



ANALYTICAL REPORT

PREPARED FOR

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Union County Water
500 N Main St.
Monroe, North Carolina 28112

Generated 2/23/2024 2:08:10 AM

JOB DESCRIPTION

PFAS - 533

JOB NUMBER

810-93581-1

Eurofins Eaton Analytical South Bend

Job Notes

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

Authorization



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Definitions/Glossary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: Union County Water
Project: PFAS - 533

Job ID: 810-93581-1

Job ID: 810-93581-1

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Job Narrative 810-93581-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 2/13/2024 9:15 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 time was 1.2°C.

PFAS

Method 533: The pH of the following sample was adjusted to pH 7 in the laboratory:.. <commaMerge>.

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

Detection Summary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: J18-Rehabeth ARV

Lab Sample ID: 810-93581-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.1		1.9		ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	6.5		1.9		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	5.8		1.9		ng/L	1		533	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.1		1.9		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.6		1.9		ng/L	1		533	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.1		1.9		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.0		1.9		ng/L	1		533	Total/NA

Client Sample ID: T07-Hwy 74 E BPS

Lab Sample ID: 810-93581-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0		1.9		ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	1.9		1.9		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9		1.9		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.6		1.9		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.8		1.9		ng/L	1		533	Total/NA

Client Sample ID: NOR-Norwood WTP

Lab Sample ID: 810-93581-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0		2.0		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		2.0		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.9		2.0		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		2.0		ng/L	1		533	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: J18-Rehabeth ARV

Lab Sample ID: 810-93581-1

Date Collected: 02/12/24 10:05

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.1		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoropentanoic acid (PFPeA)	6.5		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorohexanoic acid (PFHxA)	5.8		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoroheptanoic acid (PFHpA)	2.1		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorooctanoic acid (PFOA)	3.6		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorodecanoic acid (PFDA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorobutanesulfonic acid (PFBS)	2.1		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluorooctanesulfonic acid (PFOS)	3.0		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoro(4-methoxybutanoic acid)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1
Perfluoro-3,6-dioxaheptanoic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:12	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	83		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C5 PFPeA	104		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C5 PFHxA	75		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C4 PFHpA	77		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C8 PFOA	77		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C9 PFNA	76		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C6 PFDA	70		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C7 PFUnA	68		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C2 PFDoA	61		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C3 HFPO-DA	74		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C3 PFBS	82		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C8 PFOS	83		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C2-4:2-FTS	83		50 - 200	02/16/24 09:56	02/20/24 04:12	1

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Client Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: J18-Rehabeth ARV

Lab Sample ID: 810-93581-1

Date Collected: 02/12/24 10:05

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-6:2-FTS	84		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C2-8:2-FTS	85		50 - 200	02/16/24 09:56	02/20/24 04:12	1
13C3 PFHxS	83		50 - 200	02/16/24 09:56	02/20/24 04:12	1

Client Sample ID: T07-Hwy 74 E BPS

Lab Sample ID: 810-93581-2

Date Collected: 02/12/24 11:01

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.0		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoropentanoic acid (PFPeA)	1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorohexanoic acid (PFHxA)	1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoroheptanoic acid (PFHpA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorooctanoic acid (PFOA)	2.6		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorodecanoic acid (PFDA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorobutanesulfonic acid (PFBS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluorooctanesulfonic acid (PFOS)	3.8		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoro(4-methoxybutanoic acid)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Perfluoro-3,6-dioxaheptanoic acid	<1.9		1.9		ng/L		02/16/24 09:56	02/20/24 04:25	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	86		50 - 200				02/16/24 09:56	02/20/24 04:25	1
13C5 PFPeA	112		50 - 200				02/16/24 09:56	02/20/24 04:25	1
13C5 PFHxA	75		50 - 200				02/16/24 09:56	02/20/24 04:25	1
13C4 PFHpA	76		50 - 200				02/16/24 09:56	02/20/24 04:25	1
13C8 PFOA	82		50 - 200				02/16/24 09:56	02/20/24 04:25	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: T07-Hwy 74 E BPS

Lab Sample ID: 810-93581-2

Date Collected: 02/12/24 11:01

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C9 PFNA	85		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C6 PFDA	76		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C7 PFUnA	75		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C2 PFDoA	70		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C3 HFPO-DA	77		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C3 PFBS	80		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C8 PFOS	84		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C2-4:2-FTS	81		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C2-6:2-FTS	83		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C2-8:2-FTS	87		50 - 200	02/16/24 09:56	02/20/24 04:25	1
13C3 PFHxS	82		50 - 200	02/16/24 09:56	02/20/24 04:25	1

Client Sample ID: NOR-Norwood WTP

Lab Sample ID: 810-93581-3

Date Collected: 02/12/24 11:39

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorohexanoic acid (PFHxA)	2.1		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorooctanoic acid (PFOA)	2.9		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluorooctanesulfonic acid (PFOS)	4.5		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoro(4-methoxybutanoic acid)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1

Eurofins Eaton Analytical South Bend

Client Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: NOR-Norwood WTP

Lab Sample ID: 810-93581-3

Date Collected: 02/12/24 11:39

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Method: EPA 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Perfluoro-3,6-dioxaheptanoic acid	<2.0		2.0		ng/L		02/16/24 09:56	02/20/24 04:39	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	88		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C5 PFPeA	107		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C5 PFHxA	80		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C4 PFHpA	80		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C8 PFOA	83		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C9 PFNA	82		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C6 PFDA	73		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C7 PFUnA	75		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C2 PFDoA	76		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C3 HFPO-DA	78		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C3 PFBS	83		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C8 PFOS	88		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C2-4:2-FTS	85		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C2-6:2-FTS	87		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C2-8:2-FTS	89		50 - 200				02/16/24 09:56	02/20/24 04:39	1
13C3 PFHxS	86		50 - 200				02/16/24 09:56	02/20/24 04:39	1

Isotope Dilution Summary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	C6PFDA (50-200)	13C7PUA (50-200)
810-93581-1	J18-Rehabeth ARV	83	104	75	77	77	76	70	68
810-93581-2	T07-Hwy 74 E BPS	86	112	75	76	82	85	76	75
810-93581-3	NOR-Norwood WTP	88	107	80	80	83	82	73	75
LCS 810-88942/3-A	Lab Control Sample	74	78	73	76	77	77	77	75
LLCS 810-88942/2-A	Lab Control Sample	80	84	80	81	82	87	79	78
MBL 810-88942/1-A	Method Blank	82	88	79	80	82	83	79	76

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFD _o A (50-200)	HFPODA (50-200)	C3PFBS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)	C3PFHS (50-200)
810-93581-1	J18-Rehabeth ARV	61	74	82	83	83	84	85	83
810-93581-2	T07-Hwy 74 E BPS	70	77	80	84	81	83	87	82
810-93581-3	NOR-Norwood WTP	76	78	83	88	85	87	89	86
LCS 810-88942/3-A	Lab Control Sample	70	72	85	86	80	87	85	85
LLCS 810-88942/2-A	Lab Control Sample	69	76	84	87	75	82	85	85
MBL 810-88942/1-A	Method Blank	68	75	86	88	75	84	87	87

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- 13C5PHA = 13C5 PFHxA
- C4PFHA = 13C4 PFHpA
- C8PFOA = 13C8 PFOA
- C9PFNA = 13C9 PFNA
- C6PFDA = 13C6 PFDA
- 13C7PUA = 13C7 PFUnA
- PFD_oA = 13C2 PFD_oA
- HFPODA = 13C3 HFPO-DA
- C3PFBS = 13C3 PFBS
- C8PFOS = 13C8 PFOS
- 42FTS = 13C2-4:2-FTS
- 62FTS = 13C2-6:2-FTS
- 82FTS = 13C2-8:2-FTS
- C3PFHS = 13C3 PFHxS

QC Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Lab Sample ID: MBL 810-88942/1-A
Matrix: Drinking Water
Analysis Batch: 89031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88942

Analyte	MBL	MBL	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<0.52		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorohexanoic acid (PFHxA)	<0.42		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoroheptanoic acid (PFHpA)	<0.40		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorononanoic acid (PFNA)	<0.38		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorodecanoic acid (PFDA)	<0.36		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoroundecanoic acid (PFUnA)	<0.38		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorododecanoic acid (PFDoA)	<0.35		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorobutanesulfonic acid (PFBS)	<0.42		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.37		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorohexanesulfonic acid (PFHxS)	<0.39		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.44		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluorooctanesulfonic acid (PFOS)	<0.39		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.45		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.56		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.68		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.57		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.53		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<0.45		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<0.51		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoro(4-methoxybutanoic acid)	<0.35		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.32		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1
Perfluoro-3,6-dioxaheptanoic acid	<0.93		2.0		ng/L		02/16/24 09:56	02/20/24 01:56	1

Isotope Dilution	MBL	MBL	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	82		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C5 PFPeA	88		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C5 PFHxA	79		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C4 PFHpA	80		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C8 PFOA	82		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C9 PFNA	83		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C6 PFDA	79		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C7 PFUnA	76		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C2 PFDoA	68		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C3 HFPO-DA	75		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C3 PFBS	86		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C8 PFOS	88		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C2-4:2-FTS	75		50 - 200	02/16/24 09:56	02/20/24 01:56	1

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: MBL 810-88942/1-A
Matrix: Drinking Water
Analysis Batch: 89031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88942

Isotope Dilution	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2-6:2-FTS	84		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C2-8:2-FTS	87		50 - 200	02/16/24 09:56	02/20/24 01:56	1
13C3 PFHxS	87		50 - 200	02/16/24 09:56	02/20/24 01:56	1

Lab Sample ID: LCS 810-88942/3-A
Matrix: Drinking Water
Analysis Batch: 89031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	200	225		ng/L		112	70 - 130
Perfluorohexanoic acid (PFHxA)	200	224		ng/L		112	70 - 130
Perfluoroheptanoic acid (PFHpA)	200	227		ng/L		113	70 - 130
Perfluorooctanoic acid (PFOA)	200	220		ng/L		110	70 - 130
Perfluorononanoic acid (PFNA)	200	228		ng/L		114	70 - 130
Perfluorodecanoic acid (PFDA)	200	223		ng/L		112	70 - 130
Perfluoroundecanoic acid (PFUnA)	200	225		ng/L		112	70 - 130
Perfluorododecanoic acid (PFDoA)	200	225		ng/L		112	70 - 130
Perfluorobutanesulfonic acid (PFBS)	178	198		ng/L		111	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	188	207		ng/L		110	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	183	201		ng/L		110	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	191	209		ng/L		110	70 - 130
Perfluorooctanesulfonic acid (PFOS)	186	201		ng/L		108	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	178	208		ng/L		117	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	188	214		ng/L		114	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	190	216		ng/L		113	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	192	214		ng/L		112	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	200	220		ng/L		110	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	189	205		ng/L		108	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	187	220		ng/L		118	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	189	204		ng/L		108	70 - 130
Perfluoro(4-methoxybutanoic acid)	200	224		ng/L		112	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	200	221		ng/L		111	70 - 130
Perfluoro-3,6-dioxaheptanoic acid	200	210		ng/L		105	70 - 130

QC Sample Results

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	74		50 - 200
13C5 PFPeA	78		50 - 200
13C5 PFHxA	73		50 - 200
13C4 PFHpA	76		50 - 200
13C8 PFOA	77		50 - 200
13C9 PFNA	77		50 - 200
13C6 PFDA	77		50 - 200
13C7 PFUnA	75		50 - 200
13C2 PFDoA	70		50 - 200
13C3 HFPO-DA	72		50 - 200
13C3 PFBS	85		50 - 200
13C8 PFOS	86		50 - 200
13C2-4:2-FTS	80		50 - 200
13C2-6:2-FTS	87		50 - 200
13C2-8:2-FTS	85		50 - 200
13C3 PFHxS	85		50 - 200

Lab Sample ID: LLCS 810-88942/2-A

Matrix: Drinking Water

Analysis Batch: 89031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 88942

Analyte	Spike Added	LLCS	LLCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Perfluorobutanoic acid (PFBA)	2.00	2.02		ng/L		101	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.97	J	ng/L		99	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.00		ng/L		100	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.99	J	ng/L		100	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.01		ng/L		100	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.07		ng/L		103	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.08		ng/L		104	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.14		ng/L		107	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.78	1.69	J	ng/L		95	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.88	1.67	J	ng/L		89	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.83	1.69	J	ng/L		93	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.77	J	ng/L		93	50 - 150
Perfluorooctanesulfonic acid (PFOS)	1.86	1.84	J	ng/L		99	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	1.78	1.99	J	ng/L		112	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	1.88	2.02		ng/L		108	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	1.90	2.11		ng/L		111	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	1.92	2.02		ng/L		105	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	2.00	1.90	J	ng/L		95	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	1.88	J	ng/L		99	50 - 150

Eurofins Eaton Analytical South Bend

QC Sample Results

Client: Union County Water
 Project/Site: PFAS - 533

Job ID: 810-93581-1

Method: 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water (Continued)

Lab Sample ID: LLCS 810-88942/2-A
Matrix: Drinking Water
Analysis Batch: 89031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88942

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxan onane-1-sulfonic acid	1.87	1.91	J	ng/L		102	50 - 150
11-Chloroeicosfluoro-3-oxaund ecane-1-sulfonic acid	1.89	1.80	J	ng/L		95	50 - 150
Perfluoro(4-methoxybutanoic acid)	2.00	1.88	J	ng/L		94	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.99	J	ng/L		100	50 - 150
Perfluoro-3,6-dioxaheptanoic acid	2.00	1.89	J	ng/L		95	50 - 150

Isotope Dilution	LLCS LLCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	80		50 - 200
13C5 PFPeA	84		50 - 200
13C5 PFHxA	80		50 - 200
13C4 PFHpA	81		50 - 200
13C8 PFOA	82		50 - 200
13C9 PFNA	87		50 - 200
13C6 PFDA	79		50 - 200
13C7 PFUnA	78		50 - 200
13C2 PFDoA	69		50 - 200
13C3 HFPO-DA	76		50 - 200
13C3 PFBS	84		50 - 200
13C8 PFOS	87		50 - 200
13C2-4:2-FTS	75		50 - 200
13C2-6:2-FTS	82		50 - 200
13C2-8:2-FTS	85		50 - 200
13C3 PFHxS	85		50 - 200

QC Association Summary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

LCMS

Prep Batch: 88942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93581-1	J18-Rehabeth ARV	Total/NA	Drinking Water	533	
810-93581-2	T07-Hwy 74 E BPS	Total/NA	Drinking Water	533	
810-93581-3	NOR-Norwood WTP	Total/NA	Drinking Water	533	
MBL 810-88942/1-A	Method Blank	Total/NA	Drinking Water	533	
LCS 810-88942/3-A	Lab Control Sample	Total/NA	Drinking Water	533	
LLCS 810-88942/2-A	Lab Control Sample	Total/NA	Drinking Water	533	

Analysis Batch: 89031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-93581-1	J18-Rehabeth ARV	Total/NA	Drinking Water	533	88942
810-93581-2	T07-Hwy 74 E BPS	Total/NA	Drinking Water	533	88942
810-93581-3	NOR-Norwood WTP	Total/NA	Drinking Water	533	88942
MBL 810-88942/1-A	Method Blank	Total/NA	Drinking Water	533	88942
LCS 810-88942/3-A	Lab Control Sample	Total/NA	Drinking Water	533	88942
LLCS 810-88942/2-A	Lab Control Sample	Total/NA	Drinking Water	533	88942

Lab Chronicle

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Client Sample ID: J18-Rehabeth ARV

Lab Sample ID: 810-93581-1

Date Collected: 02/12/24 10:05

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			88942	KB	EA SB	02/16/24 09:56
Total/NA	Analysis	533		1	89031	MH	EA SB	02/20/24 04:12

Client Sample ID: T07-Hwy 74 E BPS

Lab Sample ID: 810-93581-2

Date Collected: 02/12/24 11:01

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			88942	KB	EA SB	02/16/24 09:56
Total/NA	Analysis	533		1	89031	MH	EA SB	02/20/24 04:25

Client Sample ID: NOR-Norwood WTP

Lab Sample ID: 810-93581-3

Date Collected: 02/12/24 11:39

Matrix: Drinking Water

Date Received: 02/13/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			88942	KB	EA SB	02/16/24 09:56
Total/NA	Analysis	533		1	89031	MH	EA SB	02/20/24 04:39

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Union County Water
 Project/Site: PFAS - 533

Job ID: 810-93581-1

Laboratory: Eurofins Eaton Analytical South Bend

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	18700	07-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
533	533	Drinking Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
533	533	Drinking Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
533	533	Drinking Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
533	533	Drinking Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
533	533	Drinking Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
533	533	Drinking Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid
533	533	Drinking Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
533	533	Drinking Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)
533	533	Drinking Water	Perfluoro(4-methoxybutanoic acid)
533	533	Drinking Water	Perfluoro-3,6-dioxaheptanoic acid
533	533	Drinking Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
533	533	Drinking Water	Perfluorobutanesulfonic acid (PFBS)
533	533	Drinking Water	Perfluorobutanoic acid (PFBA)
533	533	Drinking Water	Perfluorodecanoic acid (PFDA)
533	533	Drinking Water	Perfluorododecanoic acid (PFDoA)
533	533	Drinking Water	Perfluoroheptanesulfonic acid (PFHpS)
533	533	Drinking Water	Perfluoroheptanoic acid (PFHpA)
533	533	Drinking Water	Perfluorohexanesulfonic acid (PFHxS)
533	533	Drinking Water	Perfluorohexanoic acid (PFHxA)
533	533	Drinking Water	Perfluorononanoic acid (PFNA)
533	533	Drinking Water	Perfluorooctanesulfonic acid (PFOS)
533	533	Drinking Water	Perfluorooctanoic acid (PFOA)
533	533	Drinking Water	Perfluoropentanesulfonic acid (PFPeS)
533	533	Drinking Water	Perfluoropentanoic acid (PFPeA)
533	533	Drinking Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA SB
533	Extraction of Perfluorinated and Polyfluorinated Alkyl Acids	EPA	EA SB

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777



Sample Summary

Client: Union County Water
Project/Site: PFAS - 533

Job ID: 810-93581-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-93581-1	J18-Rehabeth ARV	Drinking Water	02/12/24 10:05	02/13/24 09:15
810-93581-2	T07-Hwy 74 E BPS	Drinking Water	02/12/24 11:01	02/13/24 09:15
810-93581-3	NOR-Norwood WTP	Drinking Water	02/12/24 11:39	02/13/24 09:15

1

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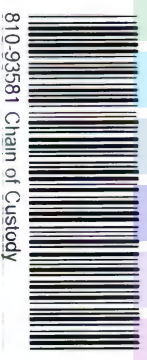
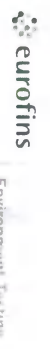
12

13

14

15

Chain of Custody Record



810-93581 Chain of Custody

Sampler: **Jordan Helms** Lab PM: **Mathis, Joe** Carrier Tracking No(s): **810-24240-6174.1** COC No: **810-24240-6174.1**

Phone: **980-269-7128** E-Mail: **Joe.Mathis@et.eurofins.com** State of Origin: **NC** Page: **1 of 1**

Company: **Union County Water** PMSID: **81004979** Analysis Requested: **533 - (MOD) Local Method** Job #:

Address: **500 N Main St** Due Date Requested: **TAT Requested (days):** Preservation Codes: **A - HCl M - Hexane B - NaOH N - None C - Zn Acetate P - Na2O4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate D - Nitric Acid E - NaHSO4 F - MeOH G - Amehlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA Other: **Z - other (specify)****

City: **Monroe** Compliance Project: **Δ Yes Δ No** PO #: **704-289-3307(Tel)** Purchase Order not required

State Zip: **NC, 28112** Project #: **81004979** SSO#:

Phone: **704-289-3307(Tel)** WO #:

Email: **Justin.Huntley@UnionCountyNC.gov**

Project Name: **PFA5 - 533**

Site: **SSOW#**

Sample Identification: **SI8- Rebekah ARN**

TO7- Hwy 74 E BPS

NOR- Norwood WTP

Sample Date: **2/12/24** Sample Time: **10:05A** Sample Type: **G** Matrix: **Drinking Water**

Sample Date: **2/12/24** Sample Time: **11:01A** Sample Type: **G** Matrix: **Drinking Water**

Sample Date: **2/12/24** Sample Time: **11:39A** Sample Type: **G** Matrix: **Drinking Water**

Field Filtered Sample (Yes or No) **Yes**

Form MS/MSD (Yes or No) **No**

533 - (MOD) Local Method

Total Number of containers: **1**

Special Instructions/Note: **Initial Temp: 2.0 Corrected Temp: 1.2 IR Gun # 18**

Possible Hazard Identification: Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: **Jordan Helms** Date: **2/12/24** Time: **1:50P** Method of Shipment: **WTS**

Relinquished by: **Jordan Helms** Date/Time: **2/12/24** Company: **Company** Received by: **KRM** Date/Time: **2-13-24** Company: **Company**

Relinquished by: **Jordan Helms** Date/Time: **2/12/24** Company: **Company** Received by: **KRM** Date/Time: **2-13-24** Company: **Company**

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

Login Sample Receipt Checklist

Client: Union County Water

Job Number: 810-93581-1

Login Number: 93581

List Source: Eurofins Eaton Analytical South Bend

List Number: 1

Creator: DePriest, Kellie

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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	
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	
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	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

