NEW YORK STATE | Department of Environmental Conservation

PFAS Sampling Results

(SPILL NO. 2400692)

POUND RIDGE, NY

DECEMBER 2024

Kathy Hochul, Governor | Sean Mahar, Interim Commissioner

1.0 Introduction

The NYSDEC was informed of per- and polyfluoroalkyl substances (PFAS) chemicals found in public supply wells in the Hamlet of Scotts Corners located within the Town of Pound Ridge. The NYSDEC then began a groundwater investigation of Scotts Corners starting in 2024. The sampling area, Pound Ridge Square Shopping center, is located at 55 Westchester Avenue in the Hamlet of Pound Ridge in Westchester County. The surrounding area is commercial and residential. The property consists of several commercial businesses, a grocery store, and parking lot area. To the west of the property are multiple commercial buildings including restaurants, a dry cleaner, and a fire department. To the south, the shopping center is bounded by Westchester Ave and commercial buildings. The rest of the shopping center is immediately surrounded by wooded areas and residences. NYSDEC received access to the monitoring wells from the property owner who cooperated with NYSDEC to complete two groundwater sampling events on July 8th and September 3rd, 2024.

2.0 Groundwater Sampling Collection

The following summarizes the field activities conducted at the Pound Ridge Square Shopping Center. The field activities consisted of groundwater sample collection from two locations on the property.

On July 8th and September 3rd, 2024, groundwater samples were collected in substantial compliance with Department policies, programs, and procedures, as applicable, including 6 NYCRR Part 375, DER-10, NYSDEC's *Sampling, Analysis, and Assessment of PFAS* guidance document. Samples were analyzed at an ELAP certified laboratory. Prior to any groundwater sampling, the wells were inspected and redeveloped by purging.

At each location, groundwater samples were collected using a low flow pumping method. A 0.25-inch diameter high density polyethylene (HDPE) tube was lowered into the well to approximately the mid-point in the water column. A peristaltic pump was used to control flow rate and a water level interface probe was used to monitor drawdown of the groundwater in the well. A multi-parameter meter (YSI) was used to monitor water quality parameters, including pH, conductivity, Oxidation-Reduction Potential, turbidity, and dissolved oxygen, until stabilization targets for each parameter was reached.

All purge water was containerized and disposed at a water treatment facility. All tubing and materials that contacted the groundwater was disposed after each sample. New HDPE and silicone tubing was used for each sample.

Samples were placed into laboratory supplied containers and then placed in a cooler with ice. For each of the two sampling events five groundwater samples were collected, each of which included two environmental samples a duplicate and two matrix spike samples.

Samples were submitted to a NYSDEC standby contracted laboratory (Eurofins) for analysis of per- and polyfluoroalkyl substances (PFAS) via Method 1633 and artificial sweeteners (Sucralose and Acesulfame-k) via Method L221.

A site location map with groundwater sampling locations is provided as Figure 1. Well construction and field notes are included as Appendix A. Laboratory analytical reports, and tables for PFAS are included as Appendix B.

3.0 Results

PFAS were detected in samples taken from MW-1 and MW-2 during both sampling events. Sample results were compared to New York Division of Water Technical and Operational Guidance Series (TOGS) No 1.1.1 for PFOA and PFOS of 10 parts per trillion (ppt).

PFOS was detected exceeding guidance levels at a maximum of 31 ppt in the first sampling event and at 38 ppt in the second. Exceedances of PFOS were found in the samples taken from both MW-1 and MW-2 in the first sampling event and only in MW-1 for the second event.

PFOA was detected exceeding guidance levels at a maximum of 410 ppt in the first sampling event and 610 ppt in the second. Exceedances of PFOA were found in the samples taken from both MW-1 and MW-2 and both sampling events.

Sucralose and Acesulfame-k were analyzed to determine if shallow groundwater is being influenced by septic systems in the surrounding area. Analytical results for all parameters are summarized in Table 1.

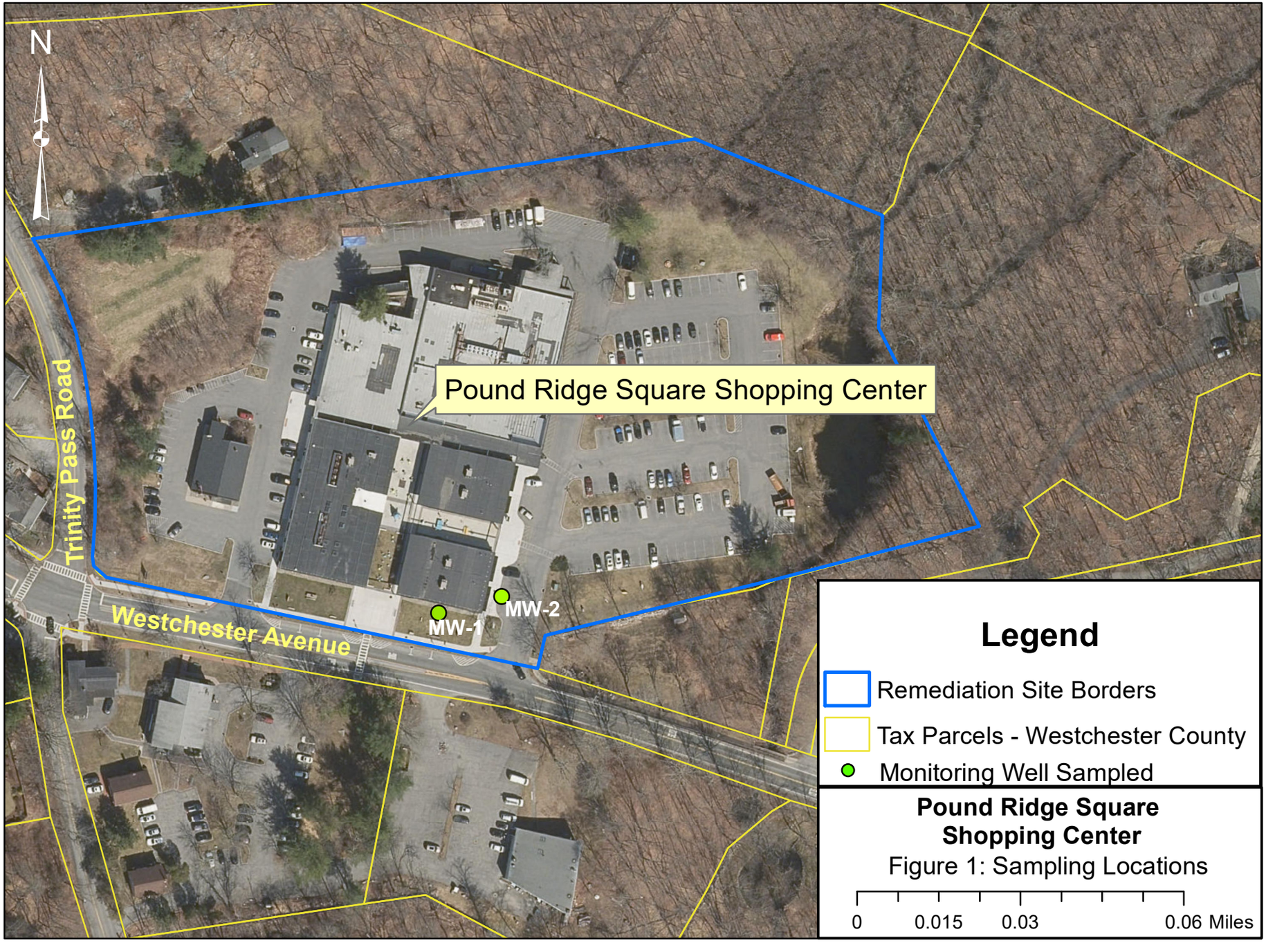
References

NYSDEC. 2023. 2023 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) No 1.1.1. https://extapps.dec.ny.gov/docs/water_pdf/togs111addendum2023.pdf

NYSDEC. 2021. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS). https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf

NYSDEC. 2006. 6 NYCRR Part 375, Environmental Remediation Programs, Subparts 375-1 to 375-4 & 375-6. https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf

Figures


N
Pound Ridge Square Shopping Center
Trinity Pass Road
Westchester Avenue
MW-1
MW-2
Legend
Remediation Site Borders
Tax Parcels - Westchester County
Monitoring Well Sampled
Pound Ridge Square
Shopping Center
Figure 1: Sampling Locations
0
0.015
0.03
0.06 Miles

Legend

N

- Monitoring Well
- Pound Ridge Square Shopping Center
- Local Streets

Groundwater		
Analyte	Units	NY Class GA[1]
PFOA	ppt	6.7
PFOS	ppt	2.7

[1]TOGS No. 1.1.1, 2023 Addendum, Class GA guidance values

ppt - parts per trillion

Highlight - Inidcates analyte was detected above the Class GA guidance value

0 50 100 200 300 Feet

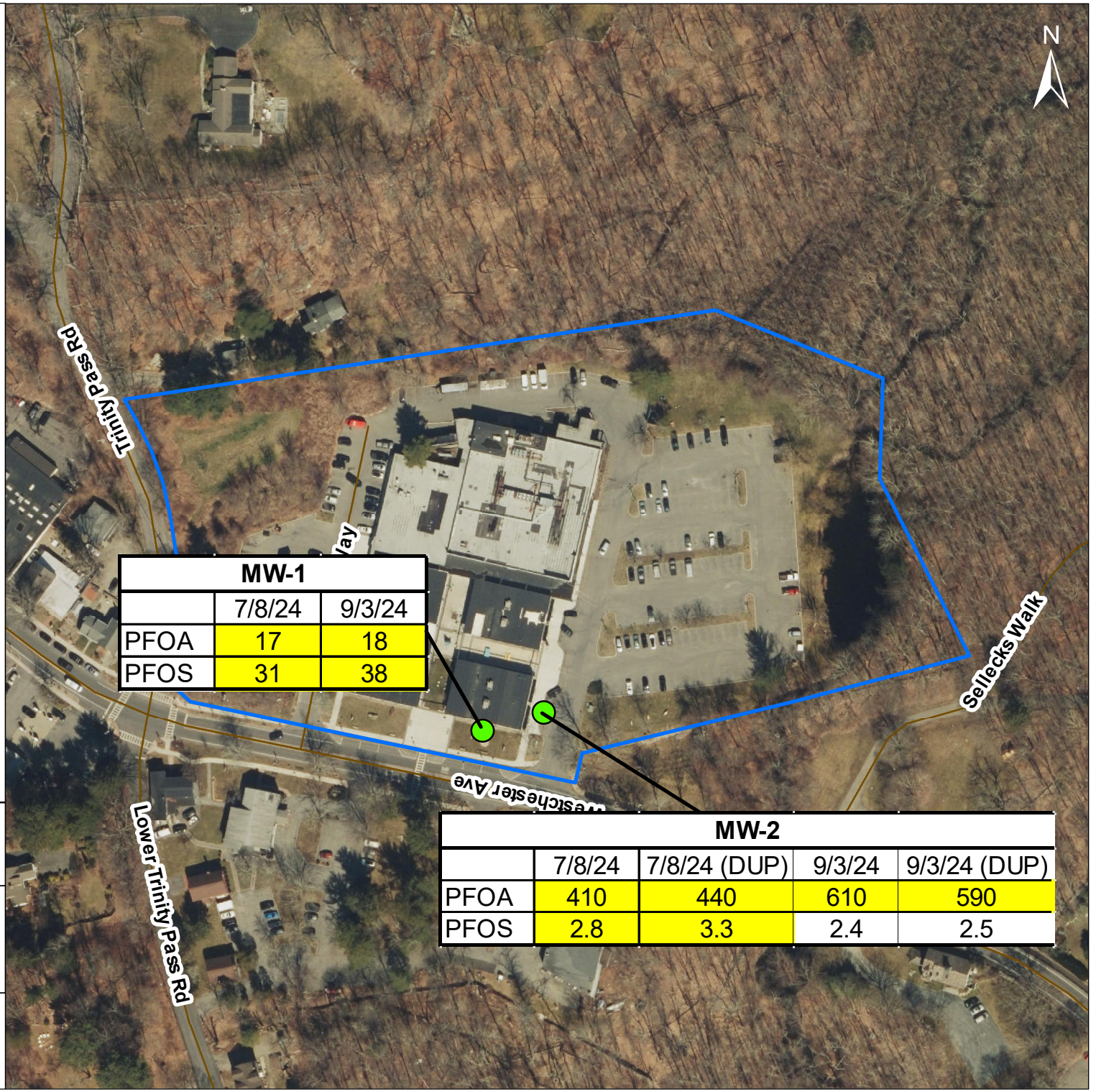
1 inch = 150 feet

Figure 2: PFOA and PFOS Groundwater Results

Pound Ridge Square Shopping Center

NEW YORK STATE | Department of Environmental Conservation

Date Created: 12/20/2024



Tables

Groundwater Sampling Analytical Data of Detected Parameters

Location Sample Date Sample Name	Analytical Units	NYS AWQSGV & Awareness Levels	MW-1 7/8/2024 MW-1-27-20240708	MW-2 7/8/2024 MW-2-15-20240708	MW-2 7/8/2024 DUP-20240708	MW-1 9/3/2024 MW-1-20240903	MW-2 9/3/2024 MW-2-20240903	MW-2 9/3/2024 DUP-20240903
Parameter								
3-Perfluoropentylpropanoic acid (5:3 FTCA)	PPT	100	ND	17	18	ND	11	13
3-Perfluoroheptyl propanoic acid	PPT	100	ND	17	17	ND	13	13
3-Perfluoropropyl propanoic acid	PPT	100	ND	2.9	3.1	ND	2.9	2.8
PERFLUOROBUTANESULFONIC ACID	PPT	100	4.4	1.7	1.6	4.4	1	1.1
Perfluorobutanoic acid (PFBA)	PPT	100	6.3	76	77	6.5	110	100
PERFLUOROHEPTANE SULFONATE (PFHpS)	PPT	100	0.47	ND	ND	ND	ND	ND
PERFLUORODECANOIC ACID (PFDA)	PPT	100	ND	230	240	ND	290	270
PERFLUORODODECANOIC ACID (PFDoA)	PPT	100	ND	33	30	ND	47	44
Perfluoroheptanoic Acid (PFHpA)	PPT	100	4.2	150	150	4.5	260	250
PERFLUOROHEXANESULFONIC ACID	PPT	100	13	1.4	1.1	15	ND	ND
PERFLUOROHEXANOIC ACID (PFHxA)	PPT	100	7.2	190	190	7.3	240	260
PERFLUORONONANOIC ACID	PPT	100	1.4	84	83	1.3	110	100
Perfluorooctane Sulfonamide (FOSA)	PPT	100	ND	ND	0.47	ND	0.6	0.55
PERFLUOROOCTANE SULFONIC ACID (PFOS)	PPT	2.7	**31**	**2.8**	**3.3**	**38**	2.4	2.5
PERFLUOROPENTANOIC ACID (PFPeA)	PPT	100	ND	250	250	ND	320	330
PERFLUOROTETRADECANOIC ACID (PFTeA)	PPT	100	ND	1.1	0.96	ND	0.9	0.78
PERFLUOROTRIDECANOIC ACID (PFTriA)	PPT	100	ND	5.4	5	ND	6.3	5.8
PERFLUOROUNDECANOIC ACID (PFUnA)	PPT	100	ND	67	62	ND	70	65
Perfluorooctanoic acid (PFOA)	PPT	6.7	**17**	**410**	**440**	**18**	**610**	**590**
Perfluoropentanesulfonic Acid (Pfpes)	PPT	100	0.63	ND	ND	ND	ND	ND
PERFLUOROPENTANOIC ACID (PFPeA)	PPT	100	7.7	ND	ND	7	ND	ND
TOTAL including PFOS &PFOA	PPT	500	93.3	1539.3	1572.53	102	2095.1	2048.53
Acesulfame K	PPB	-	0.21	0.031	0.03	NS	NS	NS
Sucralose	PPB	-	0.51	0.042	0.045	NS	NS	NS

ND=Non Detect

NS= Not Sampled

PPT=Parts per Trillion

PPB=Parts per Billion

Bold Results indicate an Exeedence in Guidance Values

- = No standard

Appendix A

MARIN ENVIRONMENTAL

Trinity Corners Shopping Center
55 Westchester Avenue
Pound Ridge, New York

99-0371

BORING MW-1

DRILLING INFORMATION

Drilling Dates	: 11/30/99	Inspector	: Brian Sirowich
Total Depth	: 46 feet	Drilling method	: Air rotary
Drilling Company	: Boyd Artesion Well : Company, Inc.	Diameter	: 6"

Depth in Feet	Sample ID	Lithology	DESCRIPTION
0	1		0 - 18' Brown, fine to coarse SILT, SAND and GRAVEL
18	5		18 - 35' Weathered white and pink SCHIST
35			35 - 40' Hard gray to white SCHIST
40			40 - 46' Pink FELDSPAR, GNEISS
46			End of boring at 46'

Well: MW-1
Elev.:

REMARKS

e LITHOLOGIC DESCRIPTION
and :35 to 50%
some :20 to 35%
little :10 to 20%
trace :0 to 10%

12-23-1999 H:\PROJECTS\98-517\BORING\MW-1.BOR

MARIN ENVIRONMENTAL

Trinity Corners Shopping Center
55 Westchester Avenue
Pound Ridge, New York

99-0371

BORING MW-2

DRILLING INFORMATION

Drilling Dates	: 11/30/99	Inspector	: Brian Sirowich
Total Depth	: 28 feet	Drilling method	: Air rotary
Drilling Company	: Boyd Artesion Well : Company, Inc.	Diameter	: 6"

Depth in Feet	Sample ID	Lithology	DESCRIPTION	Well: MW-2 Elev.:	REMARKS	Depth in Feet
0	1		0 - 15' Brown, fine to coarse SILT, SAND and GRAVEL	Overburden		0
2						2
4	2					4
6						6
8				Steel casing		8
10	3					10
12						12
14						14
16	4		15 - 21' Weathered SCHIST	Soft wthred bdrck		16
18						18
20	5			Grout		20
22			21 - 28' Hard gray SCHIST			22
24				Competent bedrock		24
26	6					26
28						28

e LITHOLOGIC DESCRIPTION

and	:35 to 50%
some	:20 to 35%
little	:10 to 20%
trace	:0 to 10%

12-23-1999 H:\PROJECTS\98-517\BORING\MW-2.BOR

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information	Sampler: Michaela Cochran	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-197792-40920.1
Client Contact: Michaela Cochran	Phone: 518-402-9669	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: New York State D.E.C.	PWSID:			Job #:
Address: 625 Broadway 12th Floor	Due Date Requested: 8/7/24			
City: Albany	TAT Requested (days): Standard (30)			
State, Zip: NY, 12233-7017	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9669(Tel)	PO #: Callout ID: 152002			
Email: Michaela.cochran@dec.ny.gov	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site: Pound Ridge	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
H - Ascorbic Acid

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final - 1633 Standard List 40	LCMS_PPCP_NEG - Sucralose & Ace-K	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	H		
Dup	7/8/24		G	Water	X		3	1	4	
MW-1/27'		11:08		Water	X		3	1	4	
MW-2/15'		1:14 pm		Water	X		3	1	4	
MW-2/15' MS		1:14		Water	X	X	3	1	4	
MW-2/15' MSD		1:14		Water	X	X	3	1	4	

TNC

7-8-24

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Michaela Cochran	7/8/24 1634	NYSDEC		7-8-24 1634	ECH

Monitoring Well Sampling Log

Well No.: MW1
Project: Pound Ridge

Date: 7/8/24
Location: Pound Ridge

Project No.: 2400692 Spill
Casing Type: Steel
Screen Length: 10ft.
Measuring Point: Top of casing
Well Diameter: 6in.
Well Depth: 55.34ft.
Water Level: 6.60ft. BTOC
Water Column: 48.74ft
1 Volume (gal.):

Purge Device: Peri pump
Start Purge: 10:47
Stop Purge: 11:05
Tubing Type: HDPE
Sampling Device: Pump
Sample Time: 11:08
Sample Personnel: Michaela Cochran, Sarah Moriarty, Matthew Ayers
Sample Analyses: 1633, L221

Notes:

Gal./ft.: 1" dia. = 0.05 gal./ft., 2" dia. = 0.18 gal./ft., 4" dia. = 0.66 gal./ft., 6" dia. = 1.5 gal./ft

Low Flow Criteria: temp ±3%, pH ±0.1, cond ±3%, redox ±10 mv, DO & turb ±10%, flow 100-500 ml/min.

Time	Rate	Volume (gal)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	ORP (mV)	Depth to Water (ft.)	Remarks
10:47	300	0.238	7.18	1.37	22.9	0	28.65	-124	7.08	
10:50	300	0.238	7.21	1.34	26.4	0	28.56	-131	7.28	Swampy smell
10:53	300	0.238	7.18	1.33	30.6	0	28.49	-132	7.45	
10:56	300	0.238	7.18	1.33	30.6	0	28.47	-134	7.72	
10:59	300	0.238	7.18	1.32	27.8	0	28.47	-135	7.97	
11:02	300	0.238	7.18	1.32	24.1	0	28.50	-132	8.20	
11:05	300	0.238	7.16	1.31	23.7	0	28.57	-134	8.48	

6.60 w/c BTOC 10:27

Monitoring Well Sampling Log

Well No.: MW2
Project: Pound Ridge

Date: 7/8/24
Location: Pound Ridge

Project No.: 2400692 Spill
Casing Type: Steel
Screen Length: [redacted]15ft
Measuring Point: Top of Casing
Well Diameter: 6in
Well Depth: 27.75 Ft.
Water Level: 4.16 Ft. BTOC
Water Column: 23.59 Ft.
1 Volume (gal.):

Purge Device: Peri Pump
Start Purge: 12:46
Stop Purge: 1:09
Tubing Type: HDPE
Sampling Device: Pump
Sample Time: 1:14
Sample Personnel: Michaela Cochran, Sarah Moriarty, Matthew Ayers
Sample Analyses: 16:33, L221

Notes:

Gal./ft.: 1" dia. = 0.05 gal./ft., 2" dia. = 0.18 gal./ft., 4" dia. = 0.66 gal./ft., 6" dia. = 1.5 gal./ft

Low Flow Criteria: temp ±3%, pH ±0.1, cond ±3%, redox ±10 mv, DO & turb ±10%, flow 100-500 ml/min.

Time	Rate	Volume (gal)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. [redacted]C°	ORP (mV)	Depth to Water (ft.)	Remarks
12:46	400	0.317	7.70	0.188	12.1	2.20	26.73	-220	4.53	
12:49	400	0.317	7.67	0.191	21.4	0.28	26.31	-220	4.58	
12:52	400	0.317	7.62	0.197	26.3	0	25.60	-219	4.64	
12:55	400	0.317	7.51	0.207	28.5	0	25.16	-220	4.67	
12:58	400	0.317	7.42	0.217	28.6	0	24.45	-219	4.68	
1:03	400	0.317	7.35	0.223	27.6	0	24.06	-218	4.70	
1:06	400	0.317	7.32	0.230	26.7	0	23.70	-217	4.71	
1:09	400	0.317	7.32	0.232	26.5	0	23.52	-218	4.71	

Volume = Rate × 3min × gallons

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Michaela Cochran	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-198889-41092.1
Client Contact: Michaela Cochran	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: New York State D.E.C.	PWSID:			Job #:
Address: 625 Broadway 12th Floor	Due Date Requested: 9/20/24			
City: Albany	TAT Requested (days): 30			
State, Zip: NY, 12233-7017	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9669(Tel)	PO #: Callout ID: 152002			
Email: Michaela.cochran@dec.ny.gov	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site: Pound Ridge	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final - 1633 Standard List 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	X	
DUP	9/3/24 ~~8/21/24~~ MC	✓	G	Water	X		3	3	
MW-1	↓	1:20pm	↓	Water	X		3	3	
MW-2		2:30pm		Water	X		3	3	
MW-2-MS		↓		Water	X	X	3	3	
MW-2-MSD	↓		↓	Water	X	X	3	3	

SVK 9/4/24

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

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

Deliverable Requested: I, II, III, IV, Other (specify) Cat B / EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Michaela Cochran	9/4/24 8:00am	NYSDEC	Sam Vut Koch	9/4/24 8:00am	EETN

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

Ver: 04/02/2024

Monitoring Well Sampling Log

Site #: Spill 2400692 — Date: ~~8/[illegible]/24~~ 9/3/24

Site Location: Pound Ridge/Scotts Corners — Personnel: Michaela C., Matt A, ~~Steve~~

Well ID: MW-2 — Tubing Type: HDPE

Casing Type: Steel — Sample Pump: Peri

Measuring Point: top of casing — Monitoring Equipment: Horiba U-52

Well Diameter (inches): 6" — Screen Setting (ft btoc): 15'

Well Total Depth (ft btoc): — Tubing Intake (ft btoc): 20'

Depth to Water (btoc): 3.96' — Comments:

Well Condition:

Well Purging Information:

Water Column Length (ft): — State Purge Time: 1:40 pm

1 Volume (gal.): — Stop Purge Time: 2:30 pm

Purge Device/Tubing: — Total Volume Removed (gal.): 3 gal

Gallons/ft.: 1" dia. = 0.05 gal./ft., 2" dia. = 0.18 gal./ft., 4" dia. = 0.66 gal./ft., 6" dia. = 1.5 gal./ft

Time	Depth to Water (ft btoc)	Pumping Rate (ml/min)	Water Quality Monitoring Parameters: pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	ORP (mV)	Volume (if purging)	Remarks
1:46	4.10	250	7.64	0.246	16	0.58	22.09	-302	0.200	
1:49	4.18	↓	7.61	0.227	12.9	0.44	21.54	-319	↓	
1:52	4.32		7.75	0.218	14.8	0.36	21.64	-346		
1:55	4.41		7.88	0.218	14.4	0.34	21.53	-358		
1:58	4.51		7.90	0.216	12.5	0.32	21.66	-359		
2:01	4.63		7.89	0.212	10.6	0.31	22.10	-363		
2:04	4.65		7.95	0.210	9.8	0.29	22.94	-363		
2:07	4.72		7.95	0.209	6.2	0.28	23.24	-364		
2:10	4.79		7.88	0.210	5.0	0.28	23.28	-365		
2:13	4.79		7.92	0.210	4.5	0.37	23.32	-368		
2:16	4.79		7.97	0.211	4.1	0.28	23.38	-369		
2:19	4.81		7.94	0.213	3.9	0.27	23.45	-370		
2:22	4.81		7.94	0.214	3.8	0.26	23.60	-372	▼	
		▼								

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time (from - to)	Depth to Water (ft btoc)	Pumping Rate (ml/min)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	ORP (mV)	Notes
Recommended Stabilization	±0.3	100-500	±0.1	±3%	±10% or < 5	±10% or <0.5	± 3%	±10	
Stabilization (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Sample Time: — **Sample Analyses:**

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/L	milligrams per liter	mV	millivolts
mS/cm	miliseimons per centimeter				

Monitoring Well Sampling Log

Site #: spill 2400692 — Date: 9/3/24
Site Location: Pound Ridge/Scott's Corners — Personnel: Michaela C., Matt A., [redacted]
Well ID: MW-1 — Tubing Type: HDPE
Casing Type: Steel — Sample Pump: Peri
Measuring Point: top of casing — Monitoring Equipment: Horiba U-52
Well Diameter (inches): 6" — Screen Setting (ft btoc): 18'
Well Total Depth (ft btoc): 27.8 ft. — Tubing Intake (ft btoc): 20'
Depth to Water (btoc): ~~2.72 ft.~~ 6.41 ft — Comments:
Well Condition:

Well Purging Information:

Water Column Length (ft): — State Purge Time: 12:20 pm
1 Volume (gal.): — Stop Purge Time: 1:20 pm
Purge Device/Tubing: — Total Volume Removed (gal.): 35 gal

Gallons/ft.: 1" dia. = 0.05 gal./ft., 2" dia. = 0.18 gal./ft., 4" dia. = 0.66 gal./ft., 6" dia. = 1.5 gal./ft

Time	Depth to Water (ft btoc)	Pumping Rate (ml/min)	Water Quality Monitoring Parameters: pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	ORP (mV)	Volume (if purging)	Remarks
12:30	6.84	330	7.39	1.77	1.3	0.7	18.02	-309	0.260	
12:33	6.99	250	7.40	1.76	1.3	0.63	18.13	-319	0.200	
12:36	7.11	250	7.47	1.76	1.6	0.59	18.13	-330	0.200	
12:39	7.23	300	7.48	1.76	1.5	0.55	18.15	-335	0.240	
12:42	7.34	300	7.52	1.76	1.5	0.51	18.20	-341	0.240	
12:45	7.55	300	7.58	1.75	1.8	0.48	18.15	-350	0.240	
12:48	7.64	300	7.59	1.75	1.7	0.47	18.11	-352	0.240	
12:51	7.83	300	7.58	1.75	1.5	0.44	18.20	-354	0.240	
12:54	7.93	300	7.59	1.75	1.1	0.43	18.19	-354	0.240	
12:57	8.02	300	7.56	1.75	1.1	0.42	18.20	-355	0.240	
1:00	8.16	300	7.56	1.75	0.8	0.41	18.28	-356	0.240	
1:03	8.27	300	7.59	1.75	0.6	0.40	18.30	-356	0.240	
1:06	8.41	300	7.56	1.74	0.4	0.39	18.31	-357	0.240	
1:09	8.51	300	7.61	1.74	0.4	0.4	18.33	-357	0.240	
1:12	8.61	300	7.56	1.74	0.4	0.38	18.32	-358	0.240	

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

Time (from - to)	Depth to Water (ft btoc)	Pumping Rate (ml/min)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	ORP (mV)	Notes
Recommended Stabilization	±0.3	100-500	±0.1	±3%	±10% or < 5	±10% or <0.5	± 3%	±10	
Stabilization (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Sample Time: — **Sample Analyses:**

ft btoc	feet below top of casing	NTU	Nephelometric Turbidity Units	°C	degrees Celsius
ml/min	milliliters per minute	mg/L	milligrams per liter	mV	millivolts
mS/cm	miliseimons per centimeter				

Appendix B

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ANALYTICAL REPORT

PREPARED FOR

Attn: Michaela Cochran
New York State D.E.C.
625 Broadway
12th Floor
Albany, New York 12233-7017

Generated 7/31/2024 11:12:00 AM

JOB DESCRIPTION

Pound Ridge Spill #2400692 PIN H7411

JOB NUMBER

480-221475-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Environment Testing Northeast, LLC Project Manager.

Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization

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Authorized for release by
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Table of Contents

Definitions/Glossary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Qualifiers

LCMS

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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

Job ID: 480-221475-1 Eurofins Buffalo

Job Narrative
480-221475-1

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 7/10/2024 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.7º C.

Receipt Exceptions
pH>4; needs adjusted.

DUP (480-221475-1), MW-1-27 (480-221475-2), MW-2-15 (480-221475-3), MW-2-15 (480-221475-3[MS]) and MW-2-5 (480-221475-3[MSD])

LCMS
Method 1633: The laboratory control sample (LCS) for preparation batch 240-619826 and analytical batch 240-620220 recovered outside control limits for the following analytes: Perfluoroheptanesulfonic acid (PFHpS). A low-level LCS (LLCS), spiked at 2x the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected or in the range of the LLCS in the samples, the data have been reported and qualified.

Method 1633: The closing CCV and CCB for analytical batch 240-620220 were out of the recommended order, data quality is unaffected, therefore data is reported.

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

Detection Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-221475-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	77		3.2	0.80	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	250		1.6	0.48	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	190		1.6	0.40	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	150		1.6	0.41	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	83		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorodecanoic acid (PFDA)	240		1.6	0.40	ng/L	1		1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	62		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorododecanoic acid (PFDoA)	30		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorotridecanoic acid (PFTrDA)	5.0		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorotetradecanoic acid (PFTeDA)	0.96	J	1.6	0.40	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.6	0.40	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.3		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorooctanesulfonamide (PFOSA)	0.47	J	1.6	0.40	ng/L	1		1633	Total/NA
3-Perfluoropropylpropanoic acid (3:3 FTCA)	3.1	J	3.2	0.80	ng/L	1		1633	Total/NA
3-Perfluoropentylpropanoic acid (5:3 FTCA)	18		8.0	2.0	ng/L	1		1633	Total/NA
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	17		8.0	2.0	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA) - DL	440		16	4.3	ng/L	10		1633	Total/NA
Acesulfame K	0.030		0.020	0.0020	ug/L	1		PPCP NEG	Total/NA
Sucralose	0.045	J	0.10	0.014	ug/L	1		PPCP NEG	Total/NA

Client Sample ID: MW-1-27
Lab Sample ID: 480-221475-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.3		3.5	0.87	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	7.7		1.7	0.52	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	7.2		1.7	0.43	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.2		1.7	0.44	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	17		1.7	0.47	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	1.4	J	1.7	0.43	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.4		1.7	0.43	ng/L	1		1633	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.63	J	1.7	0.43	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	13		1.7	0.43	ng/L	1		1633	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.47	J *-	1.7	0.43	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	31		1.7	0.43	ng/L	1		1633	Total/NA
Acesulfame K	0.21		0.020	0.0020	ug/L	1		PPCP NEG	Total/NA
Sucralose	0.51		0.10	0.014	ug/L	1		PPCP NEG	Total/NA

Client Sample ID: MW-2-15
Lab Sample ID: 480-221475-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	76		3.4	0.86	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	250		1.7	0.52	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	190		1.7	0.43	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	150		1.7	0.44	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	84		1.7	0.43	ng/L	1		1633	Total/NA
Perfluorodecanoic acid (PFDA)	230		1.7	0.43	ng/L	1		1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	67		1.7	0.43	ng/L	1		1633	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: MW-2-15 (Continued)
Lab Sample ID: 480-221475-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorododecanoic acid (PFDoA)	33		1.7	0.43	ng/L	1		1633	Total/NA
Perfluorotridecanoic acid (PFTrDA)	5.4		1.7	0.43	ng/L	1		1633	Total/NA
Perfluorotetradecanoic acid (PFTeDA)	1.1	J	1.7	0.43	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.7		1.7	0.43	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.7	0.43	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	0.43	ng/L	1		1633	Total/NA
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	3.4	0.86	ng/L	1		1633	Total/NA
3-Perfluoropentylpropanoic acid (5:3 FTCA)	17		8.6	2.1	ng/L	1		1633	Total/NA
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	17		8.6	2.1	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA) - DL	410		17	4.6	ng/L	10		1633	Total/NA
Acesulfame K	0.031		0.020	0.0020	ug/L	1		PPCP NEG	Total/NA
Sucralose	0.042	J	0.10	0.014	ug/L	1		PPCP NEG	Total/NA

This Detection Summary does not include radiochemical test results.

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-221475-1
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**77**		3.2	0.80	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoropentanoic acid (PFPeA)	**250**		1.6	0.48	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorohexanoic acid (PFHxA)	**190**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoroheptanoic acid (PFHpA)	**150**		1.6	0.41	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorononanoic acid (PFNA)	**83**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorodecanoic acid (PFDA)	**240**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoroundecanoic acid (PFUnA)	**62**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorododecanoic acid (PFDoA)	**30**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorotridecanoic acid (PFTrDA)	**5.0**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorotetradecanoic acid (PFTeDA)	**0.96**	**J**	1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorobutanesulfonic acid (PFBS)	**1.6**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorohexanesulfonic acid (PFHxS)	**1.1**	**J**	1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoroheptanesulfonic acid (PFHpS)	ND	*-	1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorooctanesulfonic acid (PFOS)	**3.3**		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.2	0.92	ng/L		07/15/24 08:41	07/17/24 15:56	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.2	0.82	ng/L		07/15/24 08:41	07/17/24 15:56	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.2	0.80	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorooctanesulfonamide (PFOSA)	**0.47**	**J**	1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.53	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.0	2.4	ng/L		07/15/24 08:41	07/17/24 15:56	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.0	2.0	ng/L		07/15/24 08:41	07/17/24 15:56	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.2	0.37	ng/L		07/15/24 08:41	07/17/24 15:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1

Client Sample ID: DUP
Lab Sample ID: 480-221475-1
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	**3.1**	**J**	3.2	0.80	ng/L		07/15/24 08:41	07/17/24 15:56	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	**18**		8.0	2.0	ng/L		07/15/24 08:41	07/17/24 15:56	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	**17**		8.0	2.0	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.6	0.40	ng/L		07/15/24 08:41	07/17/24 15:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*72.8*		*5 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C5 PFPeA	*76.6*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C5 PFHxA	*75.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C4 PFHpA	*76.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C8 PFOA	*69.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C9 PFNA	*78.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C6 PFDA	*76.1*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C7 PFUnA	*79.0*		*30 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C2 PFTeDA	*57.1*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C3 PFBS	*89.1*		*40 - 135*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C3 PFHxS	*77.0*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C8 PFOS	*82.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C8 PFOSA	*49.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
d3-NMeFOSAA	*52.6*		*40 - 170*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
d5-NEtFOSAA	*51.5*		*25 - 135*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
M2-4:2 FTS	*101*		*40 - 200*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
M2-6:2 FTS	*74.6*		*40 - 200*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
M2-8:2 FTS	*68.9*		*40 - 300*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C3 HFPO-DA	*76.6*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
d7-N-MeFOSE-M	*19.9*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
d9-N-EtFOSE-M	*15.6*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
d5-NEtPFOSA	*40.3*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
D3-NMeFOSA	*43.3*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*
13C2-PFDoDA	*74.5*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:56*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**440**		16	4.3	ng/L		07/15/24 08:41	07/22/24 12:55	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*134*	*5+*	*5 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*
13C5 PFPeA	*129*		*40 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*
13C5 PFHxA	*120*		*40 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*
13C4 PFHpA	*121*		*40 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*
13C8 PFOA	*117*		*40 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*
13C9 PFNA	*125*		*40 - 130*	*07/15/24 08:41*	*07/22/24 12:55*	*10*

Client Sample ID: DUP
Lab Sample ID: 480-221475-1

Date Collected: 07/08/24 00:00
Matrix: Water

Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C6 PFDA	117		40 - 130	07/15/24 08:41	07/22/24 12:55	10
13C7 PFUnA	0.179	*5-	30 - 130	07/15/24 08:41	07/22/24 12:55	10
13C2 PFTeDA	80.9		10 - 130	07/15/24 08:41	07/22/24 12:55	10
13C3 PFBS	133		40 - 135	07/15/24 08:41	07/22/24 12:55	10
13C3 PFHxS	131	*5+	40 - 130	07/15/24 08:41	07/22/24 12:55	10
13C8 PFOS	120		40 - 130	07/15/24 08:41	07/22/24 12:55	10
13C8 PFOSA	84.1		40 - 130	07/15/24 08:41	07/22/24 12:55	10
d3-NMeFOSAA	87.0		40 - 170	07/15/24 08:41	07/22/24 12:55	10
d5-NEtFOSAA	87.9		25 - 135	07/15/24 08:41	07/22/24 12:55	10
M2-4:2 FTS	133		40 - 200	07/15/24 08:41	07/22/24 12:55	10
M2-6:2 FTS	127		40 - 200	07/15/24 08:41	07/22/24 12:55	10
M2-8:2 FTS	130		40 - 300	07/15/24 08:41	07/22/24 12:55	10
13C3 HFPO-DA	123		40 - 130	07/15/24 08:41	07/22/24 12:55	10
d7-N-MeFOSE-M	32.1		10 - 130	07/15/24 08:41	07/22/24 12:55	10
d9-N-EtFOSE-M	22.4		10 - 130	07/15/24 08:41	07/22/24 12:55	10
d5-NEtPFOSA	62.8		10 - 130	07/15/24 08:41	07/22/24 12:55	10
D3-NMeFOSA	66.8		10 - 130	07/15/24 08:41	07/22/24 12:55	10
13C2-PFDoDA	0.410	*5-	10 - 130	07/15/24 08:41	07/22/24 12:55	10

Method: Lab SOP PPCP NEG - Pharmaceuticals and Personal Care Products (LC/MS/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acesulfame K	0.030		0.020	0.0020	ug/L			07/19/24 10:51	1
Sucralose	0.045	J	0.10	0.014	ug/L			07/19/24 10:51	1

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-1-27
Lab Sample ID: 480-221475-2
Date Collected: 07/08/24 11:08
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.3**		3.5	0.87	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoropentanoic acid (PFPeA)	**7.7**		1.7	0.52	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorohexanoic acid (PFHxA)	**7.2**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoroheptanoic acid (PFHpA)	**4.2**		1.7	0.44	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorooctanoic acid (PFOA)	**17**		1.7	0.47	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorononanoic acid (PFNA)	**1.4**	**J**	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorobutanesulfonic acid (PFBS)	**4.4**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoropentanesulfonic acid (PFPeS)	**0.63**	**J**	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorohexanesulfonic acid (PFHxS)	**13**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.47**	**J *-**	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorooctanesulfonic acid (PFOS)	**31**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorononanesulfonic acid (PFNS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.5	1.0	ng/L		07/15/24 08:41	07/17/24 16:09	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.5	0.90	ng/L		07/15/24 08:41	07/17/24 16:09	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.5	0.87	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.7	0.58	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.7	2.6	ng/L		07/15/24 08:41	07/17/24 16:09	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.7	2.2	ng/L		07/15/24 08:41	07/17/24 16:09	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.3	0.40	ng/L		07/15/24 08:41	07/17/24 16:09	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-1-27
Lab Sample ID: 480-221475-2
Date Collected: 07/08/24 11:08
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.5	0.87	ng/L		07/15/24 08:41	07/17/24 16:09	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		8.7	2.2	ng/L		07/15/24 08:41	07/17/24 16:09	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		8.7	2.2	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*72.9*		*5 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C5 PFPeA	*70.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C5 PFHxA	*73.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C4 PFHpA	*71.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C8 PFOA	*72.8*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C9 PFNA	*77.0*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C6 PFDA	*68.3*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C7 PFUnA	*69.1*		*30 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C2 PFTeDA	*55.9*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C3 PFBS	*78.8*		*40 - 135*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C3 PFHxS	*78.0*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C8 PFOS	*73.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C8 PFOSA	*46.1*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
d3-NMeFOSAA	*44.4*		*40 - 170*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
d5-NEtFOSAA	*43.7*		*25 - 135*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
M2-4:2 FTS	*70.0*		*40 - 200*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
M2-6:2 FTS	*72.9*		*40 - 200*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
M2-8:2 FTS	*69.7*		*40 - 300*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C3 HFPO-DA	*66.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
d7-N-MeFOSE-M	*27.8*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
d9-N-EtFOSE-M	*26.0*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
d5-NEtPFOSA	*37.5*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
D3-NMeFOSA	*37.9*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*
13C2-PFDoDA	*67.6*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:09*	*1*

Method: Lab SOP PPCP NEG - Pharmaceuticals and Personal Care Products (LC/MS/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acesulfame K	**0.21**		0.020	0.0020	ug/L			07/19/24 11:19	1
Sucralose	**0.51**		0.10	0.014	ug/L			07/19/24 11:19	1

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-2-15
Lab Sample ID: 480-221475-3
Date Collected: 07/08/24 13:14
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**76**		3.4	0.86	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoropentanoic acid (PFPeA)	**250**		1.7	0.52	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorohexanoic acid (PFHxA)	**190**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoroheptanoic acid (PFHpA)	**150**		1.7	0.44	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorononanoic acid (PFNA)	**84**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorodecanoic acid (PFDA)	**230**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoroundecanoic acid (PFUnA)	**67**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorododecanoic acid (PFDoA)	**33**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorotridecanoic acid (PFTrDA)	**5.4**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorotetradecanoic acid (PFTeDA)	**1.1**	**J**	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorobutanesulfonic acid (PFBS)	**1.7**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**	**J**	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoroheptanesulfonic acid (PFHpS)	ND	*-	1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorooctanesulfonic acid (PFOS)	**2.8**		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorononanesulfonic acid (PFNS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.4	0.99	ng/L		07/15/24 08:41	07/17/24 16:23	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.4	0.89	ng/L		07/15/24 08:41	07/17/24 16:23	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.4	0.86	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.7	0.58	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		8.6	2.5	ng/L		07/15/24 08:41	07/17/24 16:23	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		8.6	2.1	ng/L		07/15/24 08:41	07/17/24 16:23	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.3	0.40	ng/L		07/15/24 08:41	07/17/24 16:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1

Client Sample ID: MW-2-15
Lab Sample ID: 480-221475-3
Date Collected: 07/08/24 13:14
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	**2.9**	**J**	3.4	0.86	ng/L		07/15/24 08:41	07/17/24 16:23	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	**17**		8.6	2.1	ng/L		07/15/24 08:41	07/17/24 16:23	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	**17**		8.6	2.1	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.7	0.43	ng/L		07/15/24 08:41	07/17/24 16:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*67.7*		*5 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C5 PFPeA	*71.1*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C5 PFHxA	*69.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C4 PFHpA	*70.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C8 PFOA	*70.6*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C9 PFNA	*74.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C6 PFDA	*75.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C7 PFUnA	*65.2*		*30 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C2 PFTeDA	*60.0*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C3 PFBS	*81.0*		*40 - 135*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C3 PFHxS	*71.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C8 PFOS	*78.7*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C8 PFOSA	*44.2*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
d3-NMeFOSAA	*46.2*		*40 - 170*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
d5-NEtFOSAA	*46.1*		*25 - 135*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
M2-4:2 FTS	*92.3*		*40 - 200*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
M2-6:2 FTS	*68.3*		*40 - 200*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
M2-8:2 FTS	*63.8*		*40 - 300*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C3 HFPO-DA	*68.7*		*40 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
d7-N-MeFOSE-M	*40.8*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
d9-N-EtFOSE-M	*33.4*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
d5-NEtPFOSA	*38.8*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
D3-NMeFOSA	*39.9*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*
13C2-PFDoDA	*68.6*		*10 - 130*	*07/15/24 08:41*	*07/17/24 16:23*	*1*

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	**410**		17	4.6	ng/L		07/15/24 08:41	07/22/24 13:08	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*107*		*5 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*
13C5 PFPeA	*94.8*		*40 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*
13C5 PFHxA	*97.9*		*40 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*
13C4 PFHpA	*93.5*		*40 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*
13C8 PFOA	*99.8*		*40 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*
13C9 PFNA	*101*		*40 - 130*	*07/15/24 08:41*	*07/22/24 13:08*	*10*

Client Sample ID: MW-2-15
Lab Sample ID: 480-221475-3
Date Collected: 07/08/24 13:14
Matrix: Water
Date Received: 07/10/24 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C6 PFDA	95.8		40 - 130	07/15/24 08:41	07/22/24 13:08	10
13C7 PFUnA	0.438	*5-	30 - 130	07/15/24 08:41	07/22/24 13:08	10
13C2 PFTeDA	75.7		10 - 130	07/15/24 08:41	07/22/24 13:08	10
13C3 PFBS	110		40 - 135	07/15/24 08:41	07/22/24 13:08	10
13C3 PFHxS	102		40 - 130	07/15/24 08:41	07/22/24 13:08	10
13C8 PFOS	101		40 - 130	07/15/24 08:41	07/22/24 13:08	10
13C8 PFOSA	70.4		40 - 130	07/15/24 08:41	07/22/24 13:08	10
d3-NMeFOSAA	69.2		40 - 170	07/15/24 08:41	07/22/24 13:08	10
d5-NEtFOSAA	74.4		25 - 135	07/15/24 08:41	07/22/24 13:08	10
M2-4:2 FTS	96.7		40 - 200	07/15/24 08:41	07/22/24 13:08	10
M2-6:2 FTS	105		40 - 200	07/15/24 08:41	07/22/24 13:08	10
M2-8:2 FTS	105		40 - 300	07/15/24 08:41	07/22/24 13:08	10
13C3 HFPO-DA	93.4		40 - 130	07/15/24 08:41	07/22/24 13:08	10
d7-N-MeFOSE-M	54.2		10 - 130	07/15/24 08:41	07/22/24 13:08	10
d9-N-EtFOSE-M	45.1		10 - 130	07/15/24 08:41	07/22/24 13:08	10
d5-NEtPFOSA	58.3		10 - 130	07/15/24 08:41	07/22/24 13:08	10
D3-NMeFOSA	60.0		10 - 130	07/15/24 08:41	07/22/24 13:08	10
13C2-PFDoDA	87.9		10 - 130	07/15/24 08:41	07/22/24 13:08	10

Method: Lab SOP PPCP NEG - Pharmaceuticals and Personal Care Products (LC/MS/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acesulfame K	0.031		0.020	0.0020	ug/L			07/19/24 11:47	1
Sucralose	0.042	J	0.10	0.014	ug/L			07/19/24 11:47	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-619826/1-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 619826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0	1.0	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.60	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.51	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.54	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.2	ng/L		07/15/24 08:41	07/17/24 15:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		07/15/24 08:41	07/17/24 15:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.67	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	3.0	ng/L		07/15/24 08:41	07/17/24 15:15	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		07/15/24 08:41	07/17/24 15:15	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.46	ng/L		07/15/24 08:41	07/17/24 15:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-619826/1-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 619826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		07/15/24 08:41	07/17/24 15:15	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.5	ng/L		07/15/24 08:41	07/17/24 15:15	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		07/15/24 08:41	07/17/24 15:15	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*62.7*		*5 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C5 PFPeA	*66.1*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C5 PFHxA	*64.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C4 PFHpA	*65.3*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C8 PFOA	*60.7*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C9 PFNA	*59.7*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C6 PFDA	*59.1*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C7 PFUnA	*59.9*		*30 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C2 PFTeDA	*55.1*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C3 PFBS	*64.7*		*40 - 135*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C3 PFHxS	*62.8*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C8 PFOS	*66.4*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C8 PFOSA	*42.5*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
d3-NMeFOSAA	*46.7*		*40 - 170*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
d5-NEtFOSAA	*46.8*		*25 - 135*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
M2-4:2 FTS	*65.5*		*40 - 200*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
M2-6:2 FTS	*62.3*		*40 - 200*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
M2-8:2 FTS	*64.5*		*40 - 300*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C3 HFPO-DA	*62.9*		*40 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
d7-N-MeFOSE-M	*46.7*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
d9-N-EtFOSE-M	*44.0*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
d5-NEtPFOSA	*33.9*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
D3-NMeFOSA	*34.4*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*
13C2-PFDoDA	*61.0*		*10 - 130*	*07/15/24 08:41*	*07/17/24 15:15*	*1*

Lab Sample ID: LCS 240-619826/3-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	90.1		ng/L		113	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	43.4		ng/L		109	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	45.0		ng/L		112	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	45.2		ng/L		113	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	39.5		ng/L		99	70 - 150
Perfluorononanoic acid (PFNA)	40.0	43.4		ng/L		109	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	42.0		ng/L		105	70 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-619826/3-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	40.0	43.8		ng/L		109	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	43.7		ng/L		109	70 - 140
Perfluorotridecanoic acid (PFTrDA)	40.0	41.2		ng/L		103	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	40.0	41.0		ng/L		103	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	39.7		ng/L		112	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.5	43.3		ng/L		115	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.8		ng/L		104	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.1	25.2	*-	ng/L		66	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	36.8		ng/L		99	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.4	27.1		ng/L		71	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.7	24.8		ng/L		64	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	74.7	87.4		ng/L		117	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	75.8	92.7		ng/L		122	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.6	86.9		ng/L		113	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	42.8		ng/L		107	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	50.2		ng/L		125	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	47.5		ng/L		119	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	47.5		ng/L		119	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	43.0		ng/L		108	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	232		ng/L		116	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	223		ng/L		112	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	33.4		ng/L		111	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	45.4		ng/L		120	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	43.5		ng/L		109	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	47.3		ng/L		118	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.3	43.1		ng/L		116	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.7	50.5		ng/L		134	55 - 160

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-619826/3-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	35.6	40.0		ng/L		112	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	83.3		ng/L		104	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	222		ng/L		111	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	196		ng/L		98	50 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	28.1		ng/L		73	60 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	43.4		ng/L		109	55 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*59.8*		*5 - 130*
13C5 PFPeA	*61.4*		*40 - 130*
13C5 PFHxA	*58.9*		*40 - 130*
13C4 PFHpA	*61.2*		*40 - 130*
13C8 PFOA	*61.1*		*40 - 130*
13C9 PFNA	*62.1*		*40 - 130*
13C6 PFDA	*60.7*		*40 - 130*
13C7 PFUnA	*61.3*		*30 - 130*
13C2 PFTeDA	*63.4*		*10 - 130*
13C3 PFBS	*66.2*		*40 - 135*
13C3 PFHxS	*61.6*		*40 - 130*
13C8 PFOS	*67.2*		*40 - 130*
13C8 PFOSA	*40.0*		*40 - 130*
d3-NMeFOSAA	*42.2*		*40 - 170*
d5-NEtFOSAA	*43.2*		*25 - 135*
M2-4:2 FTS	*60.2*		*40 - 200*
M2-6:2 FTS	*56.3*		*40 - 200*
M2-8:2 FTS	*61.4*		*40 - 300*
13C3 HFPO-DA	*56.4*		*40 - 130*
d7-N-MeFOSE-M	*30.6*		*10 - 130*
d9-N-EtFOSE-M	*26.9*		*10 - 130*
d5-NEtPFOSA	*32.3*		*10 - 130*
D3-NMeFOSA	*31.4*		*10 - 130*
13C2-PFDoDA	*63.0*		*10 - 130*

Lab Sample ID: LLCS 240-619826/2-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	9.22		ng/L		115	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	4.76		ng/L		119	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	4.88		ng/L		122	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	4.98		ng/L		125	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.50		ng/L		112	70 - 150
Perfluorononanoic acid (PFNA)	4.00	4.71		ng/L		118	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-619826/2-A
Matrix: Water
Analysis Batch: 620220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanoic acid (PFDA)	4.00	5.52		ng/L		138	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	4.89		ng/L		122	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	5.01		ng/L		125	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	4.78		ng/L		119	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	4.64		ng/L		116	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.13		ng/L		117	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.75	4.56		ng/L		122	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.38		ng/L		120	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.81	3.22		ng/L		85	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	4.22		ng/L		114	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.84	2.96		ng/L		77	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.87	3.13		ng/L		81	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.47	8.33		ng/L		112	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.58	9.75		ng/L		129	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.66	8.10		ng/L		106	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	5.29		ng/L		132	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	5.11		ng/L		128	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	4.70		ng/L		118	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	4.00	4.86		ng/L		122	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.00	4.06		ng/L		101	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	22.6		ng/L		113	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	22.7		ng/L		113	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	3.14		ng/L		105	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.77	4.86		ng/L		129	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	5.03		ng/L		126	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	4.98		ng/L		124	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	3.73	4.32		ng/L		116	70 - 155

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-619826/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 620220
Prep Batch: 619826

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	3.77	4.97		ng/L		132	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	3.56	4.00		ng/L		112	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	8.00	9.72		ng/L		121	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	20.0	24.0		ng/L		120	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	20.0	19.6		ng/L		98	50 - 145
Perfluorodecanesulfonic acid (PFDS)	3.86	3.04		ng/L		79	60 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	4.58		ng/L		115	55 - 140

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*65.8*		*5 - 130*
13C5 PFPeA	*63.2*		*40 - 130*
13C5 PFHxA	*64.5*		*40 - 130*
13C4 PFHpA	*65.6*		*40 - 130*
13C8 PFOA	*63.0*		*40 - 130*
13C9 PFNA	*68.0*		*40 - 130*
13C6 PFDA	*64.6*		*40 - 130*
13C7 PFUnA	*67.6*		*30 - 130*
13C2 PFTeDA	*69.2*		*10 - 130*
13C3 PFBS	*67.1*		*40 - 135*
13C3 PFHxS	*63.2*		*40 - 130*
13C8 PFOS	*68.1*		*40 - 130*
13C8 PFOSA	*43.1*		*40 - 130*
d3-NMeFOSAA	*46.7*		*40 - 170*
d5-NEtFOSAA	*48.3*		*25 - 135*
M2-4:2 FTS	*70.8*		*40 - 200*
M2-6:2 FTS	*64.9*		*40 - 200*
M2-8:2 FTS	*67.5*		*40 - 300*
13C3 HFPO-DA	*61.3*		*40 - 130*
d7-N-MeFOSE-M	*35.6*		*10 - 130*
d9-N-EtFOSE-M	*30.3*		*10 - 130*
d5-NEtPFOSA	*34.8*		*10 - 130*
D3-NMeFOSA	*36.0*		*10 - 130*
13C2-PFDoDA	*67.4*		*10 - 130*

Lab Sample ID: 480-221475-3 MS
Client Sample ID: MW-2-15
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 620220
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	76		70.8	156		ng/L		112	70 - 140
Perfluoropentanoic acid (PFPeA)	250		35.4	294	4	ng/L		127	65 - 135
Perfluorohexanoic acid (PFHxA)	190		35.4	230	4	ng/L		111	70 - 145
Perfluoroheptanoic acid (PFHpA)	150		35.4	188	4	ng/L		96	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-221475-3 MS
Matrix: Water
Analysis Batch: 620220

Client Sample ID: MW-2-15
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorononanoic acid (PFNA)	84		35.4	122		ng/L		109	70 - 150
Perfluorodecanoic acid (PFDA)	230		35.4	275	4	ng/L		131	70 - 140
Perfluoroundecanoic acid (PFUnA)	67		35.4	102		ng/L		99	70 - 145
Perfluorododecanoic acid (PFDoA)	33		35.4	71.7		ng/L		109	70 - 140
Perfluorotridecanoic acid (PFTrDA)	5.4		35.4	40.1		ng/L		98	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	1.1	J	35.4	41.3		ng/L		114	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.7		31.3	34.4		ng/L		104	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	ND		33.2	40.6		ng/L		122	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	32.2	31.5		ng/L		93	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	ND	*-	33.7	23.8		ng/L		71	70 - 150
Perfluorooctanesulfonic acid (PFOS)	2.8		32.8	34.7		ng/L		97	55 - 150
Perfluorononanesulfonic acid (PFNS)	ND		34.0	22.8		ng/L		67	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	ND		34.3	19.1		ng/L		56	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		66.1	75.0		ng/L		113	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		67.1	73.6		ng/L		110	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		67.8	76.3		ng/L		113	60 - 150
Perfluorooctanesulfonamide (PFOSA)	ND		35.4	38.6		ng/L		109	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		35.4	41.2		ng/L		116	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		35.4	39.0		ng/L		110	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		35.4	38.8		ng/L		110	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		35.4	40.0		ng/L		113	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		177	199		ng/L		112	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		177	185		ng/L		104	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		26.5	28.0		ng/L		105	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		33.3	35.9		ng/L		108	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		35.4	38.2		ng/L		108	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		35.4	41.6		ng/L		117	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		33.0	31.9		ng/L		97	70 - 155

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-221475-3 MS
Matrix: Water
Analysis Batch: 620220

Client Sample ID: MW-2-15
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		33.3	32.4		ng/L		97	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		31.5	35.8		ng/L		114	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	70.8	70.9		ng/L		96	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	17		177	191		ng/L		98	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	17		177	172		ng/L		88	50 - 145
Perfluorodecanesulfonic acid (PFDS)	ND		34.1	23.5		ng/L		69	60 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		35.4	39.9		ng/L		113	55 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*82.1*		*5 - 130*
13C5 PFPeA	*85.2*		*40 - 130*
13C5 PFHxA	*81.7*		*40 - 130*
13C4 PFHpA	*84.1*		*40 - 130*
13C8 PFOA	*83.5*		*40 - 130*
13C9 PFNA	*81.1*		*40 - 130*
13C6 PFDA	*81.8*		*40 - 130*
13C7 PFUnA	*77.4*		*30 - 130*
13C2 PFTeDA	*66.6*		*10 - 130*
13C3 PFBS	*96.9*		*40 - 135*
13C3 PFHxS	*85.2*		*40 - 130*
13C8 PFOS	*88.8*		*40 - 130*
13C8 PFOSA	*52.3*		*40 - 130*
d3-NMeFOSAA	*52.9*		*40 - 170*
d5-NEtFOSAA	*50.0*		*25 - 135*
M2-4:2 FTS	*110*		*40 - 200*
M2-6:2 FTS	*83.2*		*40 - 200*
M2-8:2 FTS	*73.4*		*40 - 300*
13C3 HFPO-DA	*84.5*		*40 - 130*
d7-N-MeFOSE-M	*33.8*		*10 - 130*
d9-N-EtFOSE-M	*30.7*		*10 - 130*
d5-NEtPFOSA	*42.7*		*10 - 130*
D3-NMeFOSA	*43.1*		*10 - 130*
13C2-PFDoDA	*81.2*		*10 - 130*

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 620220

Client Sample ID: MW-2-5
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	76		67.8	160		ng/L		124	70 - 140	3	30
Perfluoropentanoic acid (PFPeA)	250		33.9	298	4	ng/L		142	65 - 135	1	30
Perfluorohexanoic acid (PFHxA)	190		33.9	222	4	ng/L		93	70 - 145	4	30
Perfluoroheptanoic acid (PFHpA)	150		33.9	199	4	ng/L		132	70 - 150	5	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 620220

Client Sample ID: MW-2-5
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorononanoic acid (PFNA)	84		33.9	116		ng/L		94	70 - 150	6	30
Perfluorodecanoic acid (PFDA)	230		33.9	268	4	ng/L		114	70 - 140	3	30
Perfluoroundecanoic acid (PFUnA)	67		33.9	99.2		ng/L		94	70 - 145	3	30
Perfluorododecanoic acid (PFDoA)	33		33.9	70.1		ng/L		109	70 - 140	2	30
Perfluorotridecanoic acid (PFTrDA)	5.4		33.9	41.1		ng/L		105	65 - 140	3	30
Perfluorotetradecanoic acid (PFTeDA)	1.1	J	33.9	38.4		ng/L		110	60 - 140	7	30
Perfluorobutanesulfonic acid (PFBS)	1.7		30.0	35.9		ng/L		114	60 - 145	4	30
Perfluoropentanesulfonic acid (PFPeS)	ND		31.8	38.1		ng/L		120	65 - 140	6	30
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	30.9	33.9		ng/L		105	65 - 145	7	30
Perfluoroheptanesulfonic acid (PFHpS)	ND	*-	32.3	25.4		ng/L		79	70 - 150	6	30
Perfluorooctanesulfonic acid (PFOS)	2.8		31.5	35.3		ng/L		103	55 - 150	2	30
Perfluorononanesulfonic acid (PFNS)	ND		32.6	23.4		ng/L		72	65 - 145	3	30
Perfluorododecanesulfonic acid (PFDoS)	ND		32.8	18.0		ng/L		55	50 - 145	6	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		63.4	75.6		ng/L		119	70 - 145	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		64.3	74.3		ng/L		116	65 - 155	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		65.0	83.3		ng/L		128	60 - 150	9	30
Perfluorooctanesulfonamide (PFOSA)	ND		33.9	39.3		ng/L		116	70 - 145	2	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		33.9	39.2		ng/L		115	60 - 150	5	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		33.9	39.2		ng/L		115	65 - 145	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		33.9	36.8		ng/L		108	50 - 140	5	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		33.9	37.0		ng/L		109	70 - 145	8	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		170	194		ng/L		115	70 - 145	2	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		170	193		ng/L		114	70 - 135	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		25.4	27.6		ng/L		109	70 - 140	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		32.0	35.3		ng/L		110	65 - 145	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		33.9	40.2		ng/L		118	60 - 150	5	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		33.9	37.4		ng/L		110	50 - 150	11	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		31.6	30.6		ng/L		97	70 - 155	4	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 620220

Client Sample ID: MW-2-5
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		32.0	29.0		ng/L		91	55 - 160	11	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		30.2	34.6		ng/L		115	70 - 140	3	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	67.8	72.3		ng/L		102	65 - 130	2	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	17		170	190		ng/L		102	70 - 135	1	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	17		170	165		ng/L		87	50 - 145	4	30
Perfluorodecanesulfonic acid (PFDS)	ND		32.7	22.5		ng/L		69	60 - 145	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		33.9	39.7		ng/L		117	55 - 140	1	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*70.7*		*5 - 130*
13C5 PFPeA	*73.0*		*40 - 130*
13C5 PFHxA	*73.6*		*40 - 130*
13C4 PFHpA	*71.1*		*40 - 130*
13C8 PFOA	*69.9*		*40 - 130*
13C9 PFNA	*75.5*		*40 - 130*
13C6 PFDA	*69.3*		*40 - 130*
13C7 PFUnA	*65.5*		*30 - 130*
13C2 PFTeDA	*55.3*		*10 - 130*
13C3 PFBS	*83.9*		*40 - 135*
13C3 PFHxS	*73.8*		*40 - 130*
13C8 PFOS	*75.6*		*40 - 130*
13C8 PFOSA	*45.6*		*40 - 130*
d3-NMeFOSAA	*45.7*		*40 - 170*
d5-NEtFOSAA	*42.1*		*25 - 135*
M2-4:2 FTS	*99.8*		*40 - 200*
M2-6:2 FTS	*71.2*		*40 - 200*
M2-8:2 FTS	*60.4*		*40 - 300*
13C3 HFPO-DA	*73.4*		*40 - 130*
d7-N-MeFOSE-M	*27.0*		*10 - 130*
d9-N-EtFOSE-M	*23.6*		*10 - 130*
d5-NEtPFOSA	*35.4*		*10 - 130*
D3-NMeFOSA	*38.7*		*10 - 130*
13C2-PFDoDA	*67.1*		*10 - 130*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL

Lab Sample ID: 480-221475-3 MS
Matrix: Water
Analysis Batch: 620739

Client Sample ID: MW-2-15
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid (PFOA) - DL	410		35.4	417	4	ng/L		13	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL (Continued)

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA - DL	111		5 - 130
13C5 PFPeA - DL	105		40 - 130
13C5 PFHxA - DL	96.8		40 - 130
13C4 PFHpA - DL	98.4		40 - 130
13C8 PFOA - DL	104		40 - 130
13C9 PFNA - DL	104		40 - 130
13C6 PFDA - DL	96.5		40 - 130
13C7 PFUnA - DL	0.131	*5-	30 - 130
13C2 PFTeDA - DL	0.387	*5-	10 - 130
13C3 PFBS - DL	112		40 - 135
13C3 PFHxS - DL	110		40 - 130
13C8 PFOS - DL	103		40 - 130
13C8 PFOSA - DL	63.1		40 - 130
d3-NMeFOSAA - DL	68.7		40 - 170
d5-NEtFOSAA - DL	73.9		25 - 135
M2-4:2 FTS - DL	113		40 - 200
M2-6:2 FTS - DL	110		40 - 200
M2-8:2 FTS - DL	106		40 - 300
13C3 HFPO-DA - DL	91.1		40 - 130
d7-N-MeFOSE-M - DL	46.2		10 - 130
d9-N-EtFOSE-M - DL	37.9		10 - 130
d5-NEtPFOSA - DL	55.0		10 - 130
D3-NMeFOSA - DL	58.7		10 - 130
13C2-PFDoDA - DL	93.4		10 - 130

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 620739

Client Sample ID: MW-2-5
Prep Type: Total/NA
Prep Batch: 619826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA) - DL	410		33.9	422	4	ng/L		30	70 - 150	1	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFBA - DL	111		5 - 130
13C5 PFPeA - DL	103		40 - 130
13C5 PFHxA - DL	101		40 - 130
13C4 PFHpA - DL	93.5		40 - 130
13C8 PFOA - DL	91.1		40 - 130
13C9 PFNA - DL	101		40 - 130
13C6 PFDA - DL	83.7		40 - 130
13C7 PFUnA - DL	81.6		30 - 130
13C2 PFTeDA - DL	72.5		10 - 130
13C3 PFBS - DL	104		40 - 135
13C3 PFHxS - DL	97.9		40 - 130
13C8 PFOS - DL	92.5		40 - 130
13C8 PFOSA - DL	68.4		40 - 130
d3-NMeFOSAA - DL	61.0		40 - 170
d5-NEtFOSAA - DL	61.1		25 - 135
M2-4:2 FTS - DL	108		40 - 200
M2-6:2 FTS - DL	94.8		40 - 200
M2-8:2 FTS - DL	97.9		40 - 300

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - DL (Continued)

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 620739

Client Sample ID: MW-2-5
Prep Type: Total/NA
Prep Batch: 619826

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3 HFPO-DA - DL	*89.1*		*40 - 130*
d7-N-MeFOSE-M - DL	*35.9*		*10 - 130*
d9-N-EtFOSE-M - DL	*31.1*		*10 - 130*
d5-NEtPFOSA - DL	*50.1*		*10 - 130*
D3-NMeFOSA - DL	*52.9*		*10 - 130*
13C2-PFDoDA - DL	*0.167*	*5-	*10 - 130*

Method: PPCP NEG - Pharmaceuticals and Personal Care Products (LC/MS/MS)

Lab Sample ID: MB 810-106437/10
Matrix: Water
Analysis Batch: 106437

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acesulfame K	ND		0.020	0.0020	ug/L			07/18/24 22:15	1
Sucralose	ND		0.10	0.014	ug/L			07/18/24 22:15	1

Lab Sample ID: 480-221475-3 MS
Matrix: Water
Analysis Batch: 106437

Client Sample ID: MW-2-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acesulfame K	0.031		0.800	0.750		ug/L		90	50 - 150
Sucralose	0.042	J	4.00	4.11		ug/L		102	50 - 150

Lab Sample ID: 480-221475-3 MSD
Matrix: Water
Analysis Batch: 106437

Client Sample ID: MW-2-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acesulfame K	0.031		0.800	0.775		ug/L		93	50 - 150	3	30
Sucralose	0.042	J	4.00	4.44		ug/L		110	50 - 150	8	30

LCMS

Analysis Batch: 106437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221475-1	DUP	Total/NA	Water	PPCP NEG	
480-221475-2	MW-1-27	Total/NA	Water	PPCP NEG	
480-221475-3	MW-2-15	Total/NA	Water	PPCP NEG	
MB 810-106437/10	Method Blank	Total/NA	Water	PPCP NEG	
480-221475-3 MS	MW-2-15	Total/NA	Water	PPCP NEG	
480-221475-3 MSD	MW-2-5	Total/NA	Water	PPCP NEG	

Prep Batch: 619826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221475-1	DUP	Total/NA	Water	1633	
480-221475-1 - DL	DUP	Total/NA	Water	1633	
480-221475-2	MW-1-27	Total/NA	Water	1633	
480-221475-3	MW-2-15	Total/NA	Water	1633	
480-221475-3 - DL	MW-2-15	Total/NA	Water	1633	
MB 240-619826/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-619826/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-619826/2-A	Lab Control Sample	Total/NA	Water	1633	
480-221475-3 MS	MW-2-15	Total/NA	Water	1633	
480-221475-3 MS - DL	MW-2-15	Total/NA	Water	1633	
480-221475-3 MSD - DL	MW-2-5	Total/NA	Water	1633	
480-221475-3 MSD	MW-2-5	Total/NA	Water	1633	

Analysis Batch: 620220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221475-1	DUP	Total/NA	Water	1633	619826
480-221475-2	MW-1-27	Total/NA	Water	1633	619826
480-221475-3	MW-2-15	Total/NA	Water	1633	619826
MB 240-619826/1-A	Method Blank	Total/NA	Water	1633	619826
LCS 240-619826/3-A	Lab Control Sample	Total/NA	Water	1633	619826
LLCS 240-619826/2-A	Lab Control Sample	Total/NA	Water	1633	619826
480-221475-3 MS	MW-2-15	Total/NA	Water	1633	619826
480-221475-3 MSD	MW-2-5	Total/NA	Water	1633	619826

Analysis Batch: 620739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221475-1 - DL	DUP	Total/NA	Water	1633	619826
480-221475-3 - DL	MW-2-15	Total/NA	Water	1633	619826
480-221475-3 MS - DL	MW-2-15	Total/NA	Water	1633	619826
480-221475-3 MSD - DL	MW-2-5	Total/NA	Water	1633	619826

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-221475-1
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			619826	CLB	EET CLE	07/15/24 08:41
Total/NA	Analysis	1633		1	620220	RMN	EET CLE	07/17/24 15:56
Total/NA	Prep	1633	DL		619826	CLB	EET CLE	07/15/24 08:41
Total/NA	Analysis	1633	DL	10	620739	RMN	EET CLE	07/22/24 12:55
Total/NA	Analysis	PPCP NEG		1	106437	BS	EA SB	07/19/24 10:51

Client Sample ID: MW-1-27
Lab Sample ID: 480-221475-2
Date Collected: 07/08/24 11:08
Matrix: Water
Date Received: 07/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			619826	CLB	EET CLE	07/15/24 08:41
Total/NA	Analysis	1633		1	620220	RMN	EET CLE	07/17/24 16:09
Total/NA	Analysis	PPCP NEG		1	106437	BS	EA SB	07/19/24 11:19

Client Sample ID: MW-2-15
Lab Sample ID: 480-221475-3
Date Collected: 07/08/24 13:14
Matrix: Water
Date Received: 07/10/24 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			619826	CLB	EET CLE	07/15/24 08:41
Total/NA	Analysis	1633		1	620220	RMN	EET CLE	07/17/24 16:23
Total/NA	Prep	1633	DL		619826	CLB	EET CLE	07/15/24 08:41
Total/NA	Analysis	1633	DL	10	620739	RMN	EET CLE	07/22/24 13:08
Total/NA	Analysis	PPCP NEG		1	106437	BS	EA SB	07/19/24 11:47

Laboratory References:

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

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10975	04-02-25

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
1633	1633	Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
1633	1633	Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
1633	1633	Water	3-Perfluoroheptylpropanoic acid (7:3 FTCA)
1633	1633	Water	3-Perfluoropentylpropanoic acid (5:3 FTCA)
1633	1633	Water	3-Perfluoropropylpropanoic acid (3:3 FTCA)
1633	1633	Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
1633	1633	Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)
1633	1633	Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
1633	1633	Water	N-ethylperfluorooctane sulfonamide (NEtFOSA)
1633	1633	Water	N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)
1633	1633	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
1633	1633	Water	N-methylperfluorooctane sulfonamide (NMeFOSA)
1633	1633	Water	N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)
1633	1633	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
1633	1633	Water	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
1633	1633	Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
1633	1633	Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
1633	1633	Water	Perfluoro-4-methoxybutanoic acid (PFMBA)
1633	1633	Water	Perfluorobutanesulfonic acid (PFBS)
1633	1633	Water	Perfluorobutanoic acid (PFBA)
1633	1633	Water	Perfluorodecanesulfonic acid (PFDS)
1633	1633	Water	Perfluorodecanoic acid (PFDA)
1633	1633	Water	Perfluorododecanesulfonic acid (PFDoS)
1633	1633	Water	Perfluorododecanoic acid (PFDoA)
1633	1633	Water	Perfluoroheptanesulfonic acid (PFHpS)
1633	1633	Water	Perfluoroheptanoic acid (PFHpA)
1633	1633	Water	Perfluorohexanesulfonic acid (PFHxS)
1633	1633	Water	Perfluorohexanoic acid (PFHxA)

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Laboratory: Eurofins Cleveland (Continued)

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

Authority	Program	Identification Number	Expiration Date

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
1633	1633	Water	Perfluorononanesulfonic acid (PFNS)
1633	1633	Water	Perfluorononanoic acid (PFNA)
1633	1633	Water	Perfluorooctanesulfonamide (PFOSA)
1633	1633	Water	Perfluorooctanesulfonic acid (PFOS)
1633	1633	Water	Perfluorooctanoic acid (PFOA)
1633	1633	Water	Perfluoropentanesulfonic acid (PFPeS)
1633	1633	Water	Perfluoropentanoic acid (PFPeA)
1633	1633	Water	Perfluorotetradecanoic acid (PFTeDA)
1633	1633	Water	Perfluorotridecanoic acid (PFTrDA)
1633	1633	Water	Perfluoroundecanoic acid (PFUnA)

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
New York	NELAP	11398	04-01-25

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
PPCP NEG		Water	Acesulfame K
PPCP NEG		Water	Sucralose

Method Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
PPCP NEG	Pharmaceuticals and Personal Care Products (LC/MS/MS)	Lab SOP	EA SB
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency
Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-221475-1	DUP	Water	07/08/24 00:00	07/10/24 10:30
480-221475-2	MW-1-27	Water	07/08/24 11:08	07/10/24 10:30
480-221475-3	MW-2-15	Water	07/08/24 13:14	07/10/24 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Albany #224

eurofins | Environment Testing

Client Information	Sampler: Michaela Cochran	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-197792-40920.1
Client Contact: Michaela Cochran	Phone: 518-402-9669	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: New York State D.E.C.	PWSID:			Job #
Address: 625 Broadway 12th Floor	Due Date Requested: 8/7/24			
City: Albany	TAT Requested (days): Standard (30)			
State, Zip: NY, 12233-7017	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9669(Tel)	PO #: Callout ID: 152002			
Email: Michaela.cochran@dec.ny.gov	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site: Pound Ridge	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
H - Ascorbic Acid

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final - 1633 Standard List 40	LCMS_PPCP_NEG - Sucralose & Ace-K	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	H		
Dup	7/8/24		G	Water	X		3	1	4	
MW-1/27'		11:08		Water	X		3	1	4	
MW-2/15'		1:14 pm		Water	X		3	1	4	
MW-2/15' MS		1:14		Water	X	X	3	1	4	
MW-2/15' MSD		1:14		Water	X	X	3	1	4	

480-221475 Chain of Custody

TNC 7-8-24

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Michaela Cochran	Date/Time: 7/8/24 1634	Company: NYSDEC	Received by:
Relinquished by: Tim Knollmeyer	Date/Time: 7/9/24 1500	Company: EETN	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Received by:	Date/Time: 7-8-24 1634	Company: EESA
Received by:	Date/Time: 7/10/24 1030	Company: VT
Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.7 # 1 ICE

Ver: 04/02/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fischer Brian J	Carrier Tracking No(s):	COC No: 480-88405 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-221475-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 8/8/2024			
City: Barberton	TAT Requested (days):			
State, Zip: OH 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other

85.35

Special Instructions/Note:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final/1633_SPE 1633 Standard List 40	Total Number of containers
			Preservation Code:					
DUP (480-221475-1)	7/8/24	Eastern		Water			X	3
MW-1-27 (480-221475-2)	7/8/24	11 08 Eastern		Water			X	3
MW-2-15 (480-221475-3)	7/8/24	13.14 Eastern		Water			X	3
MW-2-15 (480-221475-3MS)	7/8/24	13:14 Eastern	MS	Water			X	3
MW-2-5 (480-221475-3MSD)	7/8/24	13:14 Eastern	MSD	Water			X	3

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Matthew Wolfe	7/12/24 1600	NA	MALISSA LOAR	7-13-24 9:16	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client EDR Buffalo Site Name
Cooler Received on 7-13-24 Opened on 7-13-24
Cooler unpacked by: MALISSA LOAR
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other
Receipt After-hours Drop-off Date/Time Storage Location
Eurofins Cooler # TC Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form
IR GUN # (CF °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC442471
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container
Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory
Time preserved. Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen

Login # : ____________

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC circled) Client Box Other	IR GUN #: 22	2.4	2.3	(Wet Ice circled) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	2.6	2.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING
10 HAZELWOOD DRIVE

BUFFALO, NY 142282223
UNITED STATES US

ACTWGT: 43.25 LB
CAD 0759273/CAFE3808
DIMS 26x15x14 IN

BILL SENDER

Part # 159469-434 MTW/EXP 03/25
58SC9/E0E4/C5C4

TO **SAMPLE RECEIPT**
EUROFINS CLEVELAND
180 S VAN BUREN AVE

BARBERTON OH 442033543
(330) 497-9396
REF: BARBERTON

FedEx
Express

E

J241023111220 1uv

2 of 2

MPS# 0263 7117 9321 7081

Mstr# 7117 9321 7070

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CAKA

44203
OH-US CLE

102 12:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-88416.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Eaton Analytical		Accreditations Required (See note): NELAP - New York		Job #: 480-221475-1
Address: 110 S Hill Street, ,	Due Date Requested: 8/8/2024	Analysis Requested		Preservation Codes: -
City: South Bend	TAT Requested (days):			
State, Zip: IN, 46617				
Phone: 574-233-4777(Tel) 574-233-8207(Fax)	PO #:			
Email:	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	LCMS_PPCP_NEG/ Sucralose & Ace-K	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP (480-221475-1)	7/8/24	Eastern		Water			X	1	
MW-1-27 (480-221475-2)	7/8/24	11:08 Eastern		Water			X	1	
MW-2-15 (480-221475-3)	7/8/24	13:14 Eastern		Water			X	1	
MW-2-15 (480-221475-3MS)	7/8/24	13:14 Eastern	MS	Water			X	1	
MW-2-5 (480-221475-3MSD)	7/8/24	13:14 Eastern	MSD	Water			X	1	

Initial Temp: 0.0
Corrected Temp: 0.6
IR Gun #: 31

pH 7-4
chlorine absent

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 7/12/24 1600	Company: ETA		Received by: [signature]		Date/Time: 7/13/24 0900	Company:
Relinquished by:	Date/Time:	Company:		Received by:		Date/Time:	Company:
Relinquished by:	Date/Time:	Company:		Received by:		Date/Time:	Company:

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

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-221475-1

Login Number: 221475 **List Source: Eurofins Buffalo**
List Number: 1
Creator: Yeager, Brian A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	NYSDEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-221475-1

Login Number: 221475
List Number: 3
Creator: Trowbridge, Peyton

List Source: Eurofins Eaton Analytical South Bend
List Creation: 07/13/24 10:57 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
480-221475-1	DUP	72.8	76.6	75.5	76.2	69.5	78.9	76.1	79.0
480-221475-1 - DL	DUP	134 *5+	129	120	121	117	125	117	0.179 *5-
480-221475-2	MW-1-27	72.9	70.9	73.2	71.5	72.8	77.0	68.3	69.1
480-221475-3	MW-2-15	67.7	71.1	69.2	70.2	70.6	74.9	75.5	65.2
480-221475-3 - DL	MW-2-15	107	94.8	97.9	93.5	99.8	101	95.8	0.438 *5-
480-221475-3 MS	MW-2-15	82.1	85.2	81.7	84.1	83.5	81.1	81.8	77.4
480-221475-3 MS - DL	MW-2-15	111	105	96.8	98.4	104	104	96.5	0.131 *5-
480-221475-3 MSD	MW-2-5	70.7	73.0	73.6	71.1	69.9	75.5	69.3	65.5
480-221475-3 MSD - DL	MW-2-5	111	103	101	93.5	91.1	101	83.7	81.6
LCS 240-619826/3-A	Lab Control Sample	59.8	61.4	58.9	61.2	61.1	62.1	60.7	61.3
LLCS 240-619826/2-A	Lab Control Sample	65.8	63.2	64.5	65.6	63.0	68.0	64.6	67.6
MB 240-619826/1-A	Method Blank	62.7	66.1	64.9	65.3	60.7	59.7	59.1	59.9

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)	M242FTS (40-200)
480-221475-1	DUP	57.1	89.1	77.0	82.9	49.5	52.6	51.5	101
480-221475-1 - DL	DUP	80.9	133	131 *5+	120	84.1	87.0	87.9	133
480-221475-2	MW-1-27	55.9	78.8	78.0	73.5	46.1	44.4	43.7	70.0
480-221475-3	MW-2-15	60.0	81.0	71.2	78.7	44.2	46.2	46.1	92.3
480-221475-3 - DL	MW-2-15	75.7	110	102	101	70.4	69.2	74.4	96.7
480-221475-3 MS	MW-2-15	66.6	96.9	85.2	88.8	52.3	52.9	50.0	110
480-221475-3 MS - DL	MW-2-15	0.387 *5-	112	110	103	63.1	68.7	73.9	113
480-221475-3 MSD	MW-2-5	55.3	83.9	73.8	75.6	45.6	45.7	42.1	99.8
480-221475-3 MSD - DL	MW-2-5	72.5	104	97.9	92.5	68.4	61.0	61.1	108
LCS 240-619826/3-A	Lab Control Sample	63.4	66.2	61.6	67.2	40.0	42.2	43.2	60.2
LLCS 240-619826/2-A	Lab Control Sample	69.2	67.1	63.2	68.1	43.1	46.7	48.3	70.8
MB 240-619826/1-A	Method Blank	55.1	64.7	62.8	66.4	42.5	46.7	46.8	65.5

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)	PFDoDA (10-130)
480-221475-1	DUP	74.6	68.9	76.6	19.9	15.6	40.3	43.3	74.5
480-221475-1 - DL	DUP	127	130	123	32.1	22.4	62.8	66.8	0.410 *5-
480-221475-2	MW-1-27	72.9	69.7	66.9	27.8	26.0	37.5	37.9	67.6
480-221475-3	MW-2-15	68.3	63.8	68.7	40.8	33.4	38.8	39.9	68.6
480-221475-3 - DL	MW-2-15	105	105	93.4	54.2	45.1	58.3	60.0	87.9
480-221475-3 MS	MW-2-15	83.2	73.4	84.5	33.8	30.7	42.7	43.1	81.2
480-221475-3 MS - DL	MW-2-15	110	106	91.1	46.2	37.9	55.0	58.7	93.4
480-221475-3 MSD	MW-2-5	71.2	60.4	73.4	27.0	23.6	35.4	38.7	67.1
480-221475-3 MSD - DL	MW-2-5	94.8	97.9	89.1	35.9	31.1	50.1	52.9	0.167 *5-
LCS 240-619826/3-A	Lab Control Sample	56.3	61.4	56.4	30.6	26.9	32.3	31.4	63.0
LLCS 240-619826/2-A	Lab Control Sample	64.9	67.5	61.3	35.6	30.3	34.8	36.0	67.4
MB 240-619826/1-A	Method Blank	62.3	64.5	62.9	46.7	44.0	33.9	34.4	61.0

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 480-221475-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = D3-NMeFOSA
PFDoDA = 13C2-PFDoDA

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Michaela Cochran
New York State D.E.C.
625 Broadway
12th Floor
Albany, New York 12233-7017

Generated 12/19/2024 11:05:24 AM Revision 1

JOB DESCRIPTION

Pound Ridge Spill #2400692 PIN H7411

JOB NUMBER

480-223087-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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 Environment Testing Northeast, LLC Project Manager.

Compliance Statement

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Authorization

Generated
12/19/2024 11:05:24 AM
Revision 1

Authorized for release by
Kavya Boyina, Project Manager
kavya.boyina@et.eurofinsus.com
Designee for
Brian Fischer, Manager of Project Management
Brian.Fischer@et.eurofinsus.com
(716)504-9835

Table of Contents

Definitions/Glossary

Client: New York State D.E.C. Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
I	Value is EMPC (estimated maximum possible concentration).
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

Job ID: 480-223087-1 Eurofins Buffalo

Job Narrative
480-223087-1

Revision
The report being provided is a revision of the original report sent on 9/13/2024. The report (revision 1) is being revised to correct the sample collection dates. A revised COC provided by the client is included in the report.

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 9/5/2024 9:30 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 2.7°C.

PFAS
Method 1633_Final: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the Continuing Calibration Blank (CCB) for 13C2 PFTeDA . Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries, the CCB is non detect for associated target analytes, therefore, the associated samples are reported. The following sample is affected: MW-2 (480-223087-3).

Method 1633_Final: The continuing calibration verification (CCV) recovered outside of control limits for IDA compound 13C2 PFTeDA. Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported. The following samples are impacted: DUP (480-223087-1) and MW-1 (480-223087-2).

Method 1633_Final: The continuing calibration verification (CCV) recovered outside of control limits for IDA compound d5-NEtFOSAA. Section 14.3.3 of the finalized EPA 1633 states that the recovery of target analytes for the CCV(s) must be within 70 - 130%, unless the analyte is not of concern for a given project. Since target analytes associated with this IDA are within spec, data is reported. The following samples are impacted: DUP (480-223087-1), MW-1 (480-223087-2) and MW-2 (480-223087-3).

Method 1633_Final: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the Method Blank (MB) for d5-NEtFOSAA. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries, the MB is non detect for associated target analytes, therefore, the associated samples are reported. The following samples are affected:DUP (480-223087-1), MW-1 (480-223087-2) and MW-2 (480-223087-3).

Method 1633_Final: The low level laboratory control sample (LLCS) for preparation batch 240-626249 and analytical batch 240-626324 recovered outside control limits for the following analyte: d5-NEtFOSAA. However, the native compounds were in spec, therefore the data has been reported.

Method 1633_Final: The laboratory control sample (LCS) for preparation batch 240-626249 and analytical batch 240-626324 recovered outside control limits for the following analytes: 13C5 PFPeA, 13C3 PFHxS and d5-NEtFOSAA. However, the native compounds were in spec, therefore the data has been reported.

Method 1633_Final: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: DUP (480-223087-1), MW-1 (480-223087-2) and MW-2 (480-223087-3). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 1633_Final: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 240-626249 and analytical batch 240-626324 were outside control limits for some analytes. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recoveries were within acceptance limits.

Job ID: 480-223087-1 (Continued) Eurofins Buffalo

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

Detection Summary

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-223087-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	100		3.0	0.75	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	330		1.5	0.45	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	260		1.5	0.38	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	250		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	590		1.5	0.41	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	100		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorodecanoic acid (PFDA)	270		1.5	0.38	ng/L	1		1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	65		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorododecanoic acid (PFDoA)	44		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorotridecanoic acid (PFTrDA)	5.8		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorotetradecanoic acid (PFTeDA)	0.78	J	1.5	0.38	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.5	0.38	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		1.5	0.38	ng/L	1		1633	Total/NA
Perfluorooctanesulfonamide (PFOSA)	0.55	J I	1.5	0.38	ng/L	1		1633	Total/NA
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.8	J	3.0	0.75	ng/L	1		1633	Total/NA
3-Perfluoropentylpropanoic acid (5:3 FTCA)	13		7.5	1.9	ng/L	1		1633	Total/NA
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	13		7.5	1.9	ng/L	1		1633	Total/NA

Client Sample ID: MW-1
Lab Sample ID: 480-223087-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.5	J	6.8	1.7	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	7.0		3.4	1.0	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	7.3		3.4	0.85	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.5		3.4	0.87	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	18		3.4	0.92	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	1.3	J	3.4	0.85	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.4		3.4	0.85	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	15		3.4	0.85	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	38		3.4	0.85	ng/L	1		1633	Total/NA

Client Sample ID: MW-2
Lab Sample ID: 480-223087-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	110		3.1	0.78	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	320		1.6	0.47	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	240		1.6	0.39	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	260		1.6	0.40	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	610		1.6	0.42	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	110		1.6	0.39	ng/L	1		1633	Total/NA
Perfluorodecanoic acid (PFDA)	290		1.6	0.39	ng/L	1		1633	Total/NA
Perfluoroundecanoic acid (PFUnA)	70	F1	1.6	0.39	ng/L	1		1633	Total/NA
Perfluorododecanoic acid (PFDoA)	47		1.6	0.39	ng/L	1		1633	Total/NA
Perfluorotridecanoic acid (PFTrDA)	6.3		1.6	0.39	ng/L	1		1633	Total/NA
Perfluorotetradecanoic acid (PFTeDA)	0.90	J	1.6	0.39	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.6	0.39	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		1.6	0.39	ng/L	1		1633	Total/NA
Perfluorooctanesulfonamide (PFOSA)	0.60	J I	1.6	0.39	ng/L	1		1633	Total/NA
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	3.1	0.78	ng/L	1		1633	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-2 (Continued)
Lab Sample ID: 480-223087-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
3-Perfluoropentylpropanoic acid (5:3 FTCA)	11		7.8	1.9	ng/L	1		1633	Total/NA
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	13		7.8	1.9	ng/L	1		1633	Total/NA

This Detection Summary does not include radiochemical test results.

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-223087-1
Date Collected: 09/03/24 00:00
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**100**		3.0	0.75	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoropentanoic acid (PFPeA)	**330**		1.5	0.45	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorohexanoic acid (PFHxA)	**260**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoroheptanoic acid (PFHpA)	**250**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorooctanoic acid (PFOA)	**590**		1.5	0.41	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorononanoic acid (PFNA)	**100**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorodecanoic acid (PFDA)	**270**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoroundecanoic acid (PFUnA)	**65**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorododecanoic acid (PFDoA)	**44**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorotridecanoic acid (PFTrDA)	**5.8**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorotetradecanoic acid (PFTeDA)	**0.78**	**J**	1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorobutanesulfonic acid (PFBS)	**1.1**	**J**	1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorooctanesulfonic acid (PFOS)	**2.5**		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.87	ng/L		09/09/24 09:54	09/10/24 04:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.0	0.78	ng/L		09/09/24 09:54	09/10/24 04:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.75	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorooctanesulfonamide (PFOSA)	**0.55**	**J I**	1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.50	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.5	2.2	ng/L		09/09/24 09:54	09/10/24 04:22	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.5	1.9	ng/L		09/09/24 09:54	09/10/24 04:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.35	ng/L		09/09/24 09:54	09/10/24 04:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1

Client Sample ID: DUP
Lab Sample ID: 480-223087-1
Date Collected: 09/03/24 00:00
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	**2.8**	**J**	3.0	0.75	ng/L		09/09/24 09:54	09/10/24 04:22	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	**13**		7.5	1.9	ng/L		09/09/24 09:54	09/10/24 04:22	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	**13**		7.5	1.9	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.38	ng/L		09/09/24 09:54	09/10/24 04:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*127*		*5 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C5 PFPeA	*139*	*5+	*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C5 PFHxA	*119*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C4 PFHpA	*130*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C8 PFOA	*127*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C9 PFNA	*126*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C6 PFDA	*123*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C7 PFUnA	*105*		*30 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C2 PFTeDA	*109*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C3 PFBS	*158*	*5+	*40 - 135*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C3 PFHxS	*139*	*5+	*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C8 PFOS	*112*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C8 PFOSA	*102*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
d3-NMeFOSAA	*98.7*		*40 - 170*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
d5-NEtFOSAA	*127*		*25 - 135*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
M2-4:2 FTS	*262*	*5+	*40 - 200*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
M2-6:2 FTS	*167*		*40 - 200*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
M2-8:2 FTS	*132*		*40 - 300*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C3 HFPO-DA	*141*	*5+	*40 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
d7-N-MeFOSE-M	*57.5*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
d9-N-EtFOSE-M	*48.0*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
d5-NEtPFOSA	*64.1*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
D3-NMeFOSA	*74.3*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*
13C2-PFDoDA	*105*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:22*	*1*

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-1
Lab Sample ID: 480-223087-2
Date Collected: 09/03/24 13:20
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.5**	**J**	6.8	1.7	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoropentanoic acid (PFPeA)	**7.0**		3.4	1.0	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorohexanoic acid (PFHxA)	**7.3**		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoroheptanoic acid (PFHpA)	**4.5**		3.4	0.87	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorooctanoic acid (PFOA)	**18**		3.4	0.92	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorononanoic acid (PFNA)	**1.3**	**J**	3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorodecanoic acid (PFDA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoroundecanoic acid (PFUnA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorododecanoic acid (PFDoA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorobutanesulfonic acid (PFBS)	**4.4**		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorohexanesulfonic acid (PFHxS)	**15**		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorooctanesulfonic acid (PFOS)	**38**		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorononanesulfonic acid (PFNS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		6.8	2.0	ng/L		09/09/24 09:54	09/10/24 04:38	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		6.8	1.8	ng/L		09/09/24 09:54	09/10/24 04:38	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		6.8	1.7	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.4	1.1	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		17	5.0	ng/L		09/09/24 09:54	09/10/24 04:38	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		17	4.3	ng/L		09/09/24 09:54	09/10/24 04:38	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.6	0.78	ng/L		09/09/24 09:54	09/10/24 04:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-1
Lab Sample ID: 480-223087-2
Date Collected: 09/03/24 13:20
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		6.8	1.7	ng/L		09/09/24 09:54	09/10/24 04:38	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		17	4.3	ng/L		09/09/24 09:54	09/10/24 04:38	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		17	4.3	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		3.4	0.85	ng/L		09/09/24 09:54	09/10/24 04:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*5 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C5 PFPeA	*112*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C5 PFHxA	*98.1*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C4 PFHpA	*99.0*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C8 PFOA	*104*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C9 PFNA	*104*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C6 PFDA	*106*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C7 PFUnA	*99.2*		*30 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C2 PFTeDA	*110*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C3 PFBS	*110*		*40 - 135*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C3 PFHxS	*105*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C8 PFOS	*106*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C8 PFOSA	*92.7*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
d3-NMeFOSAA	*102*		*40 - 170*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
d5-NEtFOSAA	*162*	**5+*	*25 - 135*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
M2-4:2 FTS	*115*		*40 - 200*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
M2-6:2 FTS	*107*		*40 - 200*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
M2-8:2 FTS	*105*		*40 - 300*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C3 HFPO-DA	*105*		*40 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
d7-N-MeFOSE-M	*86.3*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
d9-N-EtFOSE-M	*87.5*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
d5-NEtPFOSA	*77.4*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
D3-NMeFOSA	*74.4*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*
13C2-PFDoDA	*104*		*10 - 130*	*09/09/24 09:54*	*09/10/24 04:38*	*1*

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-2
Lab Sample ID: 480-223087-3
Date Collected: 09/03/24 14:30
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**110**		3.1	0.78	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoropentanoic acid (PFPeA)	**320**		1.6	0.47	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorohexanoic acid (PFHxA)	**240**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoroheptanoic acid (PFHpA)	**260**		1.6	0.40	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorooctanoic acid (PFOA)	**610**		1.6	0.42	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorononanoic acid (PFNA)	**110**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorodecanoic acid (PFDA)	**290**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoroundecanoic acid (PFUnA)	**70**	**F1**	1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorododecanoic acid (PFDoA)	**47**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorotridecanoic acid (PFTrDA)	**6.3**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorotetradecanoic acid (PFTeDA)	**0.90**	**J**	1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorobutanesulfonic acid (PFBS)	**1.0**	**J**	1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorooctanesulfonic acid (PFOS)	**2.4**		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.1	0.89	ng/L		09/09/24 09:54	09/10/24 05:28	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.1	0.80	ng/L		09/09/24 09:54	09/10/24 05:28	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.1	0.78	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorooctanesulfonamide (PFOSA)	**0.60**	**J I**	1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.52	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.8	2.3	ng/L		09/09/24 09:54	09/10/24 05:28	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.8	1.9	ng/L		09/09/24 09:54	09/10/24 05:28	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.2	0.36	ng/L		09/09/24 09:54	09/10/24 05:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: MW-2
Lab Sample ID: 480-223087-3
Date Collected: 09/03/24 14:30
Matrix: Water
Date Received: 09/05/24 09:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	**2.9**	**J**	3.1	0.78	ng/L		09/09/24 09:54	09/10/24 05:28	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	**11**		7.8	1.9	ng/L		09/09/24 09:54	09/10/24 05:28	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	**13**		7.8	1.9	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.6	0.39	ng/L		09/09/24 09:54	09/10/24 05:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*118*		*5 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C5 PFPeA	*120*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C5 PFHxA	*108*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C4 PFHpA	*107*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C8 PFOA	*116*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C9 PFNA	*118*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C6 PFDA	*124*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C7 PFUnA	*108*		*30 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C2 PFTeDA	*123*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C3 PFBS	*140*	**5+*	*40 - 135*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C3 PFHxS	*126*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C8 PFOS	*113*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C8 PFOSA	*98.8*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
d3-NMeFOSAA	*116*		*40 - 170*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
d5-NEtFOSAA	*136*	**5+*	*25 - 135*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
M2-4:2 FTS	*255*	**5+*	*40 - 200*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
M2-6:2 FTS	*158*		*40 - 200*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
M2-8:2 FTS	*129*		*40 - 300*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C3 HFPO-DA	*108*		*40 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
d7-N-MeFOSE-M	*90.4*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
d9-N-EtFOSE-M	*87.1*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
d5-NEtPFOSA	*79.0*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
D3-NMeFOSA	*82.9*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*
13C2-PFDoDA	*112*		*10 - 130*	*09/09/24 09:54*	*09/10/24 05:28*	*1*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 240-626249/1-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0	1.0	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.60	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.51	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.54	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.2	ng/L		09/09/24 09:54	09/10/24 02:09	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		09/09/24 09:54	09/10/24 02:09	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.67	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	3.0	ng/L		09/09/24 09:54	09/10/24 02:09	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		09/09/24 09:54	09/10/24 02:09	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.46	ng/L		09/09/24 09:54	09/10/24 02:09	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 240-626249/1-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 626249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		09/09/24 09:54	09/10/24 02:09	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.5	ng/L		09/09/24 09:54	09/10/24 02:09	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		09/09/24 09:54	09/10/24 02:09	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94.6*		*5 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C5 PFPeA	*89.9*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C5 PFHxA	*91.6*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C4 PFHpA	*93.2*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C8 PFOA	*93.9*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C9 PFNA	*91.6*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C6 PFDA	*91.9*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C7 PFUnA	*85.7*		*30 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C2 PFTeDA	*96.9*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C3 PFBS	*102*		*40 - 135*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C3 PFHxS	*97.8*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C8 PFOS	*93.4*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C8 PFOSA	*85.1*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
d3-NMeFOSAA	*93.5*		*40 - 170*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
d5-NEtFOSAA	*164*	*5+*	*25 - 135*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
M2-4:2 FTS	*112*		*40 - 200*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
M2-6:2 FTS	*99.6*		*40 - 200*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
M2-8:2 FTS	*101*		*40 - 300*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C3 HFPO-DA	*94.5*		*40 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
d7-N-MeFOSE-M	*69.6*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
d9-N-EtFOSE-M	*67.0*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
d5-NEtPFOSA	*60.7*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
D3-NMeFOSA	*57.0*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*
13C2-PFDoDA	*85.1*		*10 - 130*	*09/09/24 09:54*	*09/10/24 02:09*	*1*

Lab Sample ID: LCS 240-626249/3-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	92.3		ng/L		115	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	38.1		ng/L		95	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	44.8		ng/L		112	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	47.1		ng/L		118	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	46.6		ng/L		116	70 - 150
Perfluorononanoic acid (PFNA)	40.0	46.0		ng/L		115	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	46.6		ng/L		117	70 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-626249/3-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	40.0	50.4		ng/L		126	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	40.8		ng/L		102	70 - 140
Perfluorotridecanoic acid (PFTrDA)	40.0	41.7		ng/L		104	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	40.0	37.6		ng/L		94	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.4	43.2		ng/L		122	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.5	42.9		ng/L		114	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.0		ng/L		115	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.1	45.4		ng/L		119	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	45.8		ng/L		123	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.4	45.0		ng/L		117	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.7	37.0		ng/L		95	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	74.7	87.3		ng/L		117	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	75.8	81.3		ng/L		107	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.6	89.9		ng/L		117	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	47.2		ng/L		118	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	50.5		ng/L		126	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	47.2		ng/L		118	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	45.9		ng/L		115	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	40.5		ng/L		101	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	211		ng/L		105	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	211		ng/L		106	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	34.0		ng/L		113	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	40.7		ng/L		108	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	40.2		ng/L		100	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	44.9		ng/L		112	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.3	36.9		ng/L		99	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.7	33.0		ng/L		88	55 - 160

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 240-626249/3-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	35.6	43.0		ng/L		121	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	79.8		ng/L		100	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	209		ng/L		105	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	187		ng/L		93	50 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	42.5		ng/L		110	60 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	40.0		ng/L		100	55 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*126*		*5 - 130*
13C5 PFPeA	*139*	*5+	*40 - 130*
13C5 PFHxA	*117*		*40 - 130*
13C4 PFHpA	*122*		*40 - 130*
13C8 PFOA	*124*		*40 - 130*
13C9 PFNA	*129*		*40 - 130*
13C6 PFDA	*128*		*40 - 130*
13C7 PFUnA	*118*		*30 - 130*
13C2 PFTeDA	*124*		*10 - 130*
13C3 PFBS	*135*		*40 - 135*
13C3 PFHxS	*133*	*5+	*40 - 130*
13C8 PFOS	*126*		*40 - 130*
13C8 PFOSA	*114*		*40 - 130*
d3-NMeFOSAA	*122*		*40 - 170*
d5-NEtFOSAA	*236*	*5+	*25 - 135*
M2-4:2 FTS	*140*		*40 - 200*
M2-6:2 FTS	*130*		*40 - 200*
M2-8:2 FTS	*130*		*40 - 300*
13C3 HFPO-DA	*126*		*40 - 130*
d7-N-MeFOSE-M	*83.3*		*10 - 130*
d9-N-EtFOSE-M	*76.5*		*10 - 130*
d5-NEtPFOSA	*82.5*		*10 - 130*
D3-NMeFOSA	*85.0*		*10 - 130*
13C2-PFDoDA	*124*		*10 - 130*

Lab Sample ID: LLCS 240-626249/2-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	10.6		ng/L		133	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	4.54		ng/L		113	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	5.60		ng/L		140	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	5.49		ng/L		137	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	5.99		ng/L		150	70 - 150
Perfluorononanoic acid (PFNA)	4.00	5.93		ng/L		148	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-626249/2-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorodecanoic acid (PFDA)	4.00	4.72		ng/L		118	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	5.58		ng/L		140	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	4.99		ng/L		125	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	4.93		ng/L		123	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	4.60		ng/L		115	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.54	4.21		ng/L		119	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.75	4.58		ng/L		122	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.73		ng/L		130	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.81	5.49		ng/L		144	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	5.36		ng/L		144	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.84	5.10		ng/L		133	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.87	4.96		ng/L		128	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.47	10.4		ng/L		139	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.58	8.60		ng/L		113	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.66	10.8		ng/L		141	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	5.42		ng/L		136	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	5.26		ng/L		132	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	5.16		ng/L		129	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	4.00	5.48		ng/L		137	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.00	4.59		ng/L		115	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	25.5		ng/L		128	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	24.6		ng/L		123	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	3.74		ng/L		125	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.77	4.81		ng/L		128	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	4.58		ng/L		115	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	5.53		ng/L		138	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	3.73	4.39		ng/L		118	70 - 155

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 240-626249/2-A
Matrix: Water
Analysis Batch: 626324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 626249

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			3.77	4.41		ng/L		117	55 - 160		
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			3.56	4.65		ng/L		131	70 - 140		
3-Perfluoropropylpropanoic acid (3:3 FTCA)			8.00	8.56		ng/L		107	65 - 130		
3-Perfluoropentylpropanoic acid (5:3 FTCA)			20.0	22.5		ng/L		112	70 - 135		
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			20.0	22.5		ng/L		112	50 - 145		
Perfluorodecanesulfonic acid (PFDS)			3.86	5.06		ng/L		131	60 - 145		
Perfluoro-3-methoxypropanoic acid (PFMPA)			4.00	4.60		ng/L		115	55 - 140		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*84.5*		*5 - 130*
13C5 PFPeA	*87.0*		*40 - 130*
13C5 PFHxA	*75.5*		*40 - 130*
13C4 PFHpA	*81.2*		*40 - 130*
13C8 PFOA	*78.6*		*40 - 130*
13C9 PFNA	*83.8*		*40 - 130*
13C6 PFDA	*85.7*		*40 - 130*
13C7 PFUnA	*81.1*		*30 - 130*
13C2 PFTeDA	*96.9*		*10 - 130*
13C3 PFBS	*97.3*		*40 - 135*
13C3 PFHxS	*91.0*		*40 - 130*
13C8 PFOS	*83.3*		*40 - 130*
13C8 PFOSA	*75.5*		*40 - 130*
d3-NMeFOSAA	*83.9*		*40 - 170*
d5-NEtFOSAA	*164*	*5+	*25 - 135*
M2-4:2 FTS	*93.4*		*40 - 200*
M2-6:2 FTS	*91.3*		*40 - 200*
M2-8:2 FTS	*92.6*		*40 - 300*
13C3 HFPO-DA	*80.9*		*40 - 130*
d7-N-MeFOSE-M	*68.5*		*10 - 130*
d9-N-EtFOSE-M	*67.2*		*10 - 130*
d5-NEtPFOSA	*56.9*		*10 - 130*
D3-NMeFOSA	*57.5*		*10 - 130*
13C2-PFDoDA	*84.1*		*10 - 130*

Lab Sample ID: 480-223087-3 MS
Matrix: Water
Analysis Batch: 626324

Client Sample ID: MW-2 MS
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanoic acid (PFBA)	110		59.7	189		ng/L		132	70 - 140		
Perfluoropentanoic acid (PFPeA)	320		29.9	403	4	ng/L		281	65 - 135		
Perfluorohexanoic acid (PFHxA)	240		29.9	304	4	ng/L		200	70 - 145		
Perfluoroheptanoic acid (PFHpA)	260		29.9	310	4	ng/L		182	70 - 150		

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-223087-3 MS
Matrix: Water
Analysis Batch: 626324

Client Sample ID: MW-2 MS
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanoic acid (PFOA)	610		29.9	647	4	ng/L		117	70 - 150
Perfluorononanoic acid (PFNA)	110		29.9	147		ng/L		126	70 - 150
Perfluorodecanoic acid (PFDA)	290		29.9	338	E 4	ng/L		169	70 - 140
Perfluoroundecanoic acid (PFUnA)	70	F1	29.9	118	F1	ng/L		164	70 - 145
Perfluorododecanoic acid (PFDoA)	47		29.9	77.3		ng/L		102	70 - 140
Perfluorotridecanoic acid (PFTrDA)	6.3		29.9	39.6		ng/L		112	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	0.90	J	29.9	34.0		ng/L		111	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.0	J	26.4	35.8		ng/L		132	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	ND		28.0	37.3		ng/L		133	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		27.2	33.5		ng/L		123	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	ND		28.4	37.9		ng/L		133	70 - 150
Perfluorooctanesulfonic acid (PFOS)	2.4		27.7	39.6		ng/L		134	55 - 150
Perfluorononanesulfonic acid (PFNS)	ND		28.7	34.7		ng/L		121	65 - 145
Perfluorododecanesulfonic acid (PFDoS)	ND		28.9	31.0		ng/L		107	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		55.8	77.2		ng/L		139	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		56.6	67.5		ng/L		119	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		57.2	72.8		ng/L		127	60 - 150
Perfluorooctanesulfonamide (PFOSA)	0.60	J I	29.9	39.3		ng/L		130	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		29.9	40.6		ng/L		136	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		29.9	39.5		ng/L		132	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		29.9	39.2		ng/L		131	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		29.9	33.1		ng/L		111	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		149	179		ng/L		120	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		149	189		ng/L		127	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		22.4	28.4		ng/L		127	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		28.1	31.3		ng/L		111	65 - 145
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		29.9	36.6		ng/L		123	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		29.9	38.9		ng/L		130	50 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-223087-3 MS
Matrix: Water
Analysis Batch: 626324

Client Sample ID: MW-2 MS
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		27.8	29.7		ng/L		107	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		28.1	27.1		ng/L		96	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		26.6	35.7		ng/L		134	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	59.7	71.4		ng/L		115	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	11		149	180		ng/L		113	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	13		149	172		ng/L		106	50 - 145
Perfluorodecanesulfonic acid (PFDS)	ND		28.8	34.3		ng/L		119	60 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		29.9	37.8		ng/L		127	55 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*88.0*		*5 - 130*
13C5 PFPeA	*95.3*		*40 - 130*
13C5 PFHxA	*88.4*		*40 - 130*
13C4 PFHpA	*91.1*		*40 - 130*
13C8 PFOA	*92.9*		*40 - 130*
13C9 PFNA	*95.7*		*40 - 130*
13C6 PFDA	*93.5*		*40 - 130*
13C7 PFUnA	*83.0*		*30 - 130*
13C2 PFTeDA	*90.4*		*10 - 130*
13C3 PFBS	*107*		*40 - 135*
13C3 PFHxS	*99.5*		*40 - 130*
13C8 PFOS	*96.1*		*40 - 130*
13C8 PFOSA	*83.7*		*40 - 130*
d3-NMeFOSAA	*90.0*		*40 - 170*
d5-NEtFOSAA	*127*		*25 - 135*
M2-4:2 FTS	*187*		*40 - 200*
M2-6:2 FTS	*125*		*40 - 200*
M2-8:2 FTS	*101*		*40 - 300*
13C3 HFPO-DA	*96.6*		*40 - 130*
d7-N-MeFOSE-M	*68.9*		*10 - 130*
d9-N-EtFOSE-M	*60.7*		*10 - 130*
d5-NEtPFOSA	*63.4*		*10 - 130*
D3-NMeFOSA	*64.6*		*10 - 130*
13C2-PFDoDA	*89.4*		*10 - 130*

Lab Sample ID: 480-223087-3 MSD
Matrix: Water
Analysis Batch: 626324

Client Sample ID: MW-2 MSD
Prep Type: Total/NA
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	110		60.6	174		ng/L		106	70 - 140	8	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-223087-3 MSD
Client Sample ID: MW-2 MSD
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 626324
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoropentanoic acid (PFPeA)	320		30.3	380	4	ng/L		202	65 - 135	6	30
Perfluorohexanoic acid (PFHxA)	240		30.3	276	4	ng/L		106	70 - 145	10	30
Perfluoroheptanoic acid (PFHpA)	260		30.3	296	4	ng/L		135	70 - 150	4	30
Perfluorooctanoic acid (PFOA)	610		30.3	606	4	ng/L		-20	70 - 150	7	30
Perfluorononanoic acid (PFNA)	110		30.3	136		ng/L		88	70 - 150	8	30
Perfluorodecanoic acid (PFDA)	290		30.3	298	4	ng/L		33	70 - 140	13	30
Perfluoroundecanoic acid (PFUnA)	70	F1	30.3	108		ng/L		128	70 - 145	9	30
Perfluorododecanoic acid (PFDoA)	47		30.3	78.7		ng/L		105	70 - 140	2	30
Perfluorotridecanoic acid (PFTrDA)	6.3		30.3	36.1		ng/L		98	65 - 140	9	30
Perfluorotetradecanoic acid (PFTeDA)	0.90	J	30.3	31.0		ng/L		99	60 - 140	9	30
Perfluorobutanesulfonic acid (PFBS)	1.0	J	26.8	35.3		ng/L		128	60 - 145	1	30
Perfluoropentanesulfonic acid (PFPeS)	ND		28.4	33.4		ng/L		117	65 - 140	11	30
Perfluorohexanesulfonic acid (PFHxS)	ND		27.6	30.4		ng/L		110	65 - 145	10	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		28.8	35.9		ng/L		124	70 - 150	5	30
Perfluorooctanesulfonic acid (PFOS)	2.4		28.1	36.8		ng/L		122	55 - 150	7	30
Perfluorononanesulfonic acid (PFNS)	ND		29.1	32.9		ng/L		113	65 - 145	5	30
Perfluorododecanesulfonic acid (PFDoS)	ND		29.3	30.6		ng/L		104	50 - 145	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		56.6	69.2		ng/L		122	70 - 145	11	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		57.5	66.9		ng/L		116	65 - 155	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		58.1	68.1		ng/L		117	60 - 150	7	30
Perfluorooctanesulfonamide (PFOSA)	0.60	J I	30.3	37.8		ng/L		123	70 - 145	4	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		30.3	36.4		ng/L		120	60 - 150	11	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		30.3	35.2		ng/L		116	65 - 145	11	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		30.3	35.4		ng/L		117	50 - 140	10	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		30.3	32.1		ng/L		106	70 - 145	3	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		152	164		ng/L		109	70 - 145	9	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		152	158		ng/L		104	70 - 135	18	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		22.7	24.4		ng/L		107	70 - 140	15	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		28.5	29.4		ng/L		103	65 - 145	6	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		30.3	32.8		ng/L		108	60 - 150	11	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-223087-3 MSD
Client Sample ID: MW-2 MSD
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 626324
Prep Batch: 626249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		30.3	39.7		ng/L		131	50 - 150	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		28.2	29.8		ng/L		106	70 - 155	0	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		28.5	27.3		ng/L		96	55 - 160	1	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		27.0	34.4		ng/L		127	70 - 140	4	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	2.9	J	60.6	66.1		ng/L		104	65 - 130	8	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	11		152	167		ng/L		102	70 - 135	7	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	13		152	169		ng/L		103	50 - 145	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		29.2	32.6		ng/L		112	60 - 145	5	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		30.3	33.3		ng/L		110	55 - 140	13	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*85.1*		*5 - 130*
13C5 PFPeA	*91.2*		*40 - 130*
13C5 PFHxA	*83.6*		*40 - 130*
13C4 PFHpA	*86.7*		*40 - 130*
13C8 PFOA	*89.7*		*40 - 130*
13C9 PFNA	*96.8*		*40 - 130*
13C6 PFDA	*99.9*		*40 - 130*
13C7 PFUnA	*88.0*		*30 - 130*
13C2 PFTeDA	*98.1*		*10 - 130*
13C3 PFBS	*106*		*40 - 135*
13C3 PFHxS	*101*		*40 - 130*
13C8 PFOS	*93.1*		*40 - 130*
13C8 PFOSA	*79.3*		*40 - 130*
d3-NMeFOSAA	*88.8*		*40 - 170*
d5-NEtFOSAA	*130*		*25 - 135*
M2-4:2 FTS	*187*		*40 - 200*
M2-6:2 FTS	*122*		*40 - 200*
M2-8:2 FTS	*102*		*40 - 300*
13C3 HFPO-DA	*94.3*		*40 - 130*
d7-N-MeFOSE-M	*73.0*		*10 - 130*
d9-N-EtFOSE-M	*63.7*		*10 - 130*
d5-NEtPFOSA	*63.8*		*10 - 130*
D3-NMeFOSA	*65.9*		*10 - 130*
13C2-PFDoDA	*91.0*		*10 - 130*

QC Association Summary

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

LCMS

Prep Batch: 626249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223087-1	DUP	Total/NA	Water	1633	
480-223087-2	MW-1	Total/NA	Water	1633	
480-223087-3	MW-2	Total/NA	Water	1633	
MB 240-626249/1-A	Method Blank	Total/NA	Water	1633	
LCS 240-626249/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 240-626249/2-A	Lab Control Sample	Total/NA	Water	1633	
480-223087-3 MS	MW-2 MS	Total/NA	Water	1633	
480-223087-3 MSD	MW-2 MSD	Total/NA	Water	1633	

Analysis Batch: 626324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223087-1	DUP	Total/NA	Water	1633	626249
480-223087-2	MW-1	Total/NA	Water	1633	626249
480-223087-3	MW-2	Total/NA	Water	1633	626249
MB 240-626249/1-A	Method Blank	Total/NA	Water	1633	626249
LCS 240-626249/3-A	Lab Control Sample	Total/NA	Water	1633	626249
LLCS 240-626249/2-A	Lab Control Sample	Total/NA	Water	1633	626249
480-223087-3 MS	MW-2 MS	Total/NA	Water	1633	626249
480-223087-3 MSD	MW-2 MSD	Total/NA	Water	1633	626249

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Client Sample ID: DUP
Lab Sample ID: 480-223087-1
Date Collected: 09/03/24 00:00
Matrix: Water
Date Received: 09/05/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			626249	JVB4	EET CLE	09/09/24 09:54
Total/NA	Analysis	1633		1	626324	MRL	EET CLE	09/10/24 04:22

Client Sample ID: MW-1
Lab Sample ID: 480-223087-2
Date Collected: 09/03/24 13:20
Matrix: Water
Date Received: 09/05/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			626249	JVB4	EET CLE	09/09/24 09:54
Total/NA	Analysis	1633		1	626324	MRL	EET CLE	09/10/24 04:38

Client Sample ID: MW-2
Lab Sample ID: 480-223087-3
Date Collected: 09/03/24 14:30
Matrix: Water
Date Received: 09/05/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			626249	JVB4	EET CLE	09/09/24 09:54
Total/NA	Analysis	1633		1	626324	MRL	EET CLE	09/10/24 05:28

Laboratory References:
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10975	04-02-25

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
1633	1633	Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
1633	1633	Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
1633	1633	Water	3-Perfluoroheptylpropanoic acid (7:3 FTCA)
1633	1633	Water	3-Perfluoropentylpropanoic acid (5:3 FTCA)
1633	1633	Water	3-Perfluoropropylpropanoic acid (3:3 FTCA)
1633	1633	Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
1633	1633	Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)
1633	1633	Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
1633	1633	Water	N-ethylperfluorooctane sulfonamide (NEtFOSA)
1633	1633	Water	N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)
1633	1633	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
1633	1633	Water	N-methylperfluorooctane sulfonamide (NMeFOSA)
1633	1633	Water	N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)
1633	1633	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
1633	1633	Water	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
1633	1633	Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
1633	1633	Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
1633	1633	Water	Perfluoro-4-methoxybutanoic acid (PFMBA)
1633	1633	Water	Perfluorobutanesulfonic acid (PFBS)
1633	1633	Water	Perfluorobutanoic acid (PFBA)
1633	1633	Water	Perfluorodecanesulfonic acid (PFDS)
1633	1633	Water	Perfluorodecanoic acid (PFDA)
1633	1633	Water	Perfluorododecanesulfonic acid (PFDoS)
1633	1633	Water	Perfluorododecanoic acid (PFDoA)
1633	1633	Water	Perfluoroheptanesulfonic acid (PFHpS)
1633	1633	Water	Perfluoroheptanoic acid (PFHpA)
1633	1633	Water	Perfluorohexanesulfonic acid (PFHxS)
1633	1633	Water	Perfluorohexanoic acid (PFHxA)

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Laboratory: Eurofins Cleveland (Continued)

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

Authority	Program	Identification Number	Expiration Date

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
1633	1633	Water	Perfluorononanesulfonic acid (PFNS)
1633	1633	Water	Perfluorononanoic acid (PFNA)
1633	1633	Water	Perfluorooctanesulfonamide (PFOSA)
1633	1633	Water	Perfluorooctanesulfonic acid (PFOS)
1633	1633	Water	Perfluorooctanoic acid (PFOA)
1633	1633	Water	Perfluoropentanesulfonic acid (PFPeS)
1633	1633	Water	Perfluoropentanoic acid (PFPeA)
1633	1633	Water	Perfluorotetradecanoic acid (PFTeDA)
1633	1633	Water	Perfluorotridecanoic acid (PFTrDA)
1633	1633	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET CLE
1633	Solid-Phase Extraction (SPE)	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-223087-1	DUP	Water	09/03/24 00:00	09/05/24 09:30
480-223087-2	MW-1	Water	09/03/24 13:20	09/05/24 09:30
480-223087-3	MW-2	Water	09/03/24 14:30	09/05/24 09:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

Albany #224

eurofins | Environment Testing

Client Information	Sampler: Michaela Cochran	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-198889-41092.1
Client Contact: Michaela Cochran	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: New York State D.E.C.	PWSID:			Job #:
Address: 625 Broadway 12th Floor	Due Date Requested: 9/20/24			
City: Albany	TAT Requested (days): 30			
State, Zip: NY, 12233-7017	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9669(Tel)	PO #: Callout ID: 152002			
Email: Michaela.cochran@dec.ny.gov	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site: Pound Ridge	SSOW#:			

Analysis Requested

Preservation Codes: N - None; Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final - 1633 Standard List 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
DUP	8/21/24		G	Water	X		3	3	
MW-1		1:20pm		Water	X		3	3	
MW-2		2:30pm		Water	X		3	3	
MW-2-MS				Water	X	X	3	3	
MW-2-MSD				Water	X	X	3	3	

480-223087 Chain of Custody

NT 9/4/24

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

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

Deliverable Requested: I, II, III, IV, Other (specify): Cat B / EDD

Special Instructions/QC Requirements: Fed ground

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:			
Relinquished by: Michaela Cochran	Date/Time: 8:00am 9/4/24	Company: NYSDEC	Received by: Shawn Vincent Rock	Date/Time: 9/4/24 8:00am	Company: EETN		
Relinquished by: Shawn Vincent Rock	Date/Time: 9/4/24 1500	Company: EETN	Received by:	Date/Time: 9-5-24 930	Company: TAL		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.7 ICE

Ver: 04/02/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Michaela Cochran	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-198889-41092.1
Client Contact: Michaela Cochran	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: NY	Page: Page 1 of 1
Company: New York State D.E.C.	PWSID:	Analysis Requested		Job #:
Address: 625 Broadway 12th Floor	Due Date Requested: 9/20/24			Preservation Codes: N - None
City: Albany	TAT Requested (days): 30			
State, Zip: NY, 12233-7017	Compliance Project: Δ Yes Δ No			
Phone: 518-402-9669(Tel)	PO #: Callout ID: 152002			
Email: Michaela.cochran@dec.ny.gov	WO #:			Other:
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site: Pound Ridge	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final - 1633 Standard List 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
DUP	9/3/24 ~~8/21/24~~ MC		G	Water	X		3	3	
MW-1		1:20pm		Water	X		3	3	
MW-2		2:30pm		Water	X		3	3	
MW-2-MS				Water	X	X	3	3	
MW-2-MSD				Water	X	X	3	3	

SUC 9/4/24

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

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

Deliverable Requested: I, II, III, IV, Other (specify) Cat B / EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Michaela Cochran	9/4/24 8:00am	NYSDEC	Shawn Vat Koch	9/4/24 8:00am	EETN

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

Ver: 04/02/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

1.0/2.0

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fischer Brian J	Carrier Tracking No(s):	COC No: 480-89290.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Brian.Fischer@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP New York		Job #: 480-223087 1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 10/16/2024			Preservation Codes:
City: Barberton	TAT Requested (days):			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Pound Ridge Spill #2400692 PIN H7411	Project #: 48027807			
Site:	SSOW#:			Other:

P88-64

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633_Final/1633_SPE 1633 Standard List 40	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP (480-223087 1)	8/21/24	Eastern	G	Water			X	3	
MW-1 (480-223087-2)	8/21/24	13:20 Eastern	G	Water			X	3	
MW-2 (480-223087-3)	8/21/24	14:30 Eastern	G	Water			X	3	
MW-2 (480-223087-3MS)	8/21/24	14:30 Eastern	G	Water			X	3	
MW-2 (480-223087-3MSD)	8/21/24	14:30 Eastern	G	Water			X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
KS	9/5/24 1600		JESSICA RIGDON	9-6 24 0915	EETNC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Eurofins - Buffalo Site Name
Cooler Received on 9-6-24 Opened on 9-6-24
Cooler unpacked by: JESSICA RIGDON
FedEx: 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other
Receipt After-hours Drop-off Date/Time Storage Location
Eurofins Cooler # EC Foam Box Client Cooler Box Other
Packing material used: (Bubble Wrap) Foam Plastic Bag None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN # 19 (CF +1.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y(N), # of containers (Y)N), and sample type of grab/comp(Y(N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	(No) NA pH Strip Lot# HC442471
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	(No) NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by:

19. SAMPLE CONDITION
Sample(s) were received after the recommended holding time had expired
Sample(s) were received in a broken container
Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION
Sample(s) were further preserved in the laboratory
Time preserved. Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen

SAMPLE CONTROL
EUROFINS ENVIRONMENT TESTING
10 HAZELWOOD DRIVE

BUFFALO, NY 142282223
UNITED STATES US

LB
AFE3808
IN

TO SAMPLE RECEIPT
EUROFINS CLEVELAND
180 S VAN BUREN AVE

RT 164
FZ

BARBERTON OH 442033543
(330) 497-9396
REF: BARBERTON

Part # 159469-434 MTW EXP 02/25

FedEx Express

E

FRI - 06 SEP 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7463 0658 2376

NX CAKA

44203
OH-US CLE

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-223087-1

Login Number: 223087
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	NYS DEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Isotope Dilution Summary

Client: New York State D.E.C.
Job ID: 480-223087-1
Project/Site: Pound Ridge Spill #2400692 PIN H7411

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
480-223087-1	DUP	127	139 *5+	119	130	127	126	123	105
480-223087-2	MW-1	101	112	98.1	99.0	104	104	106	99.2
480-223087-3	MW-2	118	120	108	107	116	118	124	108
480-223087-3 MS	MW-2 MS	88.0	95.3	88.4	91.1	92.9	95.7	93.5	83.0
480-223087-3 MSD	MW-2 MSD	85.1	91.2	83.6	86.7	89.7	96.8	99.9	88.0
LCS 240-626249/3-A	Lab Control Sample	126	139 *5+	117	122	124	129	128	118
LLCS 240-626249/2-A	Lab Control Sample	84.5	87.0	75.5	81.2	78.6	83.8	85.7	81.1
MB 240-626249/1-A	Method Blank	94.6	89.9	91.6	93.2	93.9	91.6	91.9	85.7

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)	M242FTS (40-200)
480-223087-1	DUP	109	158 *5+	139 *5+	112	102	98.7	127	262 *5+
480-223087-2	MW-1	110	110	105	106	92.7	102	162 *5+	115
480-223087-3	MW-2	123	140 *5+	126	113	98.8	116	136 *5+	255 *5+
480-223087-3 MS	MW-2 MS	90.4	107	99.5	96.1	83.7	90.0	127	187
480-223087-3 MSD	MW-2 MSD	98.1	106	101	93.1	79.3	88.8	130	187
LCS 240-626249/3-A	Lab Control Sample	124	135	133 *5+	126	114	122	236 *5+	140
LLCS 240-626249/2-A	Lab Control Sample	96.9	97.3	91.0	83.3	75.5	83.9	164 *5+	93.4
MB 240-626249/1-A	Method Blank	96.9	102	97.8	93.4	85.1	93.5	164 *5+	112

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)	PFDoDA (10-130)
480-223087-1	DUP	167	132	141 *5+	57.5	48.0	64.1	74.3	105
480-223087-2	MW-1	107	105	105	86.3	87.5	77.4	74.4	104
480-223087-3	MW-2	158	129	108	90.4	87.1	79.0	82.9	112
480-223087-3 MS	MW-2 MS	125	101	96.6	68.9	60.7	63.4	64.6	89.4
480-223087-3 MSD	MW-2 MSD	122	102	94.3	73.0	63.7	63.8	65.9	91.0
LCS 240-626249/3-A	Lab Control Sample	130	130	126	83.3	76.5	82.5	85.0	124
LLCS 240-626249/2-A	Lab Control Sample	91.3	92.6	80.9	68.5	67.2	56.9	57.5	84.1
MB 240-626249/1-A	Method Blank	99.6	101	94.5	69.6	67.0	60.7	57.0	85.1

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
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS

Isotope Dilution Summary

Client: New York State D.E.C. Job ID: 480-223087-1

Project/Site: Pound Ridge Spill #2400692 PIN H7411

M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = D3-NMeFOSA
PFDoDA = 13C2-PFDoDA