

 **ANALYTICAL REPORT****PREPARED FOR**

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

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JOB DESCRIPTION

PFAS - 533

JOB NUMBER

810-150782-1

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: 810-150782-1

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.
☼	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: 810-150782-1

Job ID: 810-150782-1

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Job Narrative 810-150782-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/3/2025 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.0°C.

Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria: 533's. 10.0 There was no cooling media present in the cooler. The laboratory was instructed to proceed with analysis

PFAS

Method 533: The pH of the following samples were adjusted to pH 7.5 in the laboratory: J18-Rehobeth ARV (810-150782-1), Y01-Yadkin Finished Water (810-150782-2) and Y02-Yadkin Raw Water (810-150782-3)

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: 810-150782-1

Client Sample ID: J18-Rehobeth ARV

Lab Sample ID: 810-150782-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.1		1.9		ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	5.8		1.9		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	5.6		1.9		ng/L	1		533	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.1		1.9		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		1.9		ng/L	1		533	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.0		1.9		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		1.9		ng/L	1		533	Total/NA

Client Sample ID: Y01-Yadkin Finished Water

Lab Sample ID: 810-150782-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	2.4		1.9		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		1.9		ng/L	1		533	Total/NA

Client Sample ID: Y02-Yadkin Raw Water

Lab Sample ID: 810-150782-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	2.5		1.9		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		1.9		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		1.9		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.5		1.9		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: 810-150782-1

Client Sample ID: J18-Rehobeth ARV

Lab Sample ID: 810-150782-1

Date Collected: 06/02/25 08:17

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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)	3.1		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoropentanoic acid (PFPeA)	5.8		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorohexanoic acid (PFHxA)	5.6		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoroheptanoic acid (PFHpA)	2.1		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorooctanoic acid (PFOA)	3.8		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorodecanoic acid (PFDA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorobutanesulfonic acid (PFBS)	2.0		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluorooctanesulfonic acid (PFOS)	2.5		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoro(4-methoxybutanoic acid)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1
Perfluoro-3,6-dioxaheptanoic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 06:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	94		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C5 PFPeA	98		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C5 PFHxA	96		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C4 PFHpA	101		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C8 PFOA	92		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C9 PFNA	95		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C6 PFDA	97		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C7 PFUnA	88		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C2 PFDoA	86		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C3 HFPO-DA	94		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C3 PFBS	98		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C8 PFOS	91		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C2-4:2-FTS	102		50 - 200	06/05/25 10:26	06/08/25 06:38	1

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Client Sample Results

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

Job ID: 810-150782-1

Client Sample ID: J18-Rehobeth ARV

Lab Sample ID: 810-150782-1

Date Collected: 06/02/25 08:17

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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	91		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C2-8:2-FTS	99		50 - 200	06/05/25 10:26	06/08/25 06:38	1
13C3 PFHxS	111		50 - 200	06/05/25 10:26	06/08/25 06:38	1

Client Sample ID: Y01-Yadkin Finished Water

Lab Sample ID: 810-150782-2

Date Collected: 06/02/25 09:19

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoropentanoic acid (PFPeA)	2.4		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorohexanoic acid (PFHxA)	2.1		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoroheptanoic acid (PFHpA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorooctanoic acid (PFOA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorodecanoic acid (PFDA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorobutanesulfonic acid (PFBS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluorooctanesulfonic acid (PFOS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoro(4-methoxybutanoic acid)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1
Perfluoro-3,6-dioxaheptanoic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:12	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	94		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C5 PFPeA	98		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C5 PFHxA	95		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C4 PFHpA	101		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C8 PFOA	92		50 - 200	06/05/25 10:26	06/08/25 07:12	1

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Client Sample Results

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

Job ID: 810-150782-1

Client Sample ID: Y01-Yadkin Finished Water

Lab Sample ID: 810-150782-2

Date Collected: 06/02/25 09:19

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C9 PFNA	95		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C6 PFDA	96		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C7 PFUnA	88		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C2 PFDoA	88		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C3 HFPO-DA	93		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C3 PFBS	101		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C8 PFOS	94		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C2-4:2-FTS	100		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C2-6:2-FTS	92		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C2-8:2-FTS	98		50 - 200	06/05/25 10:26	06/08/25 07:12	1
13C3 PFHxS	111		50 - 200	06/05/25 10:26	06/08/25 07:12	1

Client Sample ID: Y02-Yadkin Raw Water

Lab Sample ID: 810-150782-3

Date Collected: 06/02/25 09:23

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoropentanoic acid (PFPeA)	2.5		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorohexanoic acid (PFHxA)	2.0		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoroheptanoic acid (PFHpA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorooctanoic acid (PFOA)	2.4		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorononanoic acid (PFNA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorodecanoic acid (PFDA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoroundecanoic acid (PFUnA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorododecanoic acid (PFDoA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorobutanesulfonic acid (PFBS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoropentanesulfonic acid (PFPeS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorohexanesulfonic acid (PFHxS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluorooctanesulfonic acid (PFOS)	3.5		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoro(4-methoxybutanoic acid)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1

Eurofins Eaton Analytical South Bend

Client Sample Results

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

Job ID: 810-150782-1

Client Sample ID: Y02-Yadkin Raw Water

Lab Sample ID: 810-150782-3

Date Collected: 06/02/25 09:23

Matrix: Drinking Water

Date Received: 06/03/25 09:45

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)	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Perfluoro-3,6-dioxaheptanoic acid	<1.9		1.9		ng/L		06/05/25 10:26	06/08/25 07:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	91		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C5 PFPeA	97		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C5 PFHxA	94		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C4 PFHpA	100		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C8 PFOA	86		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C9 PFNA	87		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C6 PFDA	81		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C7 PFUnA	72		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C2 PFDoA	76		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C3 HFPO-DA	90		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C3 PFBS	95		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C8 PFOS	89		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C2-4:2-FTS	102		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C2-6:2-FTS	94		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C2-8:2-FTS	101		50 - 200				06/05/25 10:26	06/08/25 07:29	1
13C3 PFHxS	115		50 - 200				06/05/25 10:26	06/08/25 07:29	1

Isotope Dilution Summary

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

Job ID: 810-150782-1

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)
810-150782-1	J18-Rehobeth ARV	94	98	96	101	92	95	97	88
810-150782-1 DU	J18-Rehobeth ARV	94	98	96	100	92	93	95	87
810-150782-2	Y01-Yadkin Finished Water	94	98	95	101	92	95	96	88
810-150782-3	Y02-Yadkin Raw Water	91	97	94	100	86	87	81	72
LCS 810-146870/3-A	Lab Control Sample	92	86	90	91	91	88	87	88
LLCS 810-146870/2-A	Lab Control Sample	88	90	93	90	89	91	93	90
MBL 810-146870/1-A	Method Blank	91	94	93	90	89	94	95	90

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (50-200)	HFPODA (50-200)	C3PFBS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)	C3PFHS (50-200)
810-150782-1	J18-Rehobeth ARV	86	94	98	91	102	91	99	111
810-150782-1 DU	J18-Rehobeth ARV	84	93	95	89	102	87	99	107
810-150782-2	Y01-Yadkin Finished Water	88	93	101	94	100	92	98	111
810-150782-3	Y02-Yadkin Raw Water	76	90	95	89	102	94	101	115
LCS 810-146870/3-A	Lab Control Sample	86	91	93	91	100	101	94	94
LLCS 810-146870/2-A	Lab Control Sample	88	89	91	90	81	80	88	93
MBL 810-146870/1-A	Method Blank	86	88	94	91	84	81	89	93

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
- PFDoA = 13C2 PFDoA
- 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: 810-150782-1

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

Lab Sample ID: MBL 810-146870/1-A
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146870

Analyte	MBL Result	MBL Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.52		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoropentanoic acid (PFPeA)	<0.77		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorohexanoic acid (PFHxA)	<0.73		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoroheptanoic acid (PFHpA)	<0.72		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorooctanoic acid (PFOA)	<0.74		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorononanoic acid (PFNA)	<0.73		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorodecanoic acid (PFDA)	<0.66		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoroundecanoic acid (PFUnA)	<0.70		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorododecanoic acid (PFDoA)	<0.70		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorobutanesulfonic acid (PFBS)	<0.66		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoropentanesulfonic acid (PFPeS)	<0.69		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorohexanesulfonic acid (PFHxS)	<0.66		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.60		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluorooctanesulfonic acid (PFOS)	<0.69		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.66		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.67		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.68		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.57		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<0.71		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid	<0.97		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid	<0.82		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoro(4-methoxybutanoic acid)	<0.65		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.81		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1
Perfluoro-3,6-dioxaheptanoic acid	<0.93		2.0		ng/L		06/05/25 10:26	06/08/25 05:13	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	91		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C5 PFPeA	94		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C5 PFHxA	93		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C4 PFHpA	90		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C8 PFOA	89		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C9 PFNA	94		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C6 PFDA	95		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C7 PFUnA	90		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C2 PFDoA	86		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C3 HFPO-DA	88		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C3 PFBS	94		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C8 PFOS	91		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C2-4:2-FTS	84		50 - 200	06/05/25 10:26	06/08/25 05:13	1

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QC Sample Results

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

Job ID: 810-150782-1

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

Lab Sample ID: MBL 810-146870/1-A
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146870

Isotope Dilution	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2-6:2-FTS	81		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C2-8:2-FTS	89		50 - 200	06/05/25 10:26	06/08/25 05:13	1
13C3 PFHxS	93		50 - 200	06/05/25 10:26	06/08/25 05:13	1

Lab Sample ID: LCS 810-146870/3-A
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146870

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	400	391		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	400	395		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	400	387		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	400	391		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	400	392		ng/L		98	70 - 130
Perfluorononanoic acid (PFNA)	400	393		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	400	397		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	400	389		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	400	393		ng/L		98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	355	343		ng/L		97	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	376	355		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	365	351		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	382	365		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	371	366		ng/L		99	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	357	366		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	375	363		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	381	361		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	384	342		ng/L		89	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	400	388		ng/L		97	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	378	366		ng/L		97	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	374	368		ng/L		98	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	378	363		ng/L		96	70 - 130
Perfluoro(4-methoxybutanoic acid)	400	403		ng/L		101	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	400	383		ng/L		96	70 - 130
Perfluoro-3,6-dioxaheptanoic acid	400	380		ng/L		95	70 - 130

QC Sample Results

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

Job ID: 810-150782-1

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

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	92		50 - 200
13C5 PFPeA	86		50 - 200
13C5 PFHxA	90		50 - 200
13C4 PFHpA	91		50 - 200
13C8 PFOA	91		50 - 200
13C9 PFNA	88		50 - 200
13C6 PFDA	87		50 - 200
13C7 PFUnA	88		50 - 200
13C2 PFDoA	86		50 - 200
13C3 HFPO-DA	91		50 - 200
13C3 PFBS	93		50 - 200
13C8 PFOS	91		50 - 200
13C2-4:2-FTS	100		50 - 200
13C2-6:2-FTS	101		50 - 200
13C2-8:2-FTS	94		50 - 200
13C3 PFHxS	94		50 - 200

Lab Sample ID: LLCS 810-146870/2-A
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146870

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec
							Limits
Perfluorobutanoic acid (PFBA)	2.00	2.08		ng/L		104	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	1.92	J	ng/L		96	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.86	J	ng/L		93	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.88	J	ng/L		94	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.83	J	ng/L		92	50 - 150
Perfluorononanoic acid (PFNA)	2.00	1.85	J	ng/L		93	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	1.92	J	ng/L		96	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	1.95	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.78	1.67	J	ng/L		94	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	1.88	1.55	J	ng/L		82	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.83	1.52	J	ng/L		83	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.74	J	ng/L		91	50 - 150
Perfluorooctanesulfonic acid (PFOS)	1.86	1.78	J	ng/L		96	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	1.78	1.83	J	ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	1.88	1.83	J	ng/L		98	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	1.90	1.72	J	ng/L		90	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	1.92	1.95	J	ng/L		101	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	2.00	1.89	J	ng/L		94	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	1.86	J	ng/L		98	50 - 150

QC Sample Results

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

Job ID: 810-150782-1

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

Lab Sample ID: LLCS 810-146870/2-A
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146870

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	1.87	1.69	J	ng/L		91	50 - 150
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	1.89	1.86	J	ng/L		99	50 - 150
Perfluoro(4-methoxybutanoic acid)	2.00	1.95	J	ng/L		98	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.89	J	ng/L		94	50 - 150
Perfluoro-3,6-dioxaheptanoic acid	2.00	1.95	J	ng/L		98	50 - 150

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	LLCS Limits
13C4 PFBA	88		50 - 200
13C5 PFPeA	90		50 - 200
13C5 PFHxA	93		50 - 200
13C4 PFHpA	90		50 - 200
13C8 PFOA	89		50 - 200
13C9 PFNA	91		50 - 200
13C6 PFDA	93		50 - 200
13C7 PFUnA	90		50 - 200
13C2 PFDoA	88		50 - 200
13C3 HFPO-DA	89		50 - 200
13C3 PFBS	91		50 - 200
13C8 PFOS	90		50 - 200
13C2-4:2-FTS	81		50 - 200
13C2-6:2-FTS	80		50 - 200
13C2-8:2-FTS	88		50 - 200
13C3 PFHxS	93		50 - 200

Lab Sample ID: 810-150782-1 DU
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: J18-Rehobeth ARV
Prep Type: Total/NA
Prep Batch: 146870

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	3.1		3.04		ng/L		2	30
Perfluoropentanoic acid (PFPeA)	5.8		5.80		ng/L		0	30
Perfluorohexanoic acid (PFHxA)	5.6		5.48		ng/L		1	30
Perfluoroheptanoic acid (PFHpA)	2.1		2.05		ng/L		2	30
Perfluorooctanoic acid (PFOA)	3.8		3.73		ng/L		2	30
Perfluorononanoic acid (PFNA)	<1.9		<1.9		ng/L		NC	30
Perfluorodecanoic acid (PFDA)	<1.9		<1.9		ng/L		NC	30
Perfluoroundecanoic acid (PFUnA)	<1.9		<1.9		ng/L		NC	30
Perfluorododecanoic acid (PFDoA)	<1.9		<1.9		ng/L		NC	30
Perfluorobutanesulfonic acid (PFBS)	2.0		2.04		ng/L		0.3	30
Perfluoropentanesulfonic acid (PFPeS)	<1.9		<1.9		ng/L		NC	30
Perfluorohexanesulfonic acid (PFHxS)	<1.9		<1.9		ng/L		NC	30

Eurofins Eaton Analytical South Bend

QC Sample Results

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

Job ID: 810-150782-1

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

Lab Sample ID: 810-150782-1 DU
Matrix: Drinking Water
Analysis Batch: 147184

Client Sample ID: J18-Rehobeth ARV
Prep Type: Total/NA
Prep Batch: 146870

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Perfluoroheptanesulfonic acid (PFHpS)	<1.9		<1.9		ng/L		NC	30
Perfluorooctanesulfonic acid (PFOS)	2.5		2.53		ng/L		0.5	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<1.9		<1.9		ng/L		NC	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<1.9		<1.9		ng/L		NC	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<1.9		<1.9		ng/L		NC	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<1.9		<1.9		ng/L		NC	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.9		<1.9		ng/L		NC	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<1.9		<1.9		ng/L		NC	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<1.9		<1.9		ng/L		NC	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<1.9		<1.9		ng/L		NC	30
Perfluoro(4-methoxybutanoic acid)	<1.9		<1.9		ng/L		NC	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<1.9		<1.9		ng/L		NC	30
Perfluoro-3,6-dioxaheptanoic acid	<1.9		<1.9		ng/L		NC	30

Isotope Dilution	DU %Recovery	DU Qualifier	Limits
13C4 PFBA	94		50 - 200
13C5 PFPeA	98		50 - 200
13C5 PFHxA	96		50 - 200
13C4 PFHpA	100		50 - 200
13C8 PFOA	92		50 - 200
13C9 PFNA	93		50 - 200
13C6 PFDA	95		50 - 200
13C7 PFUnA	87		50 - 200
13C2 PFDoA	84		50 - 200
13C3 HFPO-DA	93		50 - 200
13C3 PFBS	95		50 - 200
13C8 PFOS	89		50 - 200
13C2-4:2-FTS	102		50 - 200
13C2-6:2-FTS	87		50 - 200
13C2-8:2-FTS	99		50 - 200
13C3 PFHxS	107		50 - 200

QC Association Summary

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

Job ID: 810-150782-1

LCMS

Prep Batch: 146870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-150782-1	J18-Rehobeth ARV	Total/NA	Drinking Water	533	
810-150782-2	Y01-Yadkin Finished Water	Total/NA	Drinking Water	533	
810-150782-3	Y02-Yadkin Raw Water	Total/NA	Drinking Water	533	
MBL 810-146870/1-A	Method Blank	Total/NA	Drinking Water	533	
LCS 810-146870/3-A	Lab Control Sample	Total/NA	Drinking Water	533	
LLCS 810-146870/2-A	Lab Control Sample	Total/NA	Drinking Water	533	
810-150782-1 DU	J18-Rehobeth ARV	Total/NA	Drinking Water	533	

Analysis Batch: 147184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-150782-1	J18-Rehobeth ARV	Total/NA	Drinking Water	533	146870
810-150782-2	Y01-Yadkin Finished Water	Total/NA	Drinking Water	533	146870
810-150782-3	Y02-Yadkin Raw Water	Total/NA	Drinking Water	533	146870
MBL 810-146870/1-A	Method Blank	Total/NA	Drinking Water	533	146870
LCS 810-146870/3-A	Lab Control Sample	Total/NA	Drinking Water	533	146870
LLCS 810-146870/2-A	Lab Control Sample	Total/NA	Drinking Water	533	146870
810-150782-1 DU	J18-Rehobeth ARV	Total/NA	Drinking Water	533	146870

Lab Chronicle

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

Job ID: 810-150782-1

Client Sample ID: J18-Rehobeth ARV

Lab Sample ID: 810-150782-1

Date Collected: 06/02/25 08:17

Matrix: Drinking Water

Date Received: 06/03/25 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			146870	KB	EA SB	06/05/25 10:26
Total/NA	Analysis	533		1	147184	MH	EA SB	06/08/25 06:38

Client Sample ID: Y01-Yadkin Finished Water

Lab Sample ID: 810-150782-2

Date Collected: 06/02/25 09:19

Matrix: Drinking Water

Date Received: 06/03/25 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			146870	KB	EA SB	06/05/25 10:26
Total/NA	Analysis	533		1	147184	MH	EA SB	06/08/25 07:12

Client Sample ID: Y02-Yadkin Raw Water

Lab Sample ID: 810-150782-3

Date Collected: 06/02/25 09:23

Matrix: Drinking Water

Date Received: 06/03/25 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			146870	KB	EA SB	06/05/25 10:26
Total/NA	Analysis	533		1	147184	MH	EA SB	06/08/25 07:29

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: 810-150782-1

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	06-08-25

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: 810-150782-1

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: 810-150782-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
810-150782-1	J18-Rehobeth ARV	Drinking Water	06/02/25 08:17	06/03/25 09:45
810-150782-2	Y01-Yadkin Finished Water	Drinking Water	06/02/25 09:19	06/03/25 09:45
810-150782-3	Y02-Yadkin Raw Water	Drinking Water	06/02/25 09:23	06/03/25 09:45

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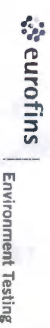
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Eurofins Eaton Analytical South Bend
 110 S Hill Street
 South Bend, IN 46817
 Phone: 574-233-4777 Fax: 574-233-9207

Chain of Custody Record



Client Information
 Client Contact: Justin Huntley
 Company: Union County Water
 Address: 500 N Main St
 City: Monroe
 State: NC
 Zip: 28112
 Phone: 704-289-3307
 Email: Justin.Huntley@UnionCountyNC.gov
 PFAS - 533

Sampler: Deryl Ennis
 Phone: 704-506-4683
 PWSID:

Lab #1: Matthews, Joe
 E-Mail: Joe.Matthews@et.eurofins.com

Carrier Tracking No(s):
 State of Origin:

COC No: 810-52866-6174.1
 Page: Page 1 of 1
 Job #:

Analysis Requested



Preservation Codes:
 - NH4 Acetate

Initial Temp: 16.2
 Corrected Temp: 15.0
 IR Gun # 98

Sample Identification

Project #: 81004979
 PO #: Purchase Order not required
 WO #:
 SOW#:

J18- Rebekah ARV
 Y01- Yackin Finished Water
 Y02- Yackin Raw Water

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (F=Water, S=Soil, G=Gravel, L=Liquid, P=Particulate, S=Sludge, W=Water, A=Air)	Preservation Code	Drinking Water
6/2/25	0817	G			Drinking Water
6/2/25	0919	G			Drinking Water
6/2/25	0923	G			Drinking Water

Field Filtered Sample (Yes or No) Yes
 Perform MS/MSD (Yes or No) Yes

533 - (MOD) Local Method

Total Number of containers

Special Instructions/Note:
 *All samples received in 1000 mL glass vials
 Acid were out of temp upon receipt.
 In 6/10/25

Possible Hazard Identification
 Non-Hazard
 Deliverable Requested
 Flammable
 Skin Irritant
 Poison B
 Unknown
 Radiological
 Empty Kit Relinquished by: I, II, III, IV, Other (Specify)

Relinquished by: Deryl Ennis

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Date/Time: 6-2-25

Date: 1000

Time:

Method of Shipment:

Custody Seal Intact: Yes No
 Custody Seal No.:

Date/Time:

Date/Time:

Time:

Method of Shipment:

Company: UCW

Received by: [Signature]

Date/Time: 6/10/25

Company: EEN

Login Sample Receipt Checklist

Client: Union County Water

Job Number: 810-150782-1

Login Number: 150782

List Number: 1

Creator: Moffitt, Tisha

List Source: Eurofins Eaton Analytical South Bend

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	
Were samples preserved to correct pH upon receipt, if applicable?	True	
Container provided by EEA	True	

