

Eurofins Derry Laboratory Report

Merrimack Village District
Jill Lavoie
2 Greens Pond Road
Merrimack, NH 03054

Date Printed: 03/30/2026
Job ID: 291-777-1
Date Received: 3/19/2026 2:15 PM
Sample Collected In: New Hampshire
Job Desc: Merrimack Village - PFAs
Non-Compliance

Attached please find results for the analysis of the samples received on the date referenced above.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed in the Certification Summary section, unless otherwise noted. This certificate shall not be reproduced, except in full, without the written approval of the analyzing laboratory. The results presented in this report relate to the samples listed on the following pages in the condition in which they were received. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

Receipt

The samples were received on 3/19/2026 2:15 PM. 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 9.8°C.

Certification Summary

Certifications for this job are presented below. Note that not all certifications may be applicable to your report and certifications for subcontracted laboratories are available upon request. Evidence of certification for laboratories within Eurofins Environmental Testing can be found on the following website: <https://www.eurofinsus.com/environment-testing/resources/certifications/>

Eurofins Derry (DER), 22 Manchester Road, Unit 2, Derry, NH 03038
New Hampshire, Lab ID: 1015

Method 533 - Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water

Isotope dilution analogue recovery for the following sample was outside control limits: 1531010_007 (MVD-7 raw) (291-777-7).
Re-extraction and/or re-analysis was performed and isotope dilution analogue recovery was outside control limits.

Analysis Related Notes

DF: "Dilution factor" means the ratio of the volume of the sample to the volume of the final (dilute) solution.

MDL: "Minimum Detection Limit" means the minimum result which can be reliably discriminated from a blank with predetermined confidence level.

ND: Non-detected at the reporting limit (or MDL or EDL if shown).

RL: "Reporting limit" means the lowest level of an analyte that can be accurately recovered from the matrix of interest.

Analytes not considered to be certified under the certifications associated with this report will have an asterisk next to their names.

Data qualifier flags provide additional information in regards to the receipt, analysis or quality control of a sample. If any such flags are associated with the results of this report, they will be listed below along with their definitions.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*5+ Isotope dilution analyte is outside acceptance limits, high biased.



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-008 (MVD-2 raw)
SAMPLE ID #: 291-777-1
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:57






Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.266	ng/L			0.266	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.304	ng/L			0.304	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.289	ng/L			0.289	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.354	ng/L			0.354	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.306	ng/L			0.306	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.254	ng/L			0.254	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.391	ng/L			0.391	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.540	ng/L			0.540	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.257	ng/L			0.257	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.366	ng/L			0.366	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.307	ng/L			0.307	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorobutanesulfonic acid (PFBS)	2.44	ng/L			0.279	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorobutanoic acid (PFBA)	2.29	ng/L			0.437	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorodecanoic acid (PFDA)	<0.319	ng/L			0.319	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorododecanoic acid (PFDoA)	<0.309	ng/L			0.309	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoroheptanesulfonic acid (PFHpS)	<0.356	ng/L			0.356	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoroheptanoic acid (PFHpA)	2.69	ng/L			0.466	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorohexanesulfonic acid (PFHxS)	0.791	ng/L		J	0.339	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorohexanoic acid (PFHxA)	3.27	ng/L			0.291	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorononanoic acid (PFNA)	0.402	ng/L		J	0.323	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-008 (MVD-2 raw)
SAMPLE ID #: 291-777-1
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:57

Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	2.12	ng/L			0.343	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluorooctanoic acid (PFOA)	13.9	ng/L			0.449	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoropentanesulfonic acid (PFPeS)	<0.320	ng/L			0.320	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoropentanoic acid (PFPeA)	2.36	ng/L			0.420	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoroundecanoic acid (PFUnA)	<0.328	ng/L			0.328	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 16:36

Isotope Dilution (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	92	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	98	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	102	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	94	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	103	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[1,2-13C2]dodecanoic acid	103	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[13C4]butanoic acid	102	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[13C5]pentanoic acid	83	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[13C8]octanoic acid	103	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Perfluoro-n-[13C9]nonanoic acid	104	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	113	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	183	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	123	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36

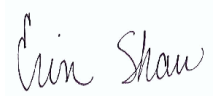
Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

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CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-008 (MVD-2 raw)
SAMPLE ID #: 291-777-1
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:57

<i>Isotope Dilution (EPA 533)</i>	<i>Results</i>	<i>Units</i>	<i>Pass/Fail</i>	<i>DQ Flag</i>	<i>DF</i>	<i>Limit</i>	<i>Analyst /Lab</i>	<i>Date & Time Prepared</i>	<i>Date & Time Analyzed</i>
Sodium perfluoro-[13C8]octanesulfonate	113	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	114	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	97	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 16:36



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_012 (MVD 9 raw)
SAMPLE ID #: 291-777-2
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:58

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.276	ng/L			0.276	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.315	ng/L			0.315	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.300	ng/L			0.300	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.368	ng/L			0.368	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.318	ng/L			0.318	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.263	ng/L			0.263	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.406	ng/L			0.406	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.561	ng/L			0.561	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.266	ng/L			0.266	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.379	ng/L			0.379	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.319	ng/L			0.319	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorobutanesulfonic acid (PFBS)	3.86	ng/L			0.290	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorobutanoic acid (PFBA)	1.35	ng/L		J	0.454	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorodecanoic acid (PFDA)	<0.331	ng/L			0.331	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorododecanoic acid (PFDoA)	<0.321	ng/L			0.321	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoroheptanesulfonic acid (PFHpS)	<0.370	ng/L			0.370	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoroheptanoic acid (PFHpA)	1.86	ng/L		J	0.484	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorohexanesulfonic acid (PFHxS)	1.30	ng/L		J	0.352	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorohexanoic acid (PFHxA)	1.20	ng/L		J	0.302	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorononanoic acid (PFNA)	<0.336	ng/L			0.336	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12






CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_012 (MVD 9 raw)
SAMPLE ID #: 291-777-2
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:58

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	2.01	ng/L			0.356	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluorooctanoic acid (PFOA)	15.5	ng/L			0.466	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoropentanesulfonic acid (PFPeS)	0.336	ng/L		J	0.333	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoropentanoic acid (PFPeA)	0.558	ng/L		J	0.436	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoroundecanoic acid (PFUnA)	<0.340	ng/L			0.340	1.95	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:12

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	109	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	114	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	116	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	116	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	116	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[1,2-13C2]dodecanoic acid	118	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[13C4]butanoic acid	118	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[13C5]pentanoic acid	111	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[13C8]octanoic acid	117	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Perfluoro-n-[13C9]nonanoic acid	115	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	100	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	95	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	83	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12

Authorized By: Erin Shaw, QA Manager
 Phone: (603)432-3044

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

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CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_012 (MVD 9 raw)
SAMPLE ID #: 291-777-2
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:58

<i>Isotope Dilution (EPA 533)</i>	<i>Results</i>	<i>Units</i>	<i>Pass/Fail</i>	<i>DQ Flag</i>	<i>DF</i>	<i>Limit</i>	<i>Analyst /Lab</i>	<i>Date & Time Prepared</i>	<i>Date & Time Analyzed</i>
Sodium perfluoro-[13C8]octanesulfonate	119	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	117	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	116	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:12



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-512 (TP - 2/9 treated)
SAMPLE ID #: 291-777-3
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 12:05






Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxau ndecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.275	ng/L			0.275	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.313	ng/L			0.313	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.299	ng/L			0.299	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.366	ng/L			0.366	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
4,8-Dioxa-3H-perfluorononan oic acid (ADONA)	<0.316	ng/L			0.316	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
9-Chlorohexadecafluoro-3-ox anonane-1-sulfonic acid (9Cl-PF3ONS)	<0.262	ng/L			0.262	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.404	ng/L			0.404	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Nonafluoro-3,6-dioxaheptanoi c acid (NFDHA)	<0.558	ng/L			0.558	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.265	ng/L			0.265	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-3-methoxypropanoi c acid (PFMPA)	<0.378	ng/L			0.378	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.317	ng/L			0.317	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorobutanesulfonic acid (PFBS)	<0.288	ng/L			0.288	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorobutanoic acid (PFBA)	<0.451	ng/L			0.451	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorodecanoic acid (PFDA)	<0.329	ng/L			0.329	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorododecanoic acid (PFDoA)	<0.319	ng/L			0.319	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoroheptanesulfonic acid (PFHpS)	<0.368	ng/L			0.368	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoroheptanoic acid (PFHpA)	<0.481	ng/L			0.481	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorohexanesulfonic acid (PFHxS)	<0.350	ng/L			0.350	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorohexanoic acid (PFHxA)	<0.301	ng/L			0.301	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorononanoic acid (PFNA)	<0.334	ng/L			0.334	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-512 (TP - 2/9 treated)
SAMPLE ID #: 291-777-3
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 12:05

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	<0.354	ng/L			0.354	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluorooctanoic acid (PFOA)	<0.464	ng/L			0.464	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoropentanesulfonic acid (PFPeS)	<0.331	ng/L			0.331	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoropentanoic acid (PFPeA)	<0.434	ng/L			0.434	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoroundecanoic acid (PFUnA)	<0.339	ng/L			0.339	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:04

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	87	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	98	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	100	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	93	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	95	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[1,2-13C2]dodecanoic acid	103	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[13C4]butanoic acid	96	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[13C5]pentanoic acid	93	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[13C8]octanoic acid	97	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Perfluoro-n-[13C9]nonanoic acid	99	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	122	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	138	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	117	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-512 (TP - 2/9 treated)
SAMPLE ID #: 291-777-3
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 12:05

<i>Isotope Dilution (EPA 533)</i>	<i>Results</i>	<i>Units</i>	<i>Pass/Fail</i>	<i>DQ Flag</i>	<i>DF</i>	<i>Limit</i>	<i>Analyst /Lab</i>	<i>Date & Time Prepared</i>	<i>Date & Time Analyzed</i>
<i>Sodium perfluoro-[13C8]octanesulfonate</i>	115	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
<i>Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate</i>	117	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04
<i>Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate</i>	113	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:04



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-011 (MVD-4R raw)
SAMPLE ID #: 291-777-4
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:28

Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxau ndecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.279	ng/L			0.279	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.318	ng/L			0.318	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	0.351	ng/L		J	0.303	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.371	ng/L			0.371	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.321	ng/L			0.321	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.266	ng/L			0.266	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.410	ng/L			0.410	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.566	ng/L			0.566	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.269	ng/L			0.269	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.383	ng/L			0.383	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.322	ng/L			0.322	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorobutanesulfonic acid (PFBS)	5.83	ng/L			0.292	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorobutanoic acid (PFBA)	5.17	ng/L			0.458	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorodecanoic acid (PFDA)	<0.334	ng/L			0.334	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorododecanoic acid (PFDoA)	<0.324	ng/L			0.324	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoroheptanesulfonic acid (PFHpS)	<0.373	ng/L			0.373	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoroheptanoic acid (PFHpA)	11.4	ng/L			0.488	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorohexanesulfonic acid (PFHxS)	2.73	ng/L			0.355	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorohexanoic acid (PFHxA)	15.6	ng/L			0.305	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorononanoic acid (PFNA)	0.518	ng/L		J	0.339	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17






CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-011 (MVD-4R raw)
SAMPLE ID #: 291-777-4
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:28

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	4.02	ng/L			0.359	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluorooctanoic acid (PFOA)	73.4	ng/L			0.471	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoropentanesulfonic acid (PFPeS)	0.571	ng/L		J	0.336	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoropentanoic acid (PFPeA)	10.5	ng/L			0.440	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoroundecanoic acid (PFUnA)	<0.344	ng/L			0.344	1.97	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:17

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	76	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	80	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	82	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	90	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[1,2-13C2]dodecanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[13C4]butanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[13C5]pentanoic acid	73	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[13C8]octanoic acid	88	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Perfluoro-n-[13C9]nonanoic acid	88	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	112	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	184	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	120	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17

Erin Shaw

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

1
2
3

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010-011 (MVD-4R raw)
SAMPLE ID #: 291-777-4
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:28

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	114	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	116	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	102	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:17



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_005 (MVD-5 raw)
SAMPLE ID #: 291-777-5
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:29






Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxau ndecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.278	ng/L			0.278	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.317	ng/L			0.317	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	0.399	ng/L		J	0.302	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.370	ng/L			0.370	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.320	ng/L			0.320	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.265	ng/L			0.265	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.408	ng/L			0.408	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.565	ng/L			0.565	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.268	ng/L			0.268	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.382	ng/L			0.382	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.321	ng/L			0.321	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorobutanesulfonic acid (PFBS)	5.46	ng/L			0.292	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorobutanoic acid (PFBA)	4.89	ng/L			0.457	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorodecanoic acid (PFDA)	<0.333	ng/L			0.333	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorododecanoic acid (PFDoA)	<0.323	ng/L			0.323	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoroheptanesulfonic acid (PFHpS)	<0.372	ng/L			0.372	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoroheptanoic acid (PFHpA)	8.48	ng/L			0.487	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorohexanesulfonic acid (PFHxS)	2.39	ng/L			0.354	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorohexanoic acid (PFHxA)	11.7	ng/L			0.304	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorononanoic acid (PFNA)	<0.338	ng/L			0.338	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_005 (MVD-5 raw)
SAMPLE ID #: 291-777-5
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:29

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	1.68	ng/L		J	0.358	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluorooctanoic acid (PFOA)	43.0	ng/L			0.469	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoropentanesulfonic acid (PFPeS)	0.440	ng/L		J	0.335	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoropentanoic acid (PFPeA)	8.25	ng/L			0.439	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoroundecanoic acid (PFUnA)	<0.343	ng/L			0.343	1.96	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:31

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	99	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	99	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	106	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	104	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	109	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[1,2-13C2]dodecanoic acid	103	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[13C4]butanoic acid	111	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[13C5]pentanoic acid	98	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[13C8]octanoic acid	109	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Perfluoro-n-[13C9]nonanoic acid	109	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	108	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	170	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	116	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_005 (MVD-5 raw)
SAMPLE ID #: 291-777-5
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:29

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	114	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	115	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	101	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:31



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_509 (TP-4/5 treated)
SAMPLE ID #: 291-777-6
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:25

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.274	ng/L			0.274	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.313	ng/L			0.313	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.298	ng/L			0.298	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.365	ng/L			0.365	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.316	ng/L			0.316	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.262	ng/L			0.262	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.403	ng/L			0.403	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.557	ng/L			0.557	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.264	ng/L			0.264	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.377	ng/L			0.377	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.317	ng/L			0.317	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorobutanesulfonic acid (PFBS)	<0.288	ng/L			0.288	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorobutanoic acid (PFBA)	1.63	ng/L		J	0.450	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorodecanoic acid (PFDA)	<0.328	ng/L			0.328	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorododecanoic acid (PFDoA)	<0.319	ng/L			0.319	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoroheptanesulfonic acid (PFHpS)	<0.367	ng/L			0.367	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoroheptanoic acid (PFHpA)	<0.480	ng/L			0.480	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorohexanesulfonic acid (PFHxS)	<0.350	ng/L			0.350	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorohexanoic acid (PFHxA)	<0.300	ng/L			0.300	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorononanoic acid (PFNA)	<0.333	ng/L			0.333	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45






CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_509 (TP-4/5 treated)
SAMPLE ID #: 291-777-6
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:25

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	<0.354	ng/L			0.354	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluorooctanoic acid (PFOA)	<0.463	ng/L			0.463	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoropentanesulfonic acid (PFPeS)	<0.330	ng/L			0.330	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoropentanoic acid (PFPeA)	<0.433	ng/L			0.433	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoroundecanoic acid (PFUnA)	<0.338	ng/L			0.338	1.94	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 17:45

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	70	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	79	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	79	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	71	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	74	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[1,2-13C2]dodecanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[13C4]butanoic acid	70	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[13C5]pentanoic acid	72	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[13C8]octanoic acid	76	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Perfluoro-n-[13C9]nonanoic acid	79	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	100	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	121	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	102	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45

Authorized By: Erin Shaw, QA Manager
 Phone: (603)432-3044

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_509 (TP-4/5 treated)
SAMPLE ID #: 291-777-6
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 11:25

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	109	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	106	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	105	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 17:45



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_007 (MVD-7 raw)
SAMPLE ID #: 291-777-7
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:49

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.275	ng/L			0.275	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.314	ng/L			0.314	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.299	ng/L			0.299	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.367	ng/L			0.367	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.317	ng/L			0.317	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.263	ng/L			0.263	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.405	ng/L			0.405	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.559	ng/L			0.559	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.265	ng/L			0.265	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.378	ng/L			0.378	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.318	ng/L			0.318	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorobutanesulfonic acid (PFBS)	2.78	ng/L			0.289	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorobutanoic acid (PFBA)	2.21	ng/L			0.452	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorodecanoic acid (PFDA)	<0.330	ng/L			0.330	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorododecanoic acid (PFDoA)	<0.320	ng/L			0.320	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoroheptanesulfonic acid (PFHpS)	<0.369	ng/L			0.369	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoroheptanoic acid (PFHpA)	2.59	ng/L			0.482	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorohexanesulfonic acid (PFHxS)	1.37	ng/L		J	0.351	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorohexanoic acid (PFHxA)	2.33	ng/L			0.301	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorononanoic acid (PFNA)	0.402	ng/L		J	0.335	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39






CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_007 (MVD-7 raw)
SAMPLE ID #: 291-777-7
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:49

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	2.59	ng/L			0.355	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluorooctanoic acid (PFOA)	20.7	ng/L			0.465	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoropentanesulfonic acid (PFPeS)	<0.332	ng/L			0.332	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoropentanoic acid (PFPeA)	1.76	ng/L		J	0.435	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoroundecanoic acid (PFUnA)	<0.339	ng/L			0.339	1.94	1	No Limit	SH - DER	03/25/26 08:52	03/25/26 18:39

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	83	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	94	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	93	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	91	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	98	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[1,2-13C2]dodecanoic acid	95	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[13C4]butanoic acid	105	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[13C5]pentanoic acid	84	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[13C8]octanoic acid	98	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Perfluoro-n-[13C9]nonanoic acid	94	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	114	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	231	%	✗	*5+	1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	130	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39

Authorized By: Erin Shaw, QA Manager
 Phone: (603)432-3044

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_007 (MVD-7 raw)
SAMPLE ID #: 291-777-7
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:49

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	104	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	104	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	89	%	✓		1	50 - 200	SH - DER	03/25/26 08:52	03/25/26 18:39



CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_009 (MVD-8 raw)
SAMPLE ID #: 291-777-8
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:52






Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxau ndecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.267	ng/L			0.267	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.305	ng/L			0.305	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.291	ng/L			0.291	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.356	ng/L			0.356	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.308	ng/L			0.308	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.255	ng/L			0.255	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.393	ng/L			0.393	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.543	ng/L			0.543	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.258	ng/L			0.258	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.368	ng/L			0.368	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.309	ng/L			0.309	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorobutanesulfonic acid (PFBS)	2.48	ng/L			0.281	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorobutanoic acid (PFBA)	2.00	ng/L			0.439	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorodecanoic acid (PFDA)	<0.320	ng/L			0.320	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorododecanoic acid (PFDoA)	<0.311	ng/L			0.311	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoroheptanesulfonic acid (PFHpS)	<0.358	ng/L			0.358	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoroheptanoic acid (PFHpA)	3.09	ng/L			0.469	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorohexanesulfonic acid (PFHxS)	1.07	ng/L		J	0.341	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorohexanoic acid (PFHxA)	3.00	ng/L			0.293	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorononanoic acid (PFNA)	<0.325	ng/L			0.325	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_009 (MVD-8 raw)
SAMPLE ID #: 291-777-8
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:52

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	1.38	ng/L		J	0.345	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluorooctanoic acid (PFOA)	21.8	ng/L			0.452	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoropentanesulfonic acid (PFPeS)	<0.322	ng/L			0.322	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoropentanoic acid (PFPeA)	2.02	ng/L			0.422	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoroundecanoic acid (PFUnA)	<0.330	ng/L			0.330	1.89	1	No Limit	SH - DER	03/23/26 09:14	03/24/26 07:26

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	94	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	97	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	93	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	101	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	105	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[1,2-13C2]dodecanoic acid	103	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[13C4]butanoic acid	105	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[13C5]pentanoic acid	97	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[13C8]octanoic acid	97	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Perfluoro-n-[13C9]nonanoic acid	94	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	81	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	96	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	69	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_009 (MVD-8 raw)
SAMPLE ID #: 291-777-8
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:52

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	105	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	108	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	106	%	✓		1	50 - 200	SH - DER	03/23/26 09:14	03/24/26 07:26



Authorized By: Erin Shaw, QA Manager
 Phone: (603)432-3044

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_510 (TP-7/8 treated)
SAMPLE ID #: 291-777-9
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:58

Test Description (EPA 533)	Results	Units	Pass/ Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
11-Chloroeicosafuoro-3-oxau ndecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.267	ng/L			0.267	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2FTS)	<0.304	ng/L			0.304	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid (4:2FTS)	<0.290	ng/L			0.290	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid (6:2FTS)	<0.355	ng/L			0.355	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
4,8-Dioxa-3H-perfluorononan oic acid (ADONA)	<0.307	ng/L			0.307	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
9-Chlorohexadecafluoro-3-ox anonane-1-sulfonic acid (9Cl-PF3ONS)	<0.254	ng/L			0.254	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Hexafluoropropylene oxide dimer acid (HFPO DA)	<0.392	ng/L			0.392	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Nonafluoro-3,6-dioxaheptanoi c acid (NFDHA)	<0.542	ng/L			0.542	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.257	ng/L			0.257	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-3-methoxypropanoi c acid (PFMPA)	<0.366	ng/L			0.366	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.308	ng/L			0.308	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorobutanesulfonic acid (PFBS)	<0.280	ng/L			0.280	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorobutanoic acid (PFBA)	<0.438	ng/L			0.438	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorodecanoic acid (PFDA)	<0.319	ng/L			0.319	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorododecanoic acid (PFDoA)	<0.310	ng/L			0.310	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoroheptanesulfonic acid (PFHpS)	<0.357	ng/L			0.357	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoroheptanoic acid (PFHpA)	<0.467	ng/L			0.467	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorohexanesulfonic acid (PFHxS)	<0.340	ng/L			0.340	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorohexanoic acid (PFHxA)	<0.292	ng/L			0.292	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorononanoic acid (PFNA)	<0.324	ng/L			0.324	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26






CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_510 (TP-7/8 treated)
SAMPLE ID #: 291-777-9
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:58

Test Description (EPA 533)	Results	Units	Pass/Fail	DQ Flag	MDL	RL	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Perfluorooctanesulfonic acid (PFOS)	<0.344	ng/L			0.344	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluorooctanoic acid (PFOA)	<0.450	ng/L			0.450	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoropentanesulfonic acid (PFPeS)	<0.321	ng/L			0.321	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoropentanoic acid (PFPeA)	<0.421	ng/L			0.421	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoroundecanoic acid (PFUnA)	<0.329	ng/L			0.329	1.88	1	No Limit	SH - DER	03/20/26 08:29	03/20/26 18:26

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
13C3-HFPO-DA	80	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[1,2,3,4,5,6,7-13C7]undecanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[1,2,3,4,5,6-13C6]decanoic acid	86	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[1,2,3,4,6-13C5]hexanoic acid	82	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[1,2,3,4-13C4]heptanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[1,2-13C2]dodecanoic acid	91	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[13C4]butanoic acid	87	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[13C5]pentanoic acid	85	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[13C8]octanoic acid	84	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Perfluoro-n-[13C9]nonanoic acid	84	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]decane sulfonate	104	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]hexane sulfonate	109	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-13C2]octane sulfonate	106	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26

Authorized By: Erin Shaw, QA Manager
 Phone: (603)432-3044

Legend	
Passes	
Fails EPA Primary	
Fails EPA Secondary	
Fails State Guideline	
Attention	

CERTIFICATE OF ANALYSIS FOR WATER

CLIENT SAMPLE ID: 1531010_510 (TP-7/8 treated)
SAMPLE ID #: 291-777-9
CLIENT JOB #:
OTHER SAMPLE INFO:
SAMPLED BY: Stephen Chase
ANALYSIS PACKAGE: PFAS 533 - 25 Compounds
COLLECTION DATE/TIME: 03/19/26 10:58

Isotope Dilution (EPA 533)	Results	Units	Pass/Fail	DQ Flag	DF	Limit	Analyst /Lab	Date & Time Prepared	Date & Time Analyzed
Sodium perfluoro-[13C8]octanesulfonate	108	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Sodium perfluoro-1-[1,2,3-13C3]hexanesulfonate	111	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26
Sodium perfluoro-1-[2,3,4-13C3]butanesulfonate	107	%	✓		1	50 - 200	SH - DER	03/20/26 08:29	03/20/26 18:26



