	4.5	2.3	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Raw Entry to WTP FB

Lab Sample ID: 320-75783-34

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-75783-2

Client Sample ID: Raw Entry to WTP

Lab Sample ID: 320-75783-33

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.2	J	4.5	2.2	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoropentanoic acid (PFPeA)	5.4		1.8	0.44	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorohexanoic acid (PFHxA)	5.5		1.8	0.52	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoroheptanoic acid (PFHpA)	1.4	J	1.8	0.23	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorooctanoic acid (PFOA)	2.8		1.8	0.77	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.80		1.8	0.80	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.85		1.8	0.85	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorobutanesulfonic acid (PFBS)	3.3		1.8	0.18	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoropentanesulfonic acid (PFPeS)	3.2		1.8	0.27	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorohexanesulfonic acid (PFHxS)	28		1.8	0.51	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.57	J	1.8	0.17	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorooctanesulfonic acid (PFOS)	9.7		1.8	0.49	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		07/08/21 11:53	07/08/21 17:37	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		07/08/21 11:53	07/08/21 17:37	1
NEtFOSA	<0.78		1.8	0.78	ng/L		07/08/21 11:53	07/08/21 17:37	1
NMeFOSA	<0.39		1.8	0.39	ng/L		07/08/21 11:53	07/08/21 17:37	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		07/08/21 11:53	07/08/21 17:37	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		07/08/21 11:53	07/08/21 17:37	1
NMeFOSE	<1.3		3.6	1.3	ng/L		07/08/21 11:53	07/08/21 17:37	1
NEtFOSE	<0.77		1.8	0.77	ng/L		07/08/21 11:53	07/08/21 17:37	1
4:2 FTS	<0.22		1.8	0.22	ng/L		07/08/21 11:53	07/08/21 17:37	1
6:2 FTS	3.4	J	4.5	2.3	ng/L		07/08/21 11:53	07/08/21 17:37	1
8:2 FTS	<0.41		1.8	0.41	ng/L		07/08/21 11:53	07/08/21 17:37	1
10:2 FTS	<0.60		1.8	0.60	ng/L		07/08/21 11:53	07/08/21 17:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		07/08/21 11:53	07/08/21 17:37	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		07/08/21 11:53	07/08/21 17:37	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		07/08/21 11:53	07/08/21 17:37	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		07/08/21 11:53	07/08/21 17:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	64		25 - 150				07/08/21 11:53	07/08/21 17:37	1
13C5 PFPeA	48		25 - 150				07/08/21 11:53	07/08/21 17:37	1
13C2 PFHxA	73		25 - 150				07/08/21 11:53	07/08/21 17:37	1
13C4 PFHpA	61		25 - 150				07/08/21 11:53	07/08/21 17:37	1
13C4 PFOA	74		25 - 150				07/08/21 11:53	07/08/21 17:37	1

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-75783-2

Client Sample ID: Raw Entry to WTP

Lab Sample ID: 320-75783-33

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

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

<u>Isotope Dilution</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
13C5 PFNA	69		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 PFDA	80		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 PFUnA	78		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 PFDoA	86		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 PFTeDA	91		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 PFHxDA	112		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C3 PFBS	76		25 - 150	07/08/21 11:53	07/08/21 17:37	1
18O2 PFHxS	75		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C4 PFOS	81		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C8 FOSA	84		10 - 150	07/08/21 11:53	07/08/21 17:37	1
d3-NMeFOSAA	72		25 - 150	07/08/21 11:53	07/08/21 17:37	1
d5-NEtFOSAA	76		25 - 150	07/08/21 11:53	07/08/21 17:37	1
d-N-MeFOSA-M	70		10 - 150	07/08/21 11:53	07/08/21 17:37	1
d-N-EtFOSA-M	67		10 - 150	07/08/21 11:53	07/08/21 17:37	1
d7-N-MeFOSE-M	64		10 - 150	07/08/21 11:53	07/08/21 17:37	1
d9-N-EtFOSE-M	62		10 - 150	07/08/21 11:53	07/08/21 17:37	1
M2-4:2 FTS	82		25 - 150	07/08/21 11:53	07/08/21 17:37	1
M2-6:2 FTS	67		25 - 150	07/08/21 11:53	07/08/21 17:37	1
M2-8:2 FTS	72		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C3 HFPO-DA	69		25 - 150	07/08/21 11:53	07/08/21 17:37	1
13C2 10:2 FTS	89		25 - 150	07/08/21 11:53	07/08/21 17:37	1

Client Sample Results

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

Job ID: 320-75783-2

Client Sample ID: Raw Entry to WTP FB

Lab Sample ID: 320-75783-34

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.5	2.1	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.8	0.22	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorooctanoic acid (PFOA)	<0.76		1.8	0.76	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.80		1.8	0.80	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.84		1.8	0.84	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		07/08/21 11:53	07/08/21 17:47	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		07/08/21 11:53	07/08/21 17:47	1
NEtFOSA	<0.78		1.8	0.78	ng/L		07/08/21 11:53	07/08/21 17:47	1
NMeFOSA	<0.38		1.8	0.38	ng/L		07/08/21 11:53	07/08/21 17:47	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		07/08/21 11:53	07/08/21 17:47	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		07/08/21 11:53	07/08/21 17:47	1
NMeFOSE	<1.3		3.6	1.3	ng/L		07/08/21 11:53	07/08/21 17:47	1
NEtFOSE	<0.76		1.8	0.76	ng/L		07/08/21 11:53	07/08/21 17:47	1
4:2 FTS	<0.21		1.8	0.21	ng/L		07/08/21 11:53	07/08/21 17:47	1
6:2 FTS	<2.2		4.5	2.2	ng/L		07/08/21 11:53	07/08/21 17:47	1
8:2 FTS	<0.41		1.8	0.41	ng/L		07/08/21 11:53	07/08/21 17:47	1
10:2 FTS	<0.60		1.8	0.60	ng/L		07/08/21 11:53	07/08/21 17:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		07/08/21 11:53	07/08/21 17:47	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		07/08/21 11:53	07/08/21 17:47	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		07/08/21 11:53	07/08/21 17:47	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		07/08/21 11:53	07/08/21 17:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	73		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C5 PFPeA	64		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C2 PFHxA	68		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C4 PFHpA	71		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C4 PFOA	72		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C5 PFNA	70		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C2 PFDA	74		25 - 150				07/08/21 11:53	07/08/21 17:47	1
13C2 PFUnA	66		25 - 150				07/08/21 11:53	07/08/21 17:47	1

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-75783-2

Client Sample ID: Raw Entry to WTP FB

Lab Sample ID: 320-75783-34

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDoA	82		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C2 PFTeDA	85		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C2 PFHxDA	89		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C3 PFBS	82		25 - 150	07/08/21 11:53	07/08/21 17:47	1
18O2 PFHxS	69		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C4 PFOS	75		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C8 FOSA	73		10 - 150	07/08/21 11:53	07/08/21 17:47	1
d3-NMeFOSAA	65		25 - 150	07/08/21 11:53	07/08/21 17:47	1
d5-NEtFOSAA	69		25 - 150	07/08/21 11:53	07/08/21 17:47	1
d-N-MeFOSA-M	61		10 - 150	07/08/21 11:53	07/08/21 17:47	1
d-N-EtFOSA-M	60		10 - 150	07/08/21 11:53	07/08/21 17:47	1
d7-N-MeFOSE-M	63		10 - 150	07/08/21 11:53	07/08/21 17:47	1
d9-N-EtFOSE-M	63		10 - 150	07/08/21 11:53	07/08/21 17:47	1
M2-4:2 FTS	58		25 - 150	07/08/21 11:53	07/08/21 17:47	1
M2-6:2 FTS	59		25 - 150	07/08/21 11:53	07/08/21 17:47	1
M2-8:2 FTS	76		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C3 HFPO-DA	68		25 - 150	07/08/21 11:53	07/08/21 17:47	1
13C2 10:2 FTS	79		25 - 150	07/08/21 11:53	07/08/21 17:47	1

Isotope Dilution Summary

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

Job ID: 320-75783-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFA (25-150)
320-75783-33	Raw Entry to WTP	64	48	73	61	74	69	80	78
320-75783-34	Raw Entry to WTP FB	73	64	68	71	72	70	74	66
LCS 320-505028/2-A	Lab Control Sample	73	71	73	77	75	74	73	72
LCSD 320-505028/3-A	Lab Control Sample Dup	78	77	73	78	75	75	75	77
MB 320-505028/1-A	Method Blank	78	74	74	76	79	78	78	76

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)
320-75783-33	Raw Entry to WTP	86	91	112	76	75	81	84	72
320-75783-34	Raw Entry to WTP FB	82	85	89	82	69	75	73	65
LCS 320-505028/2-A	Lab Control Sample	84	86	90	82	76	77	75	75
LCSD 320-505028/3-A	Lab Control Sample Dup	82	89	89	86	76	83	77	72
MB 320-505028/1-A	Method Blank	86	84	89	89	80	74	79	80

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
320-75783-33	Raw Entry to WTP	76	70	67	64	62	82	67	72
320-75783-34	Raw Entry to WTP FB	69	61	60	63	63	58	59	76
LCS 320-505028/2-A	Lab Control Sample	72	66	67	65	68	63	59	66
LCSD 320-505028/3-A	Lab Control Sample Dup	72	70	66	68	68	58	60	74
MB 320-505028/1-A	Method Blank	82	72	68	74	70	69	66	78

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
320-75783-33	Raw Entry to WTP	69	89
320-75783-34	Raw Entry to WTP FB	68	79
LCS 320-505028/2-A	Lab Control Sample	75	83
LCSD 320-505028/3-A	Lab Control Sample Dup	76	81
MB 320-505028/1-A	Method Blank	76	87

Surrogate Legend

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

Isotope Dilution Summary

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

Job ID: 320-75783-2

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

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QC Sample Results

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

Job ID: 320-75783-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-505028/1-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505028

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		07/08/21 11:53	07/08/21 17:09	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		07/08/21 11:53	07/08/21 17:09	1
NEtFOSA	<0.87		2.0	0.87	ng/L		07/08/21 11:53	07/08/21 17:09	1
NMeFOSA	<0.43		2.0	0.43	ng/L		07/08/21 11:53	07/08/21 17:09	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		07/08/21 11:53	07/08/21 17:09	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		07/08/21 11:53	07/08/21 17:09	1
NMeFOSE	<1.4		4.0	1.4	ng/L		07/08/21 11:53	07/08/21 17:09	1
NEtFOSE	<0.85		2.0	0.85	ng/L		07/08/21 11:53	07/08/21 17:09	1
4:2 FTS	<0.24		2.0	0.24	ng/L		07/08/21 11:53	07/08/21 17:09	1
6:2 FTS	<2.5		5.0	2.5	ng/L		07/08/21 11:53	07/08/21 17:09	1
8:2 FTS	<0.46		2.0	0.46	ng/L		07/08/21 11:53	07/08/21 17:09	1
10:2 FTS	<0.67		2.0	0.67	ng/L		07/08/21 11:53	07/08/21 17:09	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		07/08/21 11:53	07/08/21 17:09	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		07/08/21 11:53	07/08/21 17:09	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		07/08/21 11:53	07/08/21 17:09	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		07/08/21 11:53	07/08/21 17:09	1
Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
13C4 PFBA	78		25 - 150	07/08/21 11:53	07/08/21 17:09	1			
13C5 PFPeA	74		25 - 150	07/08/21 11:53	07/08/21 17:09	1			
13C2 PFHxA	74		25 - 150	07/08/21 11:53	07/08/21 17:09	1			
13C4 PFHpA	76		25 - 150	07/08/21 11:53	07/08/21 17:09	1			
13C4 PFOA	79		25 - 150	07/08/21 11:53	07/08/21 17:09	1			
13C5 PFNA	78		25 - 150	07/08/21 11:53	07/08/21 17:09	1			

Eurofins TestAmerica, Sacramento

QC Sample Results

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

Job ID: 320-75783-2

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

Lab Sample ID: MB 320-505028/1-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505028

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFDA	78		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C2 PFUnA	76		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C2 PFDoA	86		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C2 PFTeDA	84		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C2 PFHxDA	89		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C3 PFBS	89		25 - 150	07/08/21 11:53	07/08/21 17:09	1
18O2 PFHxS	80		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C4 PFOS	74		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C8 FOSA	79		10 - 150	07/08/21 11:53	07/08/21 17:09	1
d3-NMeFOSAA	80		25 - 150	07/08/21 11:53	07/08/21 17:09	1
d5-NEtFOSAA	82		25 - 150	07/08/21 11:53	07/08/21 17:09	1
d-N-MeFOSA-M	72		10 - 150	07/08/21 11:53	07/08/21 17:09	1
d-N-EtFOSA-M	68		10 - 150	07/08/21 11:53	07/08/21 17:09	1
d7-N-MeFOSE-M	74		10 - 150	07/08/21 11:53	07/08/21 17:09	1
d9-N-EtFOSE-M	70		10 - 150	07/08/21 11:53	07/08/21 17:09	1
M2-4:2 FTS	69		25 - 150	07/08/21 11:53	07/08/21 17:09	1
M2-6:2 FTS	66		25 - 150	07/08/21 11:53	07/08/21 17:09	1
M2-8:2 FTS	78		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C3 HFPO-DA	76		25 - 150	07/08/21 11:53	07/08/21 17:09	1
13C2 10:2 FTS	87		25 - 150	07/08/21 11:53	07/08/21 17:09	1

Lab Sample ID: LCS 320-505028/2-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Perfluoropentanoic acid (PFPeA)	40.0	42.8		ng/L		107	60 - 135	
Perfluorohexanoic acid (PFHxA)	40.0	41.2		ng/L		103	60 - 135	
Perfluoroheptanoic acid (PFHpA)	40.0	40.6		ng/L		101	60 - 135	
Perfluorooctanoic acid (PFOA)	40.0	40.1		ng/L		100	60 - 135	
Perfluorononanoic acid (PFNA)	40.0	42.5		ng/L		106	60 - 135	
Perfluorodecanoic acid (PFDA)	40.0	43.4		ng/L		109	60 - 135	
Perfluoroundecanoic acid (PFUnA)	40.0	45.1		ng/L		113	60 - 135	
Perfluorododecanoic acid (PFDoA)	40.0	40.5		ng/L		101	60 - 135	
Perfluorotridecanoic acid (PFTTrDA)	40.0	41.2		ng/L		103	60 - 135	
Perfluorotetradecanoic acid (PFTeA)	40.0	43.6		ng/L		109	60 - 135	
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	41.1		ng/L		103	60 - 135	
Perfluoro-n-octadecanoic acid (PFODA)	40.0	36.4		ng/L		91	60 - 135	
Perfluorobutanesulfonic acid (PFBS)	35.4	30.8		ng/L		87	60 - 135	
Perfluoropentanesulfonic acid (PFPeS)	37.5	32.9		ng/L		88	60 - 135	
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.8		ng/L		104	60 - 135	

Eurofins TestAmerica, Sacramento

QC Sample Results

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

Job ID: 320-75783-2

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

Lab Sample ID: LCS 320-505028/2-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.1		ng/L		103	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	35.6		ng/L		96	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	38.4		ng/L		100	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	36.9		ng/L		96	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	39.7		ng/L		102	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	36.9		ng/L		92	60 - 135
NEtFOSA	40.0	44.6		ng/L		112	60 - 135
NMeFOSA	40.0	42.8		ng/L		107	60 - 135
NMeFOSAA	40.0	39.6		ng/L		99	60 - 135
NEtFOSAA	40.0	44.4		ng/L		111	60 - 135
NMeFOSE	40.0	40.6		ng/L		102	60 - 135
NEtFOSE	40.0	41.8		ng/L		105	60 - 135
4:2 FTS	37.4	38.9		ng/L		104	60 - 135
6:2 FTS	37.9	41.3		ng/L		109	60 - 135
8:2 FTS	38.3	40.5		ng/L		106	60 - 135
10:2 FTS	38.6	36.3		ng/L		94	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	39.2		ng/L		104	60 - 135
HFPO-DA (GenX)	40.0	43.1		ng/L		108	60 - 135
9Cl-PF3ONS	37.3	40.5		ng/L		109	60 - 135
11Cl-PF3OUdS	37.7	38.7		ng/L		103	60 - 135

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	73		25 - 150
13C5 PFPeA	71		25 - 150
13C2 PFHxA	73		25 - 150
13C4 PFHpA	77		25 - 150
13C4 PFOA	75		25 - 150
13C5 PFNA	74		25 - 150
13C2 PFDA	73		25 - 150
13C2 PFUnA	72		25 - 150
13C2 PFDoA	84		25 - 150
13C2 PFTeDA	86		25 - 150
13C2 PFHxDA	90		25 - 150
13C3 PFBS	82		25 - 150
18O2 PFHxS	76		25 - 150
13C4 PFOS	77		25 - 150
13C8 FOSA	75		10 - 150
d3-NMeFOSAA	75		25 - 150
d5-NEtFOSAA	72		25 - 150
d-N-MeFOSA-M	66		10 - 150
d-N-EtFOSA-M	67		10 - 150
d7-N-MeFOSE-M	65		10 - 150
d9-N-EtFOSE-M	68		10 - 150

QC Sample Results

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

Job ID: 320-75783-2

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

Lab Sample ID: LCS 320-505028/2-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505028

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
M2-4:2 FTS	63		25 - 150
M2-6:2 FTS	59		25 - 150
M2-8:2 FTS	66		25 - 150
13C3 HFPO-DA	75		25 - 150
13C2 10:2 FTS	83		25 - 150

Lab Sample ID: LCSD 320-505028/3-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 505028

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	39.6		ng/L		99	60 - 135	2	30
Perfluoropentanoic acid (PFPeA)	40.0	39.6		ng/L		99	60 - 135	8	30
Perfluorohexanoic acid (PFHxA)	40.0	41.3		ng/L		103	60 - 135	0	30
Perfluoroheptanoic acid (PFHpA)	40.0	40.5		ng/L		101	60 - 135	0	30
Perfluorooctanoic acid (PFOA)	40.0	41.3		ng/L		103	60 - 135	3	30
Perfluorononanoic acid (PFNA)	40.0	42.3		ng/L		106	60 - 135	1	30
Perfluorodecanoic acid (PFDA)	40.0	44.1		ng/L		110	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)	40.0	43.6		ng/L		109	60 - 135	3	30
Perfluorododecanoic acid (PFDoA)	40.0	41.3		ng/L		103	60 - 135	2	30
Perfluorotridecanoic acid (PFTrDA)	40.0	40.9		ng/L		102	60 - 135	1	30
Perfluorotetradecanoic acid (PFTeA)	40.0	44.3		ng/L		111	60 - 135	1	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	45.7		ng/L		114	60 - 135	11	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	42.9		ng/L		107	60 - 135	16	30
Perfluorobutanesulfonic acid (PFBS)	35.4	31.6		ng/L		89	60 - 135	3	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	32.6		ng/L		87	60 - 135	1	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.6		ng/L		106	60 - 135	2	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.9		ng/L		102	60 - 135	0	30
Perfluorooctanesulfonic acid (PFOS)	37.1	36.0		ng/L		97	60 - 135	1	30
Perfluorononanesulfonic acid (PFNS)	38.4	37.5		ng/L		98	60 - 135	2	30
Perfluorodecanesulfonic acid (PFDS)	38.6	37.7		ng/L		98	60 - 135	2	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.8		ng/L		95	60 - 135	7	30
Perfluorooctanesulfonamide (FOSA)	40.0	38.3		ng/L		96	60 - 135	4	30
NEtFOSA	40.0	47.0		ng/L		117	60 - 135	5	30
NMeFOSA	40.0	43.4		ng/L		108	60 - 135	1	30
NMeFOSAA	40.0	42.0		ng/L		105	60 - 135	6	30
NEtFOSAA	40.0	47.2		ng/L		118	60 - 135	6	30
NMeFOSE	40.0	40.1		ng/L		100	60 - 135	1	30

Eurofins TestAmerica, Sacramento

QC Sample Results

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

Job ID: 320-75783-2

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

Lab Sample ID: LCSD 320-505028/3-A
Matrix: Water
Analysis Batch: 505106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 505028

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NETFOSE	40.0	43.8		ng/L		109	60 - 135	5	30
4:2 FTS	37.4	38.6		ng/L		103	60 - 135	1	30
6:2 FTS	37.9	44.9		ng/L		118	60 - 135	8	30
8:2 FTS	38.3	39.2		ng/L		102	60 - 135	3	30
10:2 FTS	38.6	40.3		ng/L		105	60 - 135	10	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	38.0		ng/L		101	60 - 135	3	30
HFPO-DA (GenX)	40.0	42.6		ng/L		106	60 - 135	1	30
9CI-PF3ONS	37.3	38.2		ng/L		103	60 - 135	6	30
11CI-PF3OUdS	37.7	38.4		ng/L		102	60 - 135	1	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	78		25 - 150
13C5 PFPeA	77		25 - 150
13C2 PFHxA	73		25 - 150
13C4 PFHpA	78		25 - 150
13C4 PFOA	75		25 - 150
13C5 PFNA	75		25 - 150
13C2 PFDA	75		25 - 150
13C2 PFUnA	77		25 - 150
13C2 PFDoA	82		25 - 150
13C2 PFTeDA	89		25 - 150
13C2 PFHxDA	89		25 - 150
13C3 PFBS	86		25 - 150
18O2 PFHxS	76		25 - 150
13C4 PFOS	83		25 - 150
13C8 FOSA	77		10 - 150
d3-NMeFOSAA	72		25 - 150
d5-NEtFOSAA	72		25 - 150
d-N-MeFOSA-M	70		10 - 150
d-N-EtFOSA-M	66		10 - 150
d7-N-MeFOSE-M	68		10 - 150
d9-N-EtFOSE-M	68		10 - 150
M2-4:2 FTS	58		25 - 150
M2-6:2 FTS	60		25 - 150
M2-8:2 FTS	74		25 - 150
13C3 HFPO-DA	76		25 - 150
13C2 10:2 FTS	81		25 - 150

QC Association Summary

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

Job ID: 320-75783-2

LCMS

Prep Batch: 505028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75783-33	Raw Entry to WTP	Total/NA	Water	3535	
320-75783-34	Raw Entry to WTP FB	Total/NA	Water	3535	
MB 320-505028/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-505028/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-505028/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 505106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75783-33	Raw Entry to WTP	Total/NA	Water	537 (modified)	505028
320-75783-34	Raw Entry to WTP FB	Total/NA	Water	537 (modified)	505028
MB 320-505028/1-A	Method Blank	Total/NA	Water	537 (modified)	505028
LCS 320-505028/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	505028
LCSD 320-505028/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	505028

Lab Chronicle

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

Job ID: 320-75783-2

Client Sample ID: Raw Entry to WTP

Lab Sample ID: 320-75783-33

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			277.5 mL	10.0 mL	505028	07/08/21 11:53	LN	TAL SAC
Total/NA	Analysis	537 (modified)		1			505106	07/08/21 17:37	S1M	TAL SAC

Client Sample ID: Raw Entry to WTP FB

Lab Sample ID: 320-75783-34

Date Collected: 07/06/21 12:07

Matrix: Water

Date Received: 07/07/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			279.6 mL	10.0 mL	505028	07/08/21 11:53	LN	TAL SAC
Total/NA	Analysis	537 (modified)		1			505106	07/08/21 17:47	S1M	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: 320-75783-2

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

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Method Summary

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

Job ID: 320-75783-2

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: 320-75783-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75783-33	Raw Entry to WTP	Water	07/06/21 12:07	07/07/21 09:00	
320-75783-34	Raw Entry to WTP FB	Water	07/06/21 12:07	07/07/21 09:00	

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Chain of Custody Record



Client Information Client Contact: Ty Fadness Phone: 715-839-6121 City: Eau Claire State: WI Address: 1000 Ferry St. City: Eau Claire State: WI, Zip: 54703 Phone: 715-839-6121 (Tel) Email: Tyler.Fadness@EauClaireWI.Gov Project Name: PFAS in DW Site:		Lab Pk: Fredrick, Sandie E-Mail: sandra.fredrick@eurofinset.com Carrier Tracking No(s): State of Origin: WI Job #:		COC No: 500-92968-41426.1 Page: Page 1 of 2 Job #:	
Due Date Requested: ASAP PLEASE EXPEDITE TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: Pay by Credit Card WO #: Project #: 50018749 SSOW#:		Analysis Requested Total Number of Containers:			
Sample Identification Well 22 Well 22 FB Well 23 Well 23 FB Well 19 Well 19 FB Well 15 Well 15 FB Well 11 Well 11 FB		Sample Date 7/6/21 7/6/21 7/6/21 7/6/21 7/6/21 7/6/21 7/6/21 7/6/21 7/6/21		Sample Time 0915 0917 0934 0936 0944 0945 0951 0952 1004 1005	
Sample Type (C=comp, G=grab) G G G G G G G G G		Matrix (Water, Sealed, Opened, A-AB) Water Water Water Water Water Water Water Water Water		Field Filtered Sample (Yes or No) X X X X X X X X X	
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 Other: 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 Z - other (specify)		Special Instructions/Note: PFAS-IDA-PFAS TG Analytes 320-75783 Chain of Custody			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by: [Signature] Date: 7/6/21 1400 Company:		Relinquished by: [Signature] Date: 7/12/21 1100 Company:			
Relinquished by: [Signature] Date: 7/6/21 1004 Company:		Relinquished by: [Signature] Date: 7/6/21 1005 Company:			
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: 1687094/1687095/199475A/99475B 1687093/1687092		Cooler Temperature(s) °C and Other Remarks: 3.8, 3.2, 11.7			



Chain of Custody Record

Client Information		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 500-92968-41426.2	
Client Contact: Ty Fadness		E-Mail: sandra.fredrick@eurofinset.com		State of Origin: WI		Page: Page 2 of 2	
Company: City of Eau Claire WWTP		PWSID:		Analysis Requested		Job #: _____	
Address: 1000 Ferry St.		Due Date Requested: ASAP - PLEASE EXPEDITE		Field Filtered Sample (Yes or No)		Preservation Codes:	
City: Eau Claire		TAT Requested (days):		Perform MS/MSD (Yes or No)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____	
State, Zip: WI, 54703		Compliance Project: Δ Yes Δ No		Matrix (Water, Solid, Composite, BT=Asst, A=AM)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - H2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 715-839-6121(Tel)		PO #: _____		Sample Type (C=Comp, G=grab) BT=Asst, A=AM		Total Number of Containers	
Email: Tyler.Fadness@EauClaireWI.Gov		Pay by Credit Card		Sample Time		Special Instructions/Note:	
Project Name: PFAS in DW		WO #: _____		Sample Date		_____	
Site: _____		Project #: 50018749		Sample Date		_____	
Site: _____		SSOW#: _____		Sample Date		_____	
Sample Identification		Sample Date		Sample Time		Sample Matrix	
Well 16	7/6/21	1011	6	Water			
Well 16 FB	7/6/21	1013	6	Water			
Well 24	7/6/21	1020	6	Water			
Well 24 FB	7/6/21	1021	6	Water			
Well 14	7/6/21	1036	6	Water			
Well 14 FB	7/6/21	1038	6	Water			
Well 9	7/6/21	1043	6	Water			
Well 9 FB	7/6/21	1044	6	Water			
Well 8	7/6/21	1051	6	Water			
Well 8 FB	7/6/21	1053	6	Water			
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by: _____ Date: _____		Special Instructions/QC Requirements:		_____	
Relinquished by: _____		Date: 7/6/21 1400		Relinquished by: _____		Date/Time: 7/21/21 1100	
Relinquished by: _____		Date/Time: _____		Relinquished by: _____		Date/Time: _____	
Relinquished by: _____		Date/Time: _____		Relinquished by: _____		Date/Time: _____	
Custody Seal Intact: Δ Yes		Custody Seal No: 168 7094/168 7095/994759/994758		Cooler Temperature(s) °C and Other Remarks: 38, 3.2, 1.7		Company: Eurofins	



Chain of Custody Record

Client Information		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 500-92985-41426.1	
Client Contact: Ty Fadness		E-Mail: sandra.fredrick@eurofinstest.com		State of Origin: WI		Page: Page 1 of 2	
Company: City of Eau Claire WWTP		PWSID:		Analysis Requested		Job #:	
Address: 1000 Ferry St.		Due Date Requested: ASAP - PLEASE EXPEDITE		Field Filtered Sample (Yes or No)		Preservation Codes:	
City: Eau Claire		TAT Requested (days):		X		A - HCL M - Hexane N - None O - AsNaO2 P - Na2OHS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)	
State, Zip: WI, 54703		Compliance Project: Δ Yes Δ No		Matrix (W=water, S=solid, O=wastewater, BT=biological, AS=air)		Other:	
Phone: 715-839-6121(Tel)		Pay by Credit Card		Sample Type (C=Comp, G=grab)		Total Number of Containers	
WO #: 50018749		Project #: 50018749		Sample Time		Special Instructions/Note:	
Email: Tyler.Fadness@EauClaireWI.Gov		SSOW#:		Sample Date		X	
Project Name: PFAS in DW		Site:		Sample Date		X	
Site:		Sample Date		Sample Time		X	
Sample Identification		Sample Date		Sample Time		X	
Well 6	7/6/21	1057	G	Water	X		
Well 6 FB	7/6/21	1058	G	Water	X		
Post Strip Tower	7/6/21	1121	G	Water	X		
Post Strip Tower FB	7/6/21	1122	G	Water	X		
Well 21	7/6/21	1130	G	Water	X		
Well 21 FB	7/6/21	1138	G	Water	X		
Well 18	7/6/21	1135	G	Water	X		
Well 18 FB	7/6/21	1147	G	Water	X		
Well 12	7/6/21	1148	G	Water	X		
Well 12 FB	7/6/21	1148	G	Water	X		
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Archive For Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/>		Special Instructions/QC Requirements:	
Relinquished by: [Signature]		Date: 7/6/21 1400		Method of Shipment:		Time:	
Relinquished by: [Signature]		Date/Time: 7/6/21 1100		Received by: [Signature]		Date/Time: 7/6/21 1100	
Relinquished by: [Signature]		Date/Time: 7/6/21 1100		Received by: [Signature]		Date/Time: 7/6/21 1100	
Custody Seal Intact: Δ Yes Δ No		Custody Seal No: 1687092/1687095/1994359/994758		Cooler Temperature(s) °C and Other Remarks:		3.5, 3.2, 1.7	



Chain of Custody Record

Client Information		Sampler: Tyler Fadness	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-92985-41426.2
Ty Contact: Ty Fadness		Phone: 715-839-6121	E-Mail: sandra.fredrick@eurofins.com	State of Origin: WI	Page: Page 2 of 2
Company: City of Eau Claire WWTP		PWSID:	Job #:		
Address: 1000 Ferry St.		Due Date Requested:			
City: Eau Claire		TAT Requested (days):			
State, Zip: WI, 54703		ASAP - PLEASE EXPEDITE			
Phone: 715-839-6121(Tel)		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
E-mail: Tyler.Fadness@EauClaireWI.Gov		PO #: 50018749			
Project Name: PFAS in DW		Pay by Credit Card			
Site:		WO #:			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste oil, BT=Tissue, A=Air)
Well 13	7/6/21	1154	G	Water	
Well 13 FB	7/6/21	1155	G	Water	
Raw Entry to LTP	7/6/21	1207	G	Water	
Raw Entry POT to LTP FB	7/6/21	1207	G	Water	
Entry Point Line 2	7/6/21	1217	G	Water	
Entry Point Line 2 FB	7/6/21	1218	G	Water	
Entry Point Line 2 MS	7/6/21	1221	G	Water	
Entry Point Line 2 MS FB	7/6/21	1223	G	Water	
Entry Point Line 2 MSD	7/6/21	1224	G	Water	
Entry Point Line 2 MSD FB	7/6/21	1225	G	Water	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months			
Empty Kit Relinquished by:		Time:			
Relinquished by: <i>Tyler Fadness</i>		Date/Time: 7/6/21 1400	Company: Company		
Relinquished by:		Date/Time:	Company: Company		
Relinquished by:		Date/Time:	Company: Company		
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 1687094/1687095/1994759/1994758			
Cooler Temperature(s) °C and Other Remarks: 318, 3.2, 1.7		Ver: 11/01/2020			



Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 320-75783-2

Login Number: 75783

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: Fredrick, Sandie

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1687094, 095, 093, 092, 994759, 58
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

