

## ANALYTICAL REPORT

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Laboratory Job ID: 320-83006-1  
Client Project/Site: PFAS Testing

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

Attn: Ty Fadness



Authorized for release by:  
12/17/2021 7:18:46 AM

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*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: 320-83006-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
C	See Case Narrative
J	Reported value was between the limit of detection and the limit of quantitation.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 320-83006-1

**Job ID: 320-83006-1**

**Laboratory: Eurofins TestAmerica, Sacramento**

## Narrative

### Job Narrative 320-83006-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/16/2021 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7° C.

#### Receipt Exceptions

Sample 1, both containers have Trizma lot # 19310137. Samples 2 & 3, all containers have Trizma lot # 19410205. Entry Point - Line 1 (320-83006-1), EP - Field Blank (320-83006-2) and Well 9 (320-83006-3)

#### LCMS

Method 537 (modified): The transition mass ratio is above of the established ratio limit for NETFOSAA in (CCVL 320-551599/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

(CCVL 320-551599/2)

Method 537 (modified): The transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. Well 9 (320-83006-3)

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

#### Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-551492 and 320-551492. Method: 3535\_PFC\_28D Matrix: Water

Method 3535: The following sample(s) was/were preserved with trizma: Entry Point - Line 1 (320-83006-1), EP - Field Blank (320-83006-2) and Well 9 (320-83006-3). Thus, the MB, LCS and LCSD also contain trizma. Method: 3535\_PFC\_28D Matrix: Water preparation batch 320-551492 and 320-551492

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: 320-83006-1

## Client Sample ID: Entry Point - Line 1

Lab Sample ID: 320-83006-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0	J	4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.68	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.49	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.4	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.51	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.7	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	1.3	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.9		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		1.8	0.50	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: EP - Field Blank

Lab Sample ID: 320-83006-2

No Detections.

## Client Sample ID: Well 9

Lab Sample ID: 320-83006-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.1		4.2	2.0	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.94	J	1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.99	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.9		1.7	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.32	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.9		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	6.2		1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	59		1.7	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.0	J	1.7	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11	C	1.7	0.45	ng/L	1		537 (modified)	Total/NA

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: 320-83006-1

**Client Sample ID: Entry Point - Line 1**

**Lab Sample ID: 320-83006-1**

Date Collected: 12/15/21 12:00

Matrix: Water

Date Received: 12/16/21 10:55

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>3.0</b>	<b>J</b>	4.6	2.2	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>0.68</b>	<b>J</b>	1.8	0.53	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluoroheptanoic acid (PFHpA)</b>	<b>0.49</b>	<b>J</b>	1.8	0.23	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>1.4</b>	<b>J</b>	1.8	0.78	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorononanoic acid (PFNA)</b>	<b>0.51</b>	<b>J</b>	1.8	0.25	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorodecanoic acid (PFDA)	<0.29		1.8	0.29	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.8	0.82	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.87		1.8	0.87	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>1.7</b>	<b>J</b>	1.8	0.18	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluoropentanesulfonic acid (PFPeS)</b>	<b>1.3</b>	<b>J</b>	1.8	0.28	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>5.9</b>		1.8	0.53	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.8	0.18	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>2.2</b>		1.8	0.50	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		12/16/21 13:50	12/16/21 21:18	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		12/16/21 13:50	12/16/21 21:18	1
NEtFOSA	<0.80		1.8	0.80	ng/L		12/16/21 13:50	12/16/21 21:18	1
NMeFOSA	<0.40		1.8	0.40	ng/L		12/16/21 13:50	12/16/21 21:18	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		12/16/21 13:50	12/16/21 21:18	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		12/16/21 13:50	12/16/21 21:18	1
NMeFOSE	<1.3		3.7	1.3	ng/L		12/16/21 13:50	12/16/21 21:18	1
NEtFOSE	<0.78		1.8	0.78	ng/L		12/16/21 13:50	12/16/21 21:18	1
4:2 FTS	<0.22		1.8	0.22	ng/L		12/16/21 13:50	12/16/21 21:18	1
6:2 FTS	<2.3		4.6	2.3	ng/L		12/16/21 13:50	12/16/21 21:18	1
8:2 FTS	<0.42		1.8	0.42	ng/L		12/16/21 13:50	12/16/21 21:18	1
10:2 FTS	<0.62		1.8	0.62	ng/L		12/16/21 13:50	12/16/21 21:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		12/16/21 13:50	12/16/21 21:18	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		12/16/21 13:50	12/16/21 21:18	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		12/16/21 13:50	12/16/21 21:18	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		12/16/21 13:50	12/16/21 21:18	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	64		25 - 150				12/16/21 13:50	12/16/21 21:18	1
13C5 PFPeA	84		25 - 150				12/16/21 13:50	12/16/21 21:18	1
13C2 PFHxA	78		25 - 150				12/16/21 13:50	12/16/21 21:18	1
13C4 PFHpA	94		25 - 150				12/16/21 13:50	12/16/21 21:18	1
13C4 PFOA	91		25 - 150				12/16/21 13:50	12/16/21 21:18	1

Eurofins TestAmerica, Sacramento

# Client Sample Results

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

Job ID: 320-83006-1

**Client Sample ID: Entry Point - Line 1**

**Lab Sample ID: 320-83006-1**

**Date Collected: 12/15/21 12:00**

**Matrix: Water**

**Date Received: 12/16/21 10:55**

**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>
13C5 PFNA	102		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 PFDA	94		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 PFUnA	92		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 PFDoA	91		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 PFTeDA	97		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 PFHxDA	93		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C3 PFBS	84		25 - 150	12/16/21 13:50	12/16/21 21:18	1
18O2 PFHxS	85		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C4 PFOS	91		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C8 FOSA	69		10 - 150	12/16/21 13:50	12/16/21 21:18	1
d3-NMeFOSAA	88		25 - 150	12/16/21 13:50	12/16/21 21:18	1
d5-NEtFOSAA	94		25 - 150	12/16/21 13:50	12/16/21 21:18	1
d-N-MeFOSA-M	77		10 - 150	12/16/21 13:50	12/16/21 21:18	1
d-N-EtFOSA-M	76		10 - 150	12/16/21 13:50	12/16/21 21:18	1
d7-N-MeFOSE-M	77		10 - 150	12/16/21 13:50	12/16/21 21:18	1
d9-N-EtFOSE-M	76		10 - 150	12/16/21 13:50	12/16/21 21:18	1
M2-4:2 FTS	70		25 - 150	12/16/21 13:50	12/16/21 21:18	1
M2-6:2 FTS	89		25 - 150	12/16/21 13:50	12/16/21 21:18	1
M2-8:2 FTS	90		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C3 HFPO-DA	81		25 - 150	12/16/21 13:50	12/16/21 21:18	1
13C2 10:2 FTS	96		25 - 150	12/16/21 13:50	12/16/21 21:18	1

# Client Sample Results

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

Job ID: 320-83006-1

**Client Sample ID: EP - Field Blank**

**Lab Sample ID: 320-83006-2**

Date Collected: 12/15/21 12:02

Matrix: Water

Date Received: 12/16/21 10:55

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.3	2.1	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoropentanoic acid (PFPeA)	<0.42		1.7	0.42	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorohexanoic acid (PFHxA)	<0.50		1.7	0.50	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.7	0.22	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorooctanoic acid (PFOA)	<0.74		1.7	0.74	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorononanoic acid (PFNA)	<0.23		1.7	0.23	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoroundecanoic acid (PFUnA)	<0.95		1.7	0.95	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.7	0.48	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorotetradecanoic acid (PFTeA)	<0.63		1.7	0.63	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.77		1.7	0.77	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.81		1.7	0.81	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorobutanesulfonic acid (PFBS)	<0.17		1.7	0.17	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorohexanesulfonic acid (PFHxS)	<0.49		1.7	0.49	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.16		1.7	0.16	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.7	0.47	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorododecanesulfonic acid (PFDoS)	<0.84		1.7	0.84	ng/L		12/16/21 13:50	12/16/21 21:29	1
Perfluorooctanesulfonamide (FOSA)	<0.85		1.7	0.85	ng/L		12/16/21 13:50	12/16/21 21:29	1
NEtFOSA	<0.75		1.7	0.75	ng/L		12/16/21 13:50	12/16/21 21:29	1
NMeFOSA	<0.37		1.7	0.37	ng/L		12/16/21 13:50	12/16/21 21:29	1
NMeFOSAA	<1.0		4.3	1.0	ng/L		12/16/21 13:50	12/16/21 21:29	1
NEtFOSAA	<1.1		4.3	1.1	ng/L		12/16/21 13:50	12/16/21 21:29	1
NMeFOSE	<1.2		3.5	1.2	ng/L		12/16/21 13:50	12/16/21 21:29	1
NEtFOSE	<0.74		1.7	0.74	ng/L		12/16/21 13:50	12/16/21 21:29	1
4:2 FTS	<0.21		1.7	0.21	ng/L		12/16/21 13:50	12/16/21 21:29	1
6:2 FTS	<2.2		4.3	2.2	ng/L		12/16/21 13:50	12/16/21 21:29	1
8:2 FTS	<0.40		1.7	0.40	ng/L		12/16/21 13:50	12/16/21 21:29	1
10:2 FTS	<0.58		1.7	0.58	ng/L		12/16/21 13:50	12/16/21 21:29	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.7	0.35	ng/L		12/16/21 13:50	12/16/21 21:29	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		12/16/21 13:50	12/16/21 21:29	1
9Cl-PF3ONS	<0.21		1.7	0.21	ng/L		12/16/21 13:50	12/16/21 21:29	1
11Cl-PF3OUdS	<0.28		1.7	0.28	ng/L		12/16/21 13:50	12/16/21 21:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	87		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C5 PFPeA	92		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C2 PFHxA	82		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C4 PFHpA	85		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C4 PFOA	93		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C5 PFNA	96		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C2 PFDA	92		25 - 150				12/16/21 13:50	12/16/21 21:29	1
13C2 PFUnA	94		25 - 150				12/16/21 13:50	12/16/21 21:29	1

Eurofins TestAmerica, Sacramento



# Client Sample Results

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

Job ID: 320-83006-1

**Client Sample ID: EP - Field Blank**

**Lab Sample ID: 320-83006-2**

Date Collected: 12/15/21 12:02

Matrix: Water

Date Received: 12/16/21 10:55

**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	96		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C2 PFTeDA	111		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C2 PFHxDA	94		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C3 PFBS	89		25 - 150	12/16/21 13:50	12/16/21 21:29	1
18O2 PFHxS	88		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C4 PFOS	94		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C8 FOSA	69		10 - 150	12/16/21 13:50	12/16/21 21:29	1
d3-NMeFOSAA	90		25 - 150	12/16/21 13:50	12/16/21 21:29	1
d5-NEtFOSAA	101		25 - 150	12/16/21 13:50	12/16/21 21:29	1
d-N-MeFOSA-M	78		10 - 150	12/16/21 13:50	12/16/21 21:29	1
d-N-EtFOSA-M	79		10 - 150	12/16/21 13:50	12/16/21 21:29	1
d7-N-MeFOSE-M	84		10 - 150	12/16/21 13:50	12/16/21 21:29	1
d9-N-EtFOSE-M	91		10 - 150	12/16/21 13:50	12/16/21 21:29	1
M2-4:2 FTS	70		25 - 150	12/16/21 13:50	12/16/21 21:29	1
M2-6:2 FTS	81		25 - 150	12/16/21 13:50	12/16/21 21:29	1
M2-8:2 FTS	95		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C3 HFPO-DA	91		25 - 150	12/16/21 13:50	12/16/21 21:29	1
13C2 10:2 FTS	107		25 - 150	12/16/21 13:50	12/16/21 21:29	1

# Client Sample Results

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

Job ID: 320-83006-1

**Client Sample ID: Well 9**  
Date Collected: 12/15/21 12:30  
Date Received: 12/16/21 10:55

**Lab Sample ID: 320-83006-3**  
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.1		4.2	2.0	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoropentanoic acid (PFPeA)	0.94	J	1.7	0.41	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.49	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoroheptanoic acid (PFHpA)	0.99	J	1.7	0.21	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorooctanoic acid (PFOA)	2.9		1.7	0.71	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorononanoic acid (PFNA)	0.32	J	1.7	0.23	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorodecanoic acid (PFDA)	<0.26		1.7	0.26	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoroundecanoic acid (PFUnA)	<0.92		1.7	0.92	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorododecanoic acid (PFDoA)	<0.46		1.7	0.46	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorotetradecanoic acid (PFTeA)	<0.61		1.7	0.61	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.74		1.7	0.74	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.79		1.7	0.79	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorobutanesulfonic acid (PFBS)	3.9		1.7	0.17	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoropentanesulfonic acid (PFPeS)	6.2		1.7	0.25	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorohexanesulfonic acid (PFHxS)	59		1.7	0.48	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.0	J	1.7	0.16	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorooctanesulfonic acid (PFOS)	11	C	1.7	0.45	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorononanesulfonic acid (PFNS)	<0.31		1.7	0.31	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorodecanesulfonic acid (PFDS)	<0.27		1.7	0.27	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorododecanesulfonic acid (PFDoS)	<0.81		1.7	0.81	ng/L		12/16/21 13:50	12/16/21 21:39	1
Perfluorooctanesulfonamide (FOSA)	<0.82		1.7	0.82	ng/L		12/16/21 13:50	12/16/21 21:39	1
NEtFOSA	<0.73		1.7	0.73	ng/L		12/16/21 13:50	12/16/21 21:39	1
NMeFOSA	<0.36		1.7	0.36	ng/L		12/16/21 13:50	12/16/21 21:39	1
NMeFOSAA	<1.0		4.2	1.0	ng/L		12/16/21 13:50	12/16/21 21:39	1
NEtFOSAA	<1.1		4.2	1.1	ng/L		12/16/21 13:50	12/16/21 21:39	1
NMeFOSE	<1.2		3.3	1.2	ng/L		12/16/21 13:50	12/16/21 21:39	1
NEtFOSE	<0.71		1.7	0.71	ng/L		12/16/21 13:50	12/16/21 21:39	1
4:2 FTS	<0.20		1.7	0.20	ng/L		12/16/21 13:50	12/16/21 21:39	1
6:2 FTS	<2.1		4.2	2.1	ng/L		12/16/21 13:50	12/16/21 21:39	1
8:2 FTS	<0.38		1.7	0.38	ng/L		12/16/21 13:50	12/16/21 21:39	1
10:2 FTS	<0.56		1.7	0.56	ng/L		12/16/21 13:50	12/16/21 21:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.33		1.7	0.33	ng/L		12/16/21 13:50	12/16/21 21:39	1
HFPO-DA (GenX)	<1.3		3.3	1.3	ng/L		12/16/21 13:50	12/16/21 21:39	1
9Cl-PF3ONS	<0.20		1.7	0.20	ng/L		12/16/21 13:50	12/16/21 21:39	1
11Cl-PF3OUdS	<0.27		1.7	0.27	ng/L		12/16/21 13:50	12/16/21 21:39	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	74		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C5 PFPeA	95		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFHxA	85		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C4 PFHpA	89		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C4 PFOA	98		25 - 150	12/16/21 13:50	12/16/21 21:39	1

Eurofins TestAmerica, Sacramento

# Client Sample Results

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

Job ID: 320-83006-1

**Client Sample ID: Well 9**  
**Date Collected: 12/15/21 12:30**  
**Date Received: 12/16/21 10:55**

**Lab Sample ID: 320-83006-3**  
**Matrix: Water**

**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>
13C5 PFNA	98		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFDA	93		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFUnA	96		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFDoA	100		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFTeDA	103		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 PFHxDA	93		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C3 PFBS	91		25 - 150	12/16/21 13:50	12/16/21 21:39	1
18O2 PFHxS	83		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C4 PFOS	98		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C8 FOSA	72		10 - 150	12/16/21 13:50	12/16/21 21:39	1
d3-NMeFOSAA	92		25 - 150	12/16/21 13:50	12/16/21 21:39	1
d5-NEtFOSAA	99		25 - 150	12/16/21 13:50	12/16/21 21:39	1
d-N-MeFOSA-M	77		10 - 150	12/16/21 13:50	12/16/21 21:39	1
d-N-EtFOSA-M	84		10 - 150	12/16/21 13:50	12/16/21 21:39	1
d7-N-MeFOSE-M	87		10 - 150	12/16/21 13:50	12/16/21 21:39	1
d9-N-EtFOSE-M	84		10 - 150	12/16/21 13:50	12/16/21 21:39	1
M2-4:2 FTS	75		25 - 150	12/16/21 13:50	12/16/21 21:39	1
M2-6:2 FTS	95		25 - 150	12/16/21 13:50	12/16/21 21:39	1
M2-8:2 FTS	95		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C3 HFPO-DA	91		25 - 150	12/16/21 13:50	12/16/21 21:39	1
13C2 10:2 FTS	108		25 - 150	12/16/21 13:50	12/16/21 21:39	1

# Isotope Dilution Summary

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

Job ID: 320-83006-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-83006-1	Entry Point - Line 1	64	84	78	94	91	102	94	92
320-83006-2	EP - Field Blank	87	92	82	85	93	96	92	94
320-83006-3	Well 9	74	95	85	89	98	98	93	96
LCS 320-551492/2-A	Lab Control Sample	95	99	89	94	102	100	95	99
LCSD 320-551492/3-A	Lab Control Sample Dup	83	88	85	83	98	88	88	90
MB 320-551492/1-A	Method Blank	85	94	81	92	94	93	83	91

### 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)	d3NMFS (25-150)
320-83006-1	Entry Point - Line 1	91	97	93	84	85	91	69	88
320-83006-2	EP - Field Blank	96	111	94	89	88	94	69	90
320-83006-3	Well 9	100	103	93	91	83	98	72	92
LCS 320-551492/2-A	Lab Control Sample	98	109	98	97	90	99	74	91
LCSD 320-551492/3-A	Lab Control Sample Dup	94	99	89	88	87	87	66	87
MB 320-551492/1-A	Method Blank	95	101	89	94	88	86	69	89

### 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)
320-83006-1	Entry Point - Line 1	94	77	76	77	76	70	89	90
320-83006-2	EP - Field Blank	101	78	79	84	91	70	81	95
320-83006-3	Well 9	99	77	84	87	84	75	95	95
LCS 320-551492/2-A	Lab Control Sample	106	88	87	89	85	76	90	99
LCSD 320-551492/3-A	Lab Control Sample Dup	93	76	81	86	82	69	77	82
MB 320-551492/1-A	Method Blank	104	75	83	88	86	74	83	92

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
320-83006-1	Entry Point - Line 1	81	96
320-83006-2	EP - Field Blank	91	107
320-83006-3	Well 9	91	108
LCS 320-551492/2-A	Lab Control Sample	90	112
LCSD 320-551492/3-A	Lab Control Sample Dup	86	96
MB 320-551492/1-A	Method Blank	86	94

#### Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDaA = 13C2 PFDaA
- PFTDA = 13C2 PFTeDA
- PFHxDA = 13C2 PFHxDA
- C3PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS

# Isotope Dilution Summary

Job ID: 320-83006-1

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

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

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# QC Sample Results

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

Job ID: 320-83006-1

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

**Lab Sample ID: MB 320-551492/1-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		12/16/21 13:50	12/16/21 20:47	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		12/16/21 13:50	12/16/21 20:47	1
NEtFOSA	<0.87		2.0	0.87	ng/L		12/16/21 13:50	12/16/21 20:47	1
NMeFOSA	<0.43		2.0	0.43	ng/L		12/16/21 13:50	12/16/21 20:47	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		12/16/21 13:50	12/16/21 20:47	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		12/16/21 13:50	12/16/21 20:47	1
NMeFOSE	<1.4		4.0	1.4	ng/L		12/16/21 13:50	12/16/21 20:47	1
NEtFOSE	<0.85		2.0	0.85	ng/L		12/16/21 13:50	12/16/21 20:47	1
4:2 FTS	<0.24		2.0	0.24	ng/L		12/16/21 13:50	12/16/21 20:47	1
6:2 FTS	<2.5		5.0	2.5	ng/L		12/16/21 13:50	12/16/21 20:47	1
8:2 FTS	<0.46		2.0	0.46	ng/L		12/16/21 13:50	12/16/21 20:47	1
10:2 FTS	<0.67		2.0	0.67	ng/L		12/16/21 13:50	12/16/21 20:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		12/16/21 13:50	12/16/21 20:47	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		12/16/21 13:50	12/16/21 20:47	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		12/16/21 13:50	12/16/21 20:47	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		12/16/21 13:50	12/16/21 20:47	1
Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
13C4 PFBA	85		25 - 150	12/16/21 13:50	12/16/21 20:47	1			
13C5 PFPeA	94		25 - 150	12/16/21 13:50	12/16/21 20:47	1			
13C2 PFHxA	81		25 - 150	12/16/21 13:50	12/16/21 20:47	1			
13C4 PFHpA	92		25 - 150	12/16/21 13:50	12/16/21 20:47	1			
13C4 PFOA	94		25 - 150	12/16/21 13:50	12/16/21 20:47	1			
13C5 PFNA	93		25 - 150	12/16/21 13:50	12/16/21 20:47	1			

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# QC Sample Results

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

Job ID: 320-83006-1

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

**Lab Sample ID: MB 320-551492/1-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFDA	83		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C2 PFUnA	91		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C2 PFDoA	95		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C2 PFTeDA	101		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C2 PFHxDA	89		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C3 PFBS	94		25 - 150	12/16/21 13:50	12/16/21 20:47	1
18O2 PFHxS	88		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C4 PFOS	86		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C8 FOSA	69		10 - 150	12/16/21 13:50	12/16/21 20:47	1
d3-NMeFOSAA	89		25 - 150	12/16/21 13:50	12/16/21 20:47	1
d5-NEtFOSAA	104		25 - 150	12/16/21 13:50	12/16/21 20:47	1
d-N-MeFOSA-M	75		10 - 150	12/16/21 13:50	12/16/21 20:47	1
d-N-EtFOSA-M	83		10 - 150	12/16/21 13:50	12/16/21 20:47	1
d7-N-MeFOSE-M	88		10 - 150	12/16/21 13:50	12/16/21 20:47	1
d9-N-EtFOSE-M	86		10 - 150	12/16/21 13:50	12/16/21 20:47	1
M2-4:2 FTS	74		25 - 150	12/16/21 13:50	12/16/21 20:47	1
M2-6:2 FTS	83		25 - 150	12/16/21 13:50	12/16/21 20:47	1
M2-8:2 FTS	92		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C3 HFPO-DA	86		25 - 150	12/16/21 13:50	12/16/21 20:47	1
13C2 10:2 FTS	94		25 - 150	12/16/21 13:50	12/16/21 20:47	1

**Lab Sample ID: LCS 320-551492/2-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoropentanoic acid (PFPeA)	40.0	37.2		ng/L		93	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.1		ng/L		100	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	38.5		ng/L		96	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	38.5		ng/L		96	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.6		ng/L		104	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	37.5		ng/L		94	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	36.8		ng/L		92	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	42.6		ng/L		106	60 - 135
Perfluorotridecanoic acid (PFTTrDA)	40.0	41.5		ng/L		104	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	32.1		ng/L		80	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	39.8		ng/L		99	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	33.5		ng/L		84	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	30.0		ng/L		85	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	35.8		ng/L		95	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.4		ng/L		95	60 - 135

Eurofins TestAmerica, Sacramento

# QC Sample Results

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

Job ID: 320-83006-1

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

**Lab Sample ID: LCS 320-551492/2-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	35.1		ng/L		92	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	30.6		ng/L		83	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	34.6		ng/L		90	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	34.9		ng/L		91	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	34.1		ng/L		88	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	47.8		ng/L		119	60 - 135
NEtFOSA	40.0	39.9		ng/L		100	60 - 135
NMeFOSA	40.0	40.6		ng/L		102	60 - 135
NMeFOSAA	40.0	41.3		ng/L		103	60 - 135
NEtFOSAA	40.0	36.8		ng/L		92	60 - 135
NMeFOSE	40.0	39.7		ng/L		99	60 - 135
NEtFOSE	40.0	40.2		ng/L		100	60 - 135
4:2 FTS	37.4	37.5		ng/L		100	60 - 135
6:2 FTS	37.9	37.9		ng/L		100	60 - 135
8:2 FTS	38.3	39.6		ng/L		103	60 - 135
10:2 FTS	38.6	36.8		ng/L		96	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	35.4		ng/L		94	60 - 135
HFPO-DA (GenX)	40.0	43.5		ng/L		109	60 - 135
9CI-PF3ONS	37.3	35.2		ng/L		95	60 - 135
11CI-PF3OUdS	37.7	37.2		ng/L		99	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	95		25 - 150
13C5 PFPeA	99		25 - 150
13C2 PFHxA	89		25 - 150
13C4 PFHpA	94		25 - 150
13C4 PFOA	102		25 - 150
13C5 PFNA	100		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	98		25 - 150
13C2 PFTeDA	109		25 - 150
13C2 PFHxDA	98		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	90		25 - 150
13C4 PFOS	99		25 - 150
13C8 FOSA	74		10 - 150
d3-NMeFOSAA	91		25 - 150
d5-NEtFOSAA	106		25 - 150
d-N-MeFOSA-M	88		10 - 150
d-N-EtFOSA-M	87		10 - 150
d7-N-MeFOSE-M	89		10 - 150
d9-N-EtFOSE-M	85		10 - 150



# QC Sample Results

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

Job ID: 320-83006-1

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

**Lab Sample ID: LCS 320-551492/2-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

<i>Isotope Dilution</i>	<i>LCS LCS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
M2-4:2 FTS	76		25 - 150
M2-6:2 FTS	90		25 - 150
M2-8:2 FTS	99		25 - 150
13C3 HFPO-DA	90		25 - 150
13C2 10:2 FTS	112		25 - 150

**Lab Sample ID: LCSD 320-551492/3-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA)	40.0	40.2		ng/L		100	60 - 135	7	30
Perfluoropentanoic acid (PFPeA)	40.0	39.2		ng/L		98	60 - 135	5	30
Perfluorohexanoic acid (PFHxA)	40.0	37.5		ng/L		94	60 - 135	7	30
Perfluoroheptanoic acid (PFHpA)	40.0	38.5		ng/L		96	60 - 135	0	30
Perfluorooctanoic acid (PFOA)	40.0	35.6		ng/L		89	60 - 135	8	30
Perfluorononanoic acid (PFNA)	40.0	42.3		ng/L		106	60 - 135	2	30
Perfluorodecanoic acid (PFDA)	40.0	38.5		ng/L		96	60 - 135	3	30
Perfluoroundecanoic acid (PFUnA)	40.0	38.6		ng/L		97	60 - 135	5	30
Perfluorododecanoic acid (PFDoA)	40.0	37.0		ng/L		93	60 - 135	14	30
Perfluorotridecanoic acid (PFTrDA)	40.0	38.7		ng/L		97	60 - 135	7	30
Perfluorotetradecanoic acid (PFTeA)	40.0	34.2		ng/L		86	60 - 135	6	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	40.8		ng/L		102	60 - 135	3	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	32.8		ng/L		82	60 - 135	2	30
Perfluorobutanesulfonic acid (PFBS)	35.4	28.6		ng/L		81	60 - 135	5	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	35.7		ng/L		95	60 - 135	0	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	31.5		ng/L		87	60 - 135	9	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.4		ng/L		101	60 - 135	9	30
Perfluorooctanesulfonic acid (PFOS)	37.1	32.0		ng/L		86	60 - 135	4	30
Perfluorononanesulfonic acid (PFNS)	38.4	35.9		ng/L		94	60 - 135	4	30
Perfluorodecanesulfonic acid (PFDS)	38.6	32.9		ng/L		85	60 - 135	6	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	33.8		ng/L		87	60 - 135	1	30
Perfluorooctanesulfonamide (FOSA)	40.0	48.7		ng/L		122	60 - 135	2	30
NEtFOSA	40.0	39.6		ng/L		99	60 - 135	1	30
NMeFOSA	40.0	39.1		ng/L		98	60 - 135	4	30
NMeFOSAA	40.0	39.4		ng/L		99	60 - 135	5	30
NEtFOSAA	40.0	38.6		ng/L		97	60 - 135	5	30
NMeFOSE	40.0	36.4		ng/L		91	60 - 135	9	30

Eurofins TestAmerica, Sacramento

# QC Sample Results

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

Job ID: 320-83006-1

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

**Lab Sample ID: LCSD 320-551492/3-A**  
**Matrix: Water**  
**Analysis Batch: 551599**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 551492**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NETFOSE	40.0	37.1		ng/L		93	60 - 135	8	30
4:2 FTS	37.4	39.0		ng/L		104	60 - 135	4	30
6:2 FTS	37.9	39.9		ng/L		105	60 - 135	5	30
8:2 FTS	38.3	42.3		ng/L		110	60 - 135	7	30
10:2 FTS	38.6	34.0		ng/L		88	60 - 135	8	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	38.3		ng/L		102	60 - 135	8	30
HFPO-DA (GenX)	40.0	37.1		ng/L		93	60 - 135	16	30
9CI-PF3ONS	37.3	35.2		ng/L		95	60 - 135	0	30
11CI-PF3OUdS	37.7	36.6		ng/L		97	60 - 135	2	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	83		25 - 150
13C5 PFPeA	88		25 - 150
13C2 PFHxA	85		25 - 150
13C4 PFHpA	83		25 - 150
13C4 PFOA	98		25 - 150
13C5 PFNA	88		25 - 150
13C2 PFDA	88		25 - 150
13C2 PFUnA	90		25 - 150
13C2 PFDoA	94		25 - 150
13C2 PFTeDA	99		25 - 150
13C2 PFHxDA	89		25 - 150
13C3 PFBS	88		25 - 150
18O2 PFHxS	87		25 - 150
13C4 PFOS	87		25 - 150
13C8 FOSA	66		10 - 150
d3-NMeFOSAA	87		25 - 150
d5-NEtFOSAA	93		25 - 150
d-N-MeFOSA-M	76		10 - 150
d-N-EtFOSA-M	81		10 - 150
d7-N-MeFOSE-M	86		10 - 150
d9-N-EtFOSE-M	82		10 - 150
M2-4:2 FTS	69		25 - 150
M2-6:2 FTS	77		25 - 150
M2-8:2 FTS	82		25 - 150
13C3 HFPO-DA	86		25 - 150
13C2 10:2 FTS	96		25 - 150

# QC Association Summary

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

Job ID: 320-83006-1

## LCMS

### Prep Batch: 551492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83006-1	Entry Point - Line 1	Total/NA	Water	3535	
320-83006-2	EP - Field Blank	Total/NA	Water	3535	
320-83006-3	Well 9	Total/NA	Water	3535	
MB 320-551492/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-551492/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-551492/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

### Analysis Batch: 551599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83006-1	Entry Point - Line 1	Total/NA	Water	537 (modified)	551492
320-83006-2	EP - Field Blank	Total/NA	Water	537 (modified)	551492
320-83006-3	Well 9	Total/NA	Water	537 (modified)	551492
MB 320-551492/1-A	Method Blank	Total/NA	Water	537 (modified)	551492
LCS 320-551492/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	551492
LCSD 320-551492/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	551492

# Lab Chronicle

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

Job ID: 320-83006-1

## Client Sample ID: Entry Point - Line 1

Lab Sample ID: 320-83006-1

Date Collected: 12/15/21 12:00

Matrix: Water

Date Received: 12/16/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			271.4 mL	10.0 mL	551492	12/16/21 13:50	DTH	TAL SAC
Total/NA	Analysis	537 (modified)		1			551599	12/16/21 21:18	D1R	TAL SAC

## Client Sample ID: EP - Field Blank

Lab Sample ID: 320-83006-2

Date Collected: 12/15/21 12:02

Matrix: Water

Date Received: 12/16/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			289 mL	10.0 mL	551492	12/16/21 13:50	DTH	TAL SAC
Total/NA	Analysis	537 (modified)		1			551599	12/16/21 21:29	D1R	TAL SAC

## Client Sample ID: Well 9

Lab Sample ID: 320-83006-3

Date Collected: 12/15/21 12:30

Matrix: Water

Date Received: 12/16/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			298.9 mL	10.0 mL	551492	12/16/21 13:50	DTH	TAL SAC
Total/NA	Analysis	537 (modified)		1			551599	12/16/21 21:39	D1R	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: 320-83006-1

## Laboratory: Eurofins TestAmerica, Sacramento

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

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

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# Method Summary

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

Job ID: 320-83006-1

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: 320-83006-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83006-1	Entry Point - Line 1	Water	12/15/21 12:00	12/16/21 10:55
320-83006-2	EP - Field Blank	Water	12/15/21 12:02	12/16/21 10:55
320-83006-3	Well 9	Water	12/15/21 12:30	12/16/21 10:55

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# Login Sample Receipt Checklist

Client: City of Eau Claire

Job Number: 320-83006-1

**Login Number: 83006**

**List Source: Eurofins TestAmerica, Sacramento**

**List Number: 1**

**Creator: Oropeza, Salvador**

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	1802079
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	