



February 18, 2026

Andrew Bruosseau
Black Earth Compost
1 Vale Court
Gloucester, MA 01930

Project Location: MA
Client Job Number:
Project Number: 1.26
Laboratory Work Order Number: 26A1133

Enclosed are results of analyses for samples as received by the laboratory on January 29, 2026. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

William A. Scott
Project Manager

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Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Black Earth Compost
1 Vale Court
Gloucester, MA 01930
ATTN: Andrew Bruosseau

REPORT DATE: 2/18/2026

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1.26

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 26A1133

The results of analyses performed on the following samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, are found in this report.

PROJECT LOCATION: MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Groton	26A1133-01	Soil		SM 2540G SOP-466 PFAS	
Manchester	26A1133-02	Soil		SM 2540G SOP-466 PFAS	
Wareham	26A1133-03	Soil		SM 2540G SOP-466 PFAS	
Framingham	26A1133-04	Soil		SM 2540G SOP-466 PFAS	
Groton FB	26A1133-05	Field Blank		SOP-454 PFAS	



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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For any Soil analysis, the Method Blank, LCS, and LCSD are reported on a 100% solids basis.

013026- All samples collected 1/29. Sample times taken from containers. Field blank sample received and analyzed.

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SOP-454 PFAS

Qualifications:

PF-17
Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

M2-6:2FTS
26A1133-05[Groton FB]

SOP-466 PFAS

Qualifications:

L-07
Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Perfluorononanoic acid (PFNA)
26A1133-01RE1[Groton], 26A1133-02RE1[Manchester], 26A1133-03RE1[Wareham], 26A1133-04RE1[Framingham], B422126-BS1

PF-17
Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

D3-NMeFOSAA
26A1133-04RE1[Framingham]
D5-NEtFOSAA
26A1133-03RE1[Wareham], 26A1133-04RE1[Framingham]

M2-6:2FTS
26A1133-04RE1[Framingham]

M2-8:2FTS
26A1133-02RE1[Manchester], 26A1133-03RE1[Wareham], 26A1133-04RE1[Framingham]

PF-18
Re-extraction confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:

M2-4:2FTS
26A1133-01RE1[Groton], B422126-MS1, B422126-MSD1

S-29
Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

M2-8:2FTS
B422126-BS1

M2PFTA
B422126-BS1

M9PFNA
B422126-BS1

MPFD_oA
B422126-BS1

V-20
Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

8:2 Fluorotelomersulfonic acid (8:2FTS A)
S131375-CCV2



The results of analyses reported only relate to samples submitted to Pace Analytical Services, LLC - East Longmeadow, Ma, for testing. I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa A. Worthington", written over a light gray rectangular background.

Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Groton

Sampled: 1/29/2026 14:00

Sample ID: 26A1133-01

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.3	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoropentanoic acid (PFPeA)	3.8	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorohexanoic acid (PFHxA)	8.8	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
11Cl-PF3OUdS	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
9Cl-PF3ONS	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorodecanoic acid (PFDA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
N-EtFOSAA (NEtFOSAA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
N-MeFOSAA (NMeFOSAA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorotetradecanoic acid (PFTA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorooctanesulfonamide (FOSA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorononanesulfonic acid (PFNS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluoroheptanoic acid (PFHpA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorooctanoic acid (PFOA)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.1	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW
Perfluorononanoic acid (PFNA)	ND	1.1	µg/kg dry	1	L-07	SOP-466 PFAS	2/11/26	2/12/26 13:06	QNW



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Sampled: 1/29/2026 14:00

Field Sample #: Groton

Sample ID: 26A1133-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	40.1		% Wt	1		SM 2540G	1/30/26	1/30/26 9:25	AG2

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Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Manchester

Sampled: 1/29/2026 02:00

Sample ID: 26A1133-02

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.0	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoropentanoic acid (PFPeA)	0.85	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorohexanoic acid (PFHxA)	4.9	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
11Cl-PF3OUdS	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
9Cl-PF3ONS	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorodecanoic acid (PFDA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorododecanoic acid (PFDoA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
N-EtFOSAA (NEtFOSAA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
N-MeFOSAA (NMeFOSAA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorotetradecanoic acid (PFTA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorooctanesulfonamide (FOSA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorononanesulfonic acid (PFNS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoro-1-butanefulfonamide (FBSA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoroundecanoic acid (PFUnA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluoroheptanoic acid (PFHpA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorooctanoic acid (PFOA)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	0.80	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW
Perfluorononanoic acid (PFNA)	ND	0.80	µg/kg dry	1	L-07	SOP-466 PFAS	2/11/26	2/12/26 13:13	QNW



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Manchester

Sampled: 1/29/2026 02:00

Sample ID: 26A1133-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	55.9		% Wt	1		SM 2540G	1/30/26	1/30/26 9:25	AG2

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Wareham

Sampled: 1/29/2026 11:00

Sample ID: 26A1133-03

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoropentanoic acid (PFPeA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorohexanoic acid (PFHxA)	3.2	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
11Cl-PF3OUdS	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
9Cl-PF3ONS	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorodecanoic acid (PFDA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorododecanoic acid (PFDoA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
N-EtFOSAA (NEtFOSAA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
N-MeFOSAA (NMeFOSAA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorotetradecanoic acid (PFTA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorooctanesulfonamide (FOSA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorononanesulfonic acid (PFNS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoro-1-butanefulfonamide (FBSA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoroundecanoic acid (PFUnA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluoroheptanoic acid (PFHpA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorooctanoic acid (PFOA)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	1.3	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW
Perfluorononanoic acid (PFNA)	ND	1.3	µg/kg dry	1	L-07	SOP-466 PFAS	2/11/26	2/12/26 13:20	QNW



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Sampled: 1/29/2026 11:00

Field Sample #: Wareham

Sample ID: 26A1133-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	34.4		% Wt	1		SM 2540G	1/30/26	1/30/26 9:25	AG2

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Framingham

Sampled: 1/29/2026 08:00

Sample ID: 26A1133-04

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoropentanoic acid (PFPeA)	1.5	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorohexanoic acid (PFHxA)	13	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
11Cl-PF3OUdS	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
9Cl-PF3ONS	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorodecanoic acid (PFDA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorododecanoic acid (PFDoA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
N-EtFOSAA (NEtFOSAA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
N-MeFOSAA (NMeFOSAA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorotetradecanoic acid (PFTA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorooctanesulfonamide (FOSA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorononanesulfonic acid (PFNS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoro-1-butanefulfonamide (FBSA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoroundecanoic acid (PFUnA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluoroheptanoic acid (PFHpA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorooctanoic acid (PFOA)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	µg/kg dry	1		SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW
Perfluorononanoic acid (PFNA)	ND	0.98	µg/kg dry	1	L-07	SOP-466 PFAS	2/11/26	2/12/26 13:27	QNW



Pace Analytical Services, LLC - East Longmeadow, Ma

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Framingham

Sampled: 1/29/2026 08:00

Sample ID: 26A1133-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	45.3		% Wt	1		SM 2540G	1/30/26	1/30/26 9:25	AG2

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: MA

Sample Description:

Work Order: 26A1133

Date Received: 1/29/2026

Field Sample #: Groton FB

Sampled: 1/29/2026 11:00

Sample ID: 26A1133-05

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorobutanesulfonic acid (PFBS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoropentanoic acid (PFPeA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorohexanoic acid (PFHxA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
11Cl-PF3OUdS	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
9Cl-PF3ONS	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorodecanoic acid (PFDA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorododecanoic acid (PFDoA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
N-EtFOSAA (NEtFOSAA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
N-MeFOSAA (NMeFOSAA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorotetradecanoic acid (PFTA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorotridecanoic acid (PFTrDA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorodecanesulfonic acid (PFDS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorooctanesulfonamide (FOSA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorononanesulfonic acid (PFNS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoro-1-butanefulfonamide (FBSA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorohexanesulfonic acid (PFHxS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoropentanesulfonic acid (PFPeS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoroundecanoic acid (PFUnA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluoroheptanoic acid (PFHpA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorooctanoic acid (PFOA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorooctanesulfonic acid (PFOS)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW
Perfluorononanoic acid (PFNA)	ND	2.2	ng/L	1		SOP-454 PFAS	1/30/26	2/2/26 12:09	QNW

Sample Extraction Data

Prep Method:% Solids **Analytical Method:**SM 2540G

Lab Number [Field ID]	Batch	Date
26A1133-01 [Groton]	B421594	01/30/26
26A1133-02 [Manchester]	B421594	01/30/26
26A1133-03 [Wareham]	B421594	01/30/26
26A1133-04 [Framingham]	B421594	01/30/26

Prep Method:SOP 454-PFAAS **Analytical Method:**SOP-454 PFAS

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
26A1133-05 [Groton FB]	B421592	232	1.00	01/30/26

Prep Method:SOP 466-PFAAS **Analytical Method:**SOP-466 PFAS

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
26A1133-01RE1 [Groton]	B422126	5.54	5.00	02/11/26
26A1133-02RE1 [Manchester]	B422126	5.52	5.00	02/11/26
26A1133-03RE1 [Wareham]	B422126	5.52	5.00	02/11/26
26A1133-04RE1 [Framingham]	B422126	5.56	5.00	02/11/26

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B421592 - SOP 454-PFAAS

Blank (B421592-BLK1)

Prepared: 01/30/26 Analyzed: 02/02/26

Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L
11Cl-PF3OUdS	ND	2.0	ng/L
9Cl-PF3ONS	ND	2.0	ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.0	ng/L
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	2.0	ng/L
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L
N-EtFOSAA (NEtFOSAA)	ND	2.0	ng/L
N-MeFOSAA (NMeFOSAA)	ND	2.0	ng/L
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.0	ng/L
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L
Perfluorononanesulfonic acid (PFNS)	ND	2.0	ng/L
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	2.0	ng/L
Perfluoro-1-butanesulfonamide (FBSA)	ND	2.0	ng/L
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0	ng/L
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0	ng/L
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.0	ng/L
Perfluoropentanesulfonic acid (PFPeS)	ND	2.0	ng/L
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L

LCS (B421592-BS1)

Prepared: 01/30/26 Analyzed: 02/02/26

Perfluorobutanoic acid (PFBA)	9.80	2.0	ng/L	10.00	98.0	73-129
Perfluorobutanesulfonic acid (PFBS)	8.96	2.0	ng/L	10.00	89.6	72-130
Perfluoropentanoic acid (PFPeA)	9.73	2.0	ng/L	10.00	97.3	72-129
Perfluorohexanoic acid (PFHxA)	9.83	2.0	ng/L	10.00	98.3	72-129
11Cl-PF3OUdS	8.29	2.0	ng/L	10.00	82.9	35.6-144
9Cl-PF3ONS	8.70	2.0	ng/L	10.00	87.0	51-130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.23	2.0	ng/L	10.00	92.3	57.1-131
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.17	2.0	ng/L	10.00	91.7	47.6-152
8:2 Fluorotelomersulfonic acid (8:2FTS A)	11.7	2.0	ng/L	10.00	117	67-138
Perfluorodecanoic acid (PFDA)	9.57	2.0	ng/L	10.00	95.7	71-129
Perfluorododecanoic acid (PFDoA)	10.2	2.0	ng/L	10.00	102	72-134
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	9.54	2.0	ng/L	10.00	95.4	62.3-144

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B421592 - SOP 454-PFAAS										
LCS (B421592-BS1)										
					Prepared: 01/30/26 Analyzed: 02/02/26					
Perfluoroheptanesulfonic acid (PFHpS)	9.54	2.0	ng/L	10.00		95.4	69-134			
N-EtFOSAA (NEtFOSAA)	9.42	2.0	ng/L	10.00		94.2	61-135			
N-MeFOSAA (NMeFOSAA)	9.26	2.0	ng/L	10.00		92.6	65-136			
Perfluorotetradecanoic acid (PFTA)	9.90	2.0	ng/L	10.00		99.0	71-132			
Perfluorotridecanoic acid (PFTTrDA)	10.8	2.0	ng/L	10.00		108	65-144			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	10.6	2.0	ng/L	10.00		106	63-143			
Perfluorodecanesulfonic acid (PFDS)	9.95	2.0	ng/L	10.00		99.5	53-142			
Perfluorooctanesulfonamide (FOSA)	8.34	2.0	ng/L	10.00		83.4	67-137			
Perfluorononanesulfonic acid (PFNS)	8.46	2.0	ng/L	10.00		84.6	69-127			
Perfluoro-1-hexanesulfonamide (FHxSA)	8.70	2.0	ng/L	10.00		87.0	35-131			
Perfluoro-1-butanefulfonamide (FBSA)	9.29	2.0	ng/L	10.00		92.9	53.1-125			
Perfluorohexanesulfonic acid (PFHxS)	8.64	2.0	ng/L	10.00		86.4	68-131			
Perfluoro-4-oxapentanoic acid (PFMPA)	10.5	2.0	ng/L	10.00		105	62.3-138			
Perfluoro-5-oxahexanoic acid (PFMBA)	10.8	2.0	ng/L	10.00		108	60.1-138			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.33	2.0	ng/L	10.00		83.3	64-140			
Perfluoropentanesulfonic acid (PFPeS)	8.88	2.0	ng/L	10.00		88.8	71-127			
Perfluoroundecanoic acid (PFUnA)	9.66	2.0	ng/L	10.00		96.6	69-133			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	10.8	2.0	ng/L	10.00		108	58.2-144			
Perfluoroheptanoic acid (PFHpA)	9.47	2.0	ng/L	10.00		94.7	72-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.00		100	71-133			
Perfluorooctanesulfonic acid (PFOS)	9.49	2.0	ng/L	10.00		94.9	65-140			
Perfluorononanoic acid (PFNA)	8.99	2.0	ng/L	10.00		89.9	69-130			
LCS Dup (B421592-BS1)										
					Prepared: 01/30/26 Analyzed: 02/02/26					
Perfluorobutanoic acid (PFBA)	9.35	2.0	ng/L	10.00		93.5	73-129	4.75	30	
Perfluorobutanesulfonic acid (PFBS)	8.58	2.0	ng/L	10.00		85.8	72-130	4.38	30	
Perfluoropentanoic acid (PFPeA)	9.40	2.0	ng/L	10.00		94.0	72-129	3.46	30	
Perfluorohexanoic acid (PFHxA)	9.26	2.0	ng/L	10.00		92.6	72-129	5.96	30	
11Cl-PF3OUdS	7.65	2.0	ng/L	10.00		76.5	35.6-144	8.02	30.4	
9Cl-PF3ONS	8.02	2.0	ng/L	10.00		80.2	51-130	8.06	27.1	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.90	2.0	ng/L	10.00		89.0	57.1-131	3.66	20.6	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.70	2.0	ng/L	10.00		87.0	47.6-152	5.27	30.8	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	9.82	2.0	ng/L	10.00		98.2	67-138	17.4	30	
Perfluorodecanoic acid (PFDA)	9.76	2.0	ng/L	10.00		97.6	71-129	1.91	30	
Perfluorododecanoic acid (PFDoA)	9.77	2.0	ng/L	10.00		97.7	72-134	4.03	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	9.12	2.0	ng/L	10.00		91.2	62.3-144	4.55	19.9	
Perfluoroheptanesulfonic acid (PFHpS)	9.25	2.0	ng/L	10.00		92.5	69-134	2.99	30	
N-EtFOSAA (NEtFOSAA)	9.07	2.0	ng/L	10.00		90.7	61-135	3.83	30	
N-MeFOSAA (NMeFOSAA)	9.67	2.0	ng/L	10.00		96.7	65-136	4.28	30	
Perfluorotetradecanoic acid (PFTA)	9.83	2.0	ng/L	10.00		98.3	71-132	0.754	30	
Perfluorotridecanoic acid (PFTTrDA)	10.6	2.0	ng/L	10.00		106	65-144	1.49	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	9.98	2.0	ng/L	10.00		99.8	63-143	5.82	30	
Perfluorodecanesulfonic acid (PFDS)	9.11	2.0	ng/L	10.00		91.1	53-142	8.80	30	
Perfluorooctanesulfonamide (FOSA)	7.83	2.0	ng/L	10.00		78.3	67-137	6.34	30	
Perfluorononanesulfonic acid (PFNS)	8.34	2.0	ng/L	10.00		83.4	69-127	1.45	30	
Perfluoro-1-hexanesulfonamide (FHxSA)	7.75	2.0	ng/L	10.00		77.5	35-131	11.6	25.1	
Perfluoro-1-butanefulfonamide (FBSA)	9.07	2.0	ng/L	10.00		90.7	53.1-125	2.41	22.5	
Perfluorohexanesulfonic acid (PFHxS)	8.81	2.0	ng/L	10.00		88.1	68-131	2.03	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	10.0	2.0	ng/L	10.00		100	62.3-138	4.81	20.6	
Perfluoro-5-oxahexanoic acid (PFMBA)	10.5	2.0	ng/L	10.00		105	60.1-138	2.54	20.4	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B421592 - SOP 454-PFAAS

LCS Dup (B421592-BSD1)

Prepared: 01/30/26 Analyzed: 02/02/26

6:2 Fluorotelomersulfonic acid (6:2FTS A)	9.80	2.0	ng/L	10.00		98.0	64-140	16.2	30	
Perfluoropentanesulfonic acid (PFPeS)	9.17	2.0	ng/L	10.00		91.7	71-127	3.22	30	
Perfluoroundecanoic acid (PFUnA)	8.53	2.0	ng/L	10.00		85.3	69-133	12.4	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	10.7	2.0	ng/L	10.00		107	58.2-144	1.21	21.9	
Perfluoroheptanoic acid (PFHpA)	9.66	2.0	ng/L	10.00		96.6	72-130	1.97	30	
Perfluorooctanoic acid (PFOA)	9.50	2.0	ng/L	10.00		95.0	71-133	5.37	30	
Perfluorooctanesulfonic acid (PFOS)	8.29	2.0	ng/L	10.00		82.9	65-140	13.5	30	
Perfluorononanoic acid (PFNA)	9.05	2.0	ng/L	10.00		90.5	69-130	0.726	30	

Batch B422126 - SOP 466-PFAAS

Blank (B422126-BLK1)

Prepared: 02/11/26 Analyzed: 02/12/26

Perfluorobutanoic acid (PFBA)	ND	0.45	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	ND	0.45	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.45	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.45	µg/kg wet							
11Cl-PF3OUdS	ND	0.45	µg/kg wet							
9Cl-PF3ONS	ND	0.45	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.45	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.45	µg/kg wet							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	0.45	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.45	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.45	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.45	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.45	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.45	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.45	µg/kg wet							
Perfluorotetradecanoic acid (PFTA)	ND	0.45	µg/kg wet							
Perfluorotridecanoic acid (PFTTrDA)	ND	0.45	µg/kg wet							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	0.45	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.45	µg/kg wet							
Perfluorooctanesulfonamide (FOSA)	ND	0.45	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.45	µg/kg wet							
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	0.45	µg/kg wet							
Perfluoro-1-butanesulfonamide (FBSA)	ND	0.45	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.45	µg/kg wet							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.45	µg/kg wet							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.45	µg/kg wet							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	0.45	µg/kg wet							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.45	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.45	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.45	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.45	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.45	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.45	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.45	µg/kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B422126 - SOP 466-PFAAS

LCS (B422126-BS1)

Prepared: 02/11/26 Analyzed: 02/12/26

Perfluorobutanoic acid (PFBA)	2.01	0.45	µg/kg wet	2.273		88.5	71-135			
Perfluorobutanesulfonic acid (PFBS)	2.19	0.45	µg/kg wet	2.273		96.4	72-128			
Perfluoropentanoic acid (PFPeA)	2.17	0.45	µg/kg wet	2.273		95.5	69-132			
Perfluorohexanoic acid (PFHxA)	2.21	0.45	µg/kg wet	2.273		97.4	70-132			
11Cl-PF3OUdS	1.83	0.45	µg/kg wet	2.273		80.5	52.3-130			
9Cl-PF3ONS	1.93	0.45	µg/kg wet	2.273		85.0	52.6-118			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.07	0.45	µg/kg wet	2.273		91.2	53.3-122			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.55	0.45	µg/kg wet	2.273		112	51.8-132			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	2.11	0.45	µg/kg wet	2.273		92.9	65-137			
Perfluorodecanoic acid (PFDA)	2.25	0.45	µg/kg wet	2.273		99.1	69-133			
Perfluorododecanoic acid (PFDoA)	1.58	0.45	µg/kg wet	2.273		69.4	69-135			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	2.60	0.45	µg/kg wet	2.273		115	64.6-131			
Perfluoroheptanesulfonic acid (PFHpS)	2.31	0.45	µg/kg wet	2.273		102	70-132			
N-EtFOSAA (NEtFOSAA)	2.06	0.45	µg/kg wet	2.273		90.7	61-139			
N-MeFOSAA (NMeFOSAA)	2.21	0.45	µg/kg wet	2.273		97.1	63-144			
Perfluorotetradecanoic acid (PFTA)	2.04	0.45	µg/kg wet	2.273		90.0	69-133			
Perfluorotridecanoic acid (PFTrDA)	2.03	0.45	µg/kg wet	2.273		89.3	66-139			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	2.36	0.45	µg/kg wet	2.273		104	62-145			
Perfluorodecanesulfonic acid (PFDS)	1.86	0.45	µg/kg wet	2.273		82.0	59-134			
Perfluorooctanesulfonamide (FOSA)	1.59	0.45	µg/kg wet	2.273		70.1	67-137			
Perfluorononanesulfonic acid (PFNS)	2.20	0.45	µg/kg wet	2.273		96.6	69-125			
Perfluoro-1-hexanesulfonamide (FHxSA)	2.19	0.45	µg/kg wet	2.273		96.5	53.9-112			
Perfluoro-1-butanefulfonamide (FBSA)	1.72	0.45	µg/kg wet	2.273		75.8	55-115			
Perfluorohexanesulfonic acid (PFHxS)	2.22	0.45	µg/kg wet	2.273		97.8	67-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	2.21	0.45	µg/kg wet	2.273		97.1	63.5-122			
Perfluoro-5-oxahexanoic acid (PFMBA)	2.27	0.45	µg/kg wet	2.273		99.7	58.1-123			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	1.80	0.45	µg/kg wet	2.273		79.1	64-140			
Perfluoropentanesulfonic acid (PFPeS)	1.99	0.45	µg/kg wet	2.273		87.8	73-123			
Perfluoroundecanoic acid (PFUnA)	1.68	0.45	µg/kg wet	2.273		73.9	64-136			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.32	0.45	µg/kg wet	2.273		102	64.4-129			
Perfluoroheptanoic acid (PFHpA)	1.92	0.45	µg/kg wet	2.273		84.3	71-131			
Perfluorooctanoic acid (PFOA)	1.68	0.45	µg/kg wet	2.273		73.9	69-133			
Perfluorooctanesulfonic acid (PFOS)	1.98	0.45	µg/kg wet	2.273		87.3	68-136			
Perfluorononanoic acid (PFNA)	1.57	0.45	µg/kg wet	2.273		69.0 *	72-129			L-07

Matrix Spike (B422126-MS1)

Source: 26A1133-01RE1

Prepared: 02/11/26 Analyzed: 02/12/26

Perfluorobutanoic acid (PFBA)	6.17	1.1	µg/kg dry	5.619	1.32	86.3	71-135			
Perfluorobutanesulfonic acid (PFBS)	5.61	1.1	µg/kg dry	5.619	0.272	95.0	72-128			
Perfluoropentanoic acid (PFPeA)	9.42	1.1	µg/kg dry	5.619	3.82	99.6	69-132			
Perfluorohexanoic acid (PFHxA)	14.5	1.1	µg/kg dry	5.619	8.79	102	70-132			
11Cl-PF3OUdS	4.31	1.1	µg/kg dry	5.619	ND	76.8	44.1-148			
9Cl-PF3ONS	4.71	1.1	µg/kg dry	5.619	ND	83.8	52.9-128			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.06	1.1	µg/kg dry	5.619	ND	90.1	56.7-129			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.54	1.1	µg/kg dry	5.619	ND	116	54.4-144			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	7.26	1.1	µg/kg dry	5.619	ND	129	65-137			
Perfluorodecanoic acid (PFDA)	5.58	1.1	µg/kg dry	5.619	ND	99.3	69-133			
Perfluorododecanoic acid (PFDoA)	4.76	1.1	µg/kg dry	5.619	ND	84.7	69-135			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	6.39	1.1	µg/kg dry	5.619	ND	114	63.9-142			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B422126 - SOP 466-PFAAS										
Matrix Spike (B422126-MS1)										
Source: 26A1133-01RE1 Prepared: 02/11/26 Analyzed: 02/12/26										
Perfluoroheptanesulfonic acid (PFHpS)	5.92	1.1	µg/kg dry	5.619	ND	105	70-132			
N-EtFOSAA (NEtFOSAA)	5.06	1.1	µg/kg dry	5.619	ND	90.1	61-139			
N-MeFOSAA (NMeFOSAA)	4.31	1.1	µg/kg dry	5.619	ND	76.7	63-144			
Perfluorotetradecanoic acid (PFTA)	5.12	1.1	µg/kg dry	5.619	ND	91.2	69-133			
Perfluorotridecanoic acid (PFTTrDA)	4.54	1.1	µg/kg dry	5.619	ND	80.7	66-139			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	5.44	1.1	µg/kg dry	5.619	ND	96.8	62-145			
Perfluorodecanesulfonic acid (PFDS)	4.71	1.1	µg/kg dry	5.619	ND	83.8	59-134			
Perfluorooctanesulfonamide (FOSA)	3.86	1.1	µg/kg dry	5.619	ND	68.7	67-137			
Perfluorononanesulfonic acid (PFNS)	4.71	1.1	µg/kg dry	5.619	ND	83.9	69-125			
Perfluoro-1-hexanesulfonamide (FHxSA)	5.38	1.1	µg/kg dry	5.619	ND	95.8	45.5-128			
Perfluoro-1-butanefulfonamide (FBSA)	4.36	1.1	µg/kg dry	5.619	ND	77.6	49.3-130			
Perfluorohexanesulfonic acid (PFHxS)	5.17	1.1	µg/kg dry	5.619	ND	92.0	67-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	5.97	1.1	µg/kg dry	5.619	ND	106	61.2-137			
Perfluoro-5-oxahexanoic acid (PFMBA)	5.57	1.1	µg/kg dry	5.619	ND	99.1	54.3-136			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	5.16	1.1	µg/kg dry	5.619	ND	91.8	64-140			
Perfluoropentanesulfonic acid (PFPeS)	4.69	1.1	µg/kg dry	5.619	ND	83.4	73-123			
Perfluoroundecanoic acid (PFUnA)	4.37	1.1	µg/kg dry	5.619	ND	77.8	64-136			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.73	1.1	µg/kg dry	5.619	ND	102	58.5-146			
Perfluoroheptanoic acid (PFHpA)	5.18	1.1	µg/kg dry	5.619	ND	92.1	71-131			
Perfluorooctanoic acid (PFOA)	4.73	1.1	µg/kg dry	5.619	0.370	77.5	69-133			
Perfluorooctanesulfonic acid (PFOS)	4.68	1.1	µg/kg dry	5.619	ND	83.4	68-136			
Perfluorononanoic acid (PFNA)	4.27	1.1	µg/kg dry	5.619	ND	76.0	72-129			
Matrix Spike Dup (B422126-MSD1)										
Source: 26A1133-01RE1 Prepared: 02/11/26 Analyzed: 02/12/26										
Perfluorobutanoic acid (PFBA)	6.69	1.1	µg/kg dry	5.617	1.32	95.6	71-135	8.05	30	
Perfluorobutanesulfonic acid (PFBS)	6.01	1.1	µg/kg dry	5.617	0.272	102	72-128	6.97	30	
Perfluoropentanoic acid (PFPeA)	9.71	1.1	µg/kg dry	5.617	3.82	105	69-132	3.05	30	
Perfluorohexanoic acid (PFHxA)	15.0	1.1	µg/kg dry	5.617	8.79	110	70-132	3.01	30	
11Cl-PF3OUdS	5.24	1.1	µg/kg dry	5.617	ND	93.3	44.1-148	19.4	48.5	
9Cl-PF3ONS	4.91	1.1	µg/kg dry	5.617	ND	87.5	52.9-128	4.19	31.8	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.31	1.1	µg/kg dry	5.617	ND	94.6	56.7-129	4.81	29.1	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.66	1.1	µg/kg dry	5.617	ND	119	54.4-144	1.88	40.9	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	5.60	1.1	µg/kg dry	5.617	ND	99.7	65-137	25.9	30	
Perfluorodecanoic acid (PFDA)	6.02	1.1	µg/kg dry	5.617	ND	107	69-133	7.53	30	
Perfluorododecanoic acid (PFDoA)	4.80	1.1	µg/kg dry	5.617	ND	85.4	69-135	0.692	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	6.74	1.1	µg/kg dry	5.617	ND	120	63.9-142	5.21	31.7	
Perfluoroheptanesulfonic acid (PFHpS)	5.49	1.1	µg/kg dry	5.617	ND	97.8	70-132	7.44	30	
N-EtFOSAA (NEtFOSAA)	4.52	1.1	µg/kg dry	5.617	ND	80.4	61-139	11.4	30	
N-MeFOSAA (NMeFOSAA)	5.39	1.1	µg/kg dry	5.617	ND	96.0	63-144	22.3	30	
Perfluorotetradecanoic acid (PFTA)	6.52	1.1	µg/kg dry	5.617	ND	116	69-133	24.1	30	
Perfluorotridecanoic acid (PFTTrDA)	5.77	1.1	µg/kg dry	5.617	ND	103	66-139	24.0	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	6.01	1.1	µg/kg dry	5.617	ND	107	62-145	10.0	30	
Perfluorodecanesulfonic acid (PFDS)	5.25	1.1	µg/kg dry	5.617	ND	93.5	59-134	10.9	30	
Perfluorooctanesulfonamide (FOSA)	3.88	1.1	µg/kg dry	5.617	ND	69.0	67-137	0.364	30	
Perfluorononanesulfonic acid (PFNS)	4.63	1.1	µg/kg dry	5.617	ND	82.4	69-125	1.76	30	
Perfluoro-1-hexanesulfonamide (FHxSA)	6.03	1.1	µg/kg dry	5.617	ND	107	45.5-128	11.3	37.9	
Perfluoro-1-butanefulfonamide (FBSA)	4.61	1.1	µg/kg dry	5.617	ND	82.0	49.3-130	5.53	38.7	
Perfluorohexanesulfonic acid (PFHxS)	5.82	1.1	µg/kg dry	5.617	ND	104	67-130	11.8	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	6.36	1.1	µg/kg dry	5.617	ND	113	61.2-137	6.31	30.6	
Perfluoro-5-oxahexanoic acid (PFMBA)	5.97	1.1	µg/kg dry	5.617	ND	106	54.3-136	6.88	30.7	

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B422126 - SOP 466-PFAAS

Matrix Spike Dup (B422126-MSD1)

Source: 26A1133-01RE1

Prepared: 02/11/26 Analyzed: 02/12/26

6:2 Fluorotelomersulfonic acid (6:2FTS A)	4.94	1.1	µg/kg dry	5.617	ND	87.9	64-140	4.35	30	
Perfluoropentanesulfonic acid (PFPeS)	4.88	1.1	µg/kg dry	5.617	ND	86.8	73-123	3.93	30	
Perfluoroundecanoic acid (PFUnA)	4.77	1.1	µg/kg dry	5.617	ND	85.0	64-136	8.80	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	6.08	1.1	µg/kg dry	5.617	ND	108	58.5-146	5.90	31.9	
Perfluoroheptanoic acid (PFHpA)	5.26	1.1	µg/kg dry	5.617	ND	93.6	71-131	1.52	30	
Perfluorooctanoic acid (PFOA)	5.31	1.1	µg/kg dry	5.617	0.370	88.0	69-133	11.7	30	
Perfluorooctanesulfonic acid (PFOS)	5.43	1.1	µg/kg dry	5.617	ND	96.6	68-136	14.7	30	
Perfluorononanoic acid (PFNA)	4.37	1.1	µg/kg dry	5.617	ND	77.8	72-129	2.28	30	

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
PF-18	Re-extraction confirmed Extracted Internal Standard failure due to matrix effects.
S-29	Extracted Internal Standard is outside of control limits.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Groton (26A1133-01RE1)			Lab File ID: 26A1133-01RE1.d			Analyzed: 02/12/26 13:06			
M8FOSA	949308.8	3.980017	846,341.00	3.988	112	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	110853.4	2.514133	282,023.00	2.555433	39	50 - 150	-0.0413	+/-0.50	*
M2PFTA	2097571	4.264616	1,553,820.00	4.2889	135	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	297427.7	3.746333	241,352.00	3.770567	123	50 - 150	-0.0242	+/-0.50	
MPFBA	899558.3	1.042933	964,948.00	1.051233	93	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	322319	2.832133	426,243.00	2.8649	76	50 - 150	-0.0328	+/-0.50	
M6PFDA	1950847	3.74685	1,650,703.00	3.77105	118	50 - 150	-0.0242	+/-0.50	
M3PFBS	292369.3	1.895833	263,122.00	1.92895	111	50 - 150	-0.0331	+/-0.50	
M7PFUnA	2277229	3.889017	1,964,259.00	3.91325	116	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	146835.8	3.405217	244,494.00	3.421233	60	50 - 150	-0.0160	+/-0.50	
M5PFPeA	937502.9	1.716883	854,978.00	1.749983	110	50 - 150	-0.0331	+/-0.50	
M5PFHxA	1484645	2.598483	1,291,356.00	2.639633	115	50 - 150	-0.0412	+/-0.50	
M3PFHxS	325783.1	3.18685	256,892.00	3.203017	127	50 - 150	-0.0162	+/-0.50	
M4PFHpA	1813376	3.155733	1,604,318.00	3.1719	113	50 - 150	-0.0162	+/-0.50	
M8PFOA	2121327	3.4138	1,694,246.00	3.437833	125	50 - 150	-0.0240	+/-0.50	
M8PFOS	314237.9	3.59585	273,894.00	3.619767	115	50 - 150	-0.0239	+/-0.50	
M9PFNA	1756360	3.596867	1,516,632.00	3.620783	116	50 - 150	-0.0239	+/-0.50	
MPFDoA	2177322	4.02405	1,730,456.00	4.05605	126	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	369441.9	3.896517	347,472.00	3.928717	106	50 - 150	-0.0322	+/-0.50	
D3-NMeFOSAA	408501	3.825017	413,521.00	3.848867	99	50 - 150	-0.0238	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Manchester (26A1133-02RE1)			Lab File ID: 26A1133-02RE1.d			Analyzed: 02/12/26 13:13			
M8FOSA	926277.1	3.980017	846,341.00	3.988	109	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	215667.5	2.505917	282,023.00	2.555433	76	50 - 150	-0.0495	+/-0.50	
M2PF _{TA}	1799132	4.264616	1,553,820.00	4.2889	116	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	414152.8	3.746333	241,352.00	3.770567	172	50 - 150	-0.0242	+/-0.50	*
MPF _{BA}	820431.5	1.042933	964,948.00	1.051233	85	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	324438.5	2.832133	426,243.00	2.8649	76	50 - 150	-0.0328	+/-0.50	
M6PF _{DA}	1895894	3.74685	1,650,703.00	3.77105	115	50 - 150	-0.0242	+/-0.50	
M3PF _{BS}	307807.1	1.895833	263,122.00	1.92895	117	50 - 150	-0.0331	+/-0.50	
M7PF _{UnA}	2371454	3.889017	1,964,259.00	3.91325	121	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	342642.7	3.405217	244,494.00	3.421233	140	50 - 150	-0.0160	+/-0.50	
M5PF _{PeA}	959885	1.708617	854,978.00	1.749983	112	50 - 150	-0.0414	+/-0.50	
M5PF _{HxA}	1596465	2.598483	1,291,356.00	2.639633	124	50 - 150	-0.0412	+/-0.50	
M3PF _{HxS}	324914.3	3.18685	256,892.00	3.203017	126	50 - 150	-0.0162	+/-0.50	
M4PF _{HpA}	1906451	3.147367	1,604,318.00	3.1719	119	50 - 150	-0.0245	+/-0.50	
M8PF _{OA}	2242798	3.4138	1,694,246.00	3.437833	132	50 - 150	-0.0240	+/-0.50	
M8PF _{OS}	300109.6	3.59585	273,894.00	3.619767	110	50 - 150	-0.0239	+/-0.50	
M9PF _{NA}	1861065	3.596867	1,516,632.00	3.620783	123	50 - 150	-0.0239	+/-0.50	
MPF _{DoA}	2125886	4.02405	1,730,456.00	4.05605	123	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	437269.9	3.896517	347,472.00	3.928717	126	50 - 150	-0.0322	+/-0.50	
D3-NMeFOSAA	557297.9	3.825017	413,521.00	3.848867	135	50 - 150	-0.0238	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Wareham (26A1133-03RE1)			Lab File ID: 26A1133-03RE1.d			Analyzed: 02/12/26 13:20			
M8FOSA	953363.4	3.988017	846,341.00	3.988	113	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	143687.4	2.514133	282,023.00	2.555433	51	50 - 150	-0.0413	+/-0.50	
M2PF _T A	2111241	4.264616	1,553,820.00	4.2889	136	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	409506.1	3.746333	241,352.00	3.770567	170	50 - 150	-0.0242	+/-0.50	*
MPF _B A	944719	1.042933	964,948.00	1.051233	98	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	347207.8	2.832133	426,243.00	2.8649	81	50 - 150	-0.0328	+/-0.50	
M6PF _D A	2116794	3.74685	1,650,703.00	3.77105	128	50 - 150	-0.0242	+/-0.50	
M3PF _B S	317342.7	1.895833	263,122.00	1.92895	121	50 - 150	-0.0331	+/-0.50	
M7PF _U nA	2398256	3.889017	1,964,259.00	3.91325	122	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	251517.7	3.405217	244,494.00	3.421233	103	50 - 150	-0.0160	+/-0.50	
M5PF _P eA	1005152	1.716883	854,978.00	1.749983	118	50 - 150	-0.0331	+/-0.50	
M5PF _H xA	1630502	2.598483	1,291,356.00	2.639633	126	50 - 150	-0.0412	+/-0.50	
M3PF _H xS	354515.1	3.18685	256,892.00	3.203017	138	50 - 150	-0.0162	+/-0.50	
M4PF _H pA	1919482	3.147367	1,604,318.00	3.1719	120	50 - 150	-0.0245	+/-0.50	
M8PF _O A	2332813	3.4138	1,694,246.00	3.437833	138	50 - 150	-0.0240	+/-0.50	
M8PF _O S	361178.6	3.59585	273,894.00	3.619767	132	50 - 150	-0.0239	+/-0.50	
M9PF _N A	1984690	3.596867	1,516,632.00	3.620783	131	50 - 150	-0.0239	+/-0.50	
MPF _D oA	2285457	4.02405	1,730,456.00	4.05605	132	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	532935.5	3.896517	347,472.00	3.928717	153	50 - 150	-0.0322	+/-0.50	*
D3-NMeFOSAA	524894.2	3.825017	413,521.00	3.848867	127	50 - 150	-0.0238	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Framingham (26A1133-04RE1)			Lab File ID: 26A1133-04RE1.d			Analyzed: 02/12/26 13:27			
M8FOSA	1047495	3.988017	846,341.00	3.988	124	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	245159.4	2.505917	282,023.00	2.555433	87	50 - 150	-0.0495	+/-0.50	
M2PF _{TA}	2127479	4.264616	1,553,820.00	4.2889	137	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	441714.6	3.746333	241,352.00	3.770567	183	50 - 150	-0.0242	+/-0.50	*
MPF _{BA}	885411.8	1.042933	964,948.00	1.051233	92	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	350480.3	2.832133	426,243.00	2.8649	82	50 - 150	-0.0328	+/-0.50	
M6PF _{DA}	2097017	3.74685	1,650,703.00	3.77105	127	50 - 150	-0.0242	+/-0.50	
M3PF _{BS}	330468.9	1.895833	263,122.00	1.92895	126	50 - 150	-0.0331	+/-0.50	
M7PF _{UnA}	2660523	3.889017	1,964,259.00	3.91325	135	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	377283.1	3.405217	244,494.00	3.421233	154	50 - 150	-0.0160	+/-0.50	*
M5PF _{PeA}	1044231	1.708617	854,978.00	1.749983	122	50 - 150	-0.0414	+/-0.50	
M5PF _{HxA}	1699852	2.598483	1,291,356.00	2.639633	132	50 - 150	-0.0412	+/-0.50	
M3PF _{HxS}	358944	3.17875	256,892.00	3.203017	140	50 - 150	-0.0243	+/-0.50	
M4PF _{HpA}	2083186	3.147367	1,604,318.00	3.1719	130	50 - 150	-0.0245	+/-0.50	
M8PF _{OA}	2459532	3.4138	1,694,246.00	3.437833	145	50 - 150	-0.0240	+/-0.50	
M8PF _{OS}	346691.3	3.59585	273,894.00	3.619767	127	50 - 150	-0.0239	+/-0.50	
M9PF _{NA}	2094743	3.596867	1,516,632.00	3.620783	138	50 - 150	-0.0239	+/-0.50	
MPF _{DoA}	2388819	4.02405	1,730,456.00	4.05605	138	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	543477.6	3.896517	347,472.00	3.928717	156	50 - 150	-0.0322	+/-0.50	*
D3-NMeFOSAA	671519.9	3.825017	413,521.00	3.848867	162	50 - 150	-0.0238	+/-0.50	*

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Groton FB (26A1133-05)			Lab File ID: 26A1133-05.d			Analyzed: 02/02/26 12:09			
M8FOSA	743817.8	3.988017	881,057.00	3.988033	84	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	165218.7	2.6295	189,688.00	2.637733	87	50 - 150	-0.0082	+/-0.50	
M2PF _{TA}	1490709	4.3295	1,680,292.00	4.337616	89	50 - 150	-0.0081	+/-0.50	
M2-8:2FTS	242784.2	3.810333	240,384.00	3.810333	101	50 - 150	0.0000	+/-0.50	
MPF _{BA}	882805.8	1.092783	814,956.00	1.092783	108	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	263021.9	2.91435	308,236.00	2.922483	85	50 - 150	-0.0081	+/-0.50	
M6PF _{DA}	1503803	3.810817	1,570,927.00	3.810817	96	50 - 150	0.0000	+/-0.50	
M3PF _{BS}	266765.9	1.99615	258,009.00	2.004433	103	50 - 150	-0.0083	+/-0.50	
M7PF _{UnA}	1909786	3.953383	1,824,459.00	3.961383	105	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	316160.3	3.453517	202,570.00	3.461517	156	50 - 150	-0.0080	+/-0.50	*
M5PF _{PeA}	799602.3	1.808417	743,119.00	1.8167	108	50 - 150	-0.0083	+/-0.50	
M5PF _{HxA}	1251868	2.715217	1,177,910.00	2.724	106	50 - 150	-0.0088	+/-0.50	
M3PF _{HxS}	252328.7	3.236133	246,332.00	3.244133	102	50 - 150	-0.0080	+/-0.50	
M4PF _{HpA}	1481223	3.212333	1,328,456.00	3.220417	111	50 - 150	-0.0081	+/-0.50	
M8PF _{OA}	1720697	3.47005	1,570,045.00	3.478033	110	50 - 150	-0.0080	+/-0.50	
M8PF _{OS}	284853.6	3.651917	277,183.00	3.651917	103	50 - 150	0.0000	+/-0.50	
M9PF _{NA}	1675655	3.652883	1,414,414.00	3.652883	118	50 - 150	0.0000	+/-0.50	
MPF _{DoA}	1621467	4.096066	1,805,966.00	4.096083	90	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	340947.2	3.960833	356,063.00	3.968833	96	50 - 150	-0.0080	+/-0.50	
D3-NMeFOSAA	459154.8	3.888883	429,313.00	3.888883	107	50 - 150	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B421592-BLK1)			Lab File ID: B421592-BLK1.d			Analyzed: 02/02/26 11:25			
M8FOSA	794647.3	3.988033	881,057.00	3.988033	90	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	173373	2.6295	189,688.00	2.637733	91	50 - 150	-0.0082	+/-0.50	
M2PFTA	1439927	4.329517	1,680,292.00	4.337616	86	50 - 150	-0.0081	+/-0.50	
M2-8:2FTS	240402.1	3.810333	240,384.00	3.810333	100	50 - 150	0.0000	+/-0.50	
MPFBA	863142.8	1.092783	814,956.00	1.092783	106	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	309638.5	2.91435	308,236.00	2.922483	100	50 - 150	-0.0081	+/-0.50	
M6PFDA	1505978	3.810817	1,570,927.00	3.810817	96	50 - 150	0.0000	+/-0.50	
M3PFBS	258636.4	1.99615	258,009.00	2.004433	100	50 - 150	-0.0083	+/-0.50	
M7PFUnA	1917198	3.953383	1,824,459.00	3.961383	105	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	203021.2	3.461517	202,570.00	3.461517	100	50 - 150	0.0000	+/-0.50	
M5PFPeA	773962.1	1.8167	743,119.00	1.8167	104	50 - 150	0.0000	+/-0.50	
M5PFHxA	1239840	2.715217	1,177,910.00	2.724	105	50 - 150	-0.0088	+/-0.50	
M3PFHxS	263833.3	3.236133	246,332.00	3.244133	107	50 - 150	-0.0080	+/-0.50	
M4PFHpA	1487276	3.212333	1,328,456.00	3.220417	112	50 - 150	-0.0081	+/-0.50	
M8PFOA	1693763	3.47005	1,570,045.00	3.478033	108	50 - 150	-0.0080	+/-0.50	
M8PFOS	272601.8	3.651917	277,183.00	3.651917	98	50 - 150	0.0000	+/-0.50	
M9PFNA	1612862	3.6529	1,414,414.00	3.652883	114	50 - 150	0.0000	+/-0.50	
MPFDoA	1631216	4.096083	1,805,966.00	4.096083	90	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	322441.7	3.96085	356,063.00	3.968833	91	50 - 150	-0.0080	+/-0.50	
D3-NMeFOSAA	427903.8	3.8889	429,313.00	3.888883	100	50 - 150	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B421592-BS1)			Lab File ID: B421592-BS1.d			Analyzed: 02/02/26 11:11			
M8FOSA	852139.1	3.98805	881,057.00	3.988033	97	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	179850.9	2.637733	189,688.00	2.637733	95	50 - 150	0.0000	+/-0.50	
M2PFTA	1588654	4.329517	1,680,292.00	4.337616	95	50 - 150	-0.0081	+/-0.50	
M2-8:2FTS	272775.9	3.81035	240,384.00	3.810333	113	50 - 150	0.0000	+/-0.50	
MPFBA	895836.1	1.092783	814,956.00	1.092783	110	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	286119.6	2.922483	308,236.00	2.922483	93	50 - 150	0.0000	+/-0.50	
M6PFDA	1677942	3.810833	1,570,927.00	3.810817	107	50 - 150	0.0000	+/-0.50	
M3PFBS	271197.9	2.004433	258,009.00	2.004433	105	50 - 150	0.0000	+/-0.50	
M7PFUnA	2046862	3.9614	1,824,459.00	3.961383	112	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	210176.6	3.461517	202,570.00	3.461517	104	50 - 150	0.0000	+/-0.50	
M5PFPeA	822278.6	1.8167	743,119.00	1.8167	111	50 - 150	0.0000	+/-0.50	
M5PFHxA	1308544	2.724	1,177,910.00	2.724	111	50 - 150	0.0000	+/-0.50	
M3PFHxS	275447.5	3.24415	246,332.00	3.244133	112	50 - 150	0.0000	+/-0.50	
M4PFHpA	1528436	3.212333	1,328,456.00	3.220417	115	50 - 150	-0.0081	+/-0.50	
M8PFOA	1772190	3.47005	1,570,045.00	3.478033	113	50 - 150	-0.0080	+/-0.50	
M8PFOS	278098.5	3.651917	277,183.00	3.651917	100	50 - 150	0.0000	+/-0.50	
M9PFNA	1672821	3.652883	1,414,414.00	3.652883	118	50 - 150	0.0000	+/-0.50	
MPFDoA	1774468	4.0961	1,805,966.00	4.096083	98	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	356222.3	3.968867	356,063.00	3.968833	100	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	464220.3	3.8889	429,313.00	3.888883	108	50 - 150	0.0000	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-454 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (B421592-BSD1)			Lab File ID: B421592-BSD1.d			Analyzed: 02/02/26 11:18			
M8FOSA	840990.3	3.988017	881,057.00	3.988033	95	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	188292.8	2.6295	189,688.00	2.637733	99	50 - 150	-0.0082	+/-0.50	
M2PFTA	1647285	4.329517	1,680,292.00	4.337616	98	50 - 150	-0.0081	+/-0.50	
M2-8:2FTS	277949	3.810333	240,384.00	3.810333	116	50 - 150	0.0000	+/-0.50	
MPFBA	938504.2	1.092783	814,956.00	1.092783	115	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	311064.3	2.91435	308,236.00	2.922483	101	50 - 150	-0.0081	+/-0.50	
M6PFDA	1653193	3.810817	1,570,927.00	3.810817	105	50 - 150	0.0000	+/-0.50	
M3PFBS	281463.1	2.004433	258,009.00	2.004433	109	50 - 150	0.0000	+/-0.50	
M7PFUnA	2080366	3.953383	1,824,459.00	3.961383	114	50 - 150	-0.0080	+/-0.50	
M2-6:2FTS	201641.7	3.461517	202,570.00	3.461517	100	50 - 150	0.0000	+/-0.50	
M5PFPeA	853847.3	1.8167	743,119.00	1.8167	115	50 - 150	0.0000	+/-0.50	
M5PFHxA	1351860	2.715217	1,177,910.00	2.724	115	50 - 150	-0.0088	+/-0.50	
M3PFHxS	279708.6	3.244133	246,332.00	3.244133	114	50 - 150	0.0000	+/-0.50	
M4PFHpA	1600025	3.212333	1,328,456.00	3.220417	120	50 - 150	-0.0081	+/-0.50	
M8PFOA	1871392	3.47005	1,570,045.00	3.478033	119	50 - 150	-0.0080	+/-0.50	
M8PFOS	301124.3	3.651917	277,183.00	3.651917	109	50 - 150	0.0000	+/-0.50	
M9PFNA	1670753	3.652883	1,414,414.00	3.652883	118	50 - 150	0.0000	+/-0.50	
MPFDoA	1854622	4.096066	1,805,966.00	4.096083	103	50 - 150	0.0000	+/-0.50	
D5-NEtFOSAA	383146.3	3.968833	356,063.00	3.968833	108	50 - 150	0.0000	+/-0.50	
D3-NMeFOSAA	481716.5	3.888883	429,313.00	3.888883	112	50 - 150	0.0000	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Blank (B422126-BLK1)			Lab File ID: B422126-BLK1.d			Analyzed: 02/12/26 12:44			
M8FOSA	1179760	3.980017	846,341.00	3.988	139	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	384518.8	2.514133	282,023.00	2.555433	136	50 - 150	-0.0413	+/-0.50	
M2PFTA	2166317	4.264616	1,553,820.00	4.2889	139	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	360137.2	3.746333	241,352.00	3.770567	149	50 - 150	-0.0242	+/-0.50	
MPFBA	1269573	1.042933	964,948.00	1.051233	132	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	417211.8	2.832133	426,243.00	2.8649	98	50 - 150	-0.0328	+/-0.50	
M6PFDA	2210036	3.74685	1,650,703.00	3.77105	134	50 - 150	-0.0242	+/-0.50	
M3PFBS	351444.2	1.895833	263,122.00	1.92895	134	50 - 150	-0.0331	+/-0.50	
M7PFUnA	2669604	3.889017	1,964,259.00	3.91325	136	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	275033.7	3.405217	244,494.00	3.421233	112	50 - 150	-0.0160	+/-0.50	
M5PFPeA	1140502	1.716883	854,978.00	1.749983	133	50 - 150	-0.0331	+/-0.50	
M5PFHxA	1753466	2.598483	1,291,356.00	2.639633	136	50 - 150	-0.0412	+/-0.50	
M3PFHxS	354643.3	3.18685	256,892.00	3.203017	138	50 - 150	-0.0162	+/-0.50	
M4PFHpA	2101492	3.155733	1,604,318.00	3.1719	131	50 - 150	-0.0162	+/-0.50	
M8PFOA	2333843	3.4138	1,694,246.00	3.437833	138	50 - 150	-0.0240	+/-0.50	
M8PFOS	351996.3	3.59585	273,894.00	3.619767	129	50 - 150	-0.0239	+/-0.50	
M9PFNA	1938494	3.596867	1,516,632.00	3.620783	128	50 - 150	-0.0239	+/-0.50	
MPFDoA	2220754	4.02405	1,730,456.00	4.05605	128	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	432252.2	3.896517	347,472.00	3.928717	124	50 - 150	-0.0322	+/-0.50	
D3-NMeFOSAA	563849.3	3.825017	413,521.00	3.848867	136	50 - 150	-0.0238	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (B422126-BS1)			Lab File ID: B422126-BS1.d			Analyzed: 02/12/26 12:37			
M8FOSA	1194415	3.98	846,341.00	3.988	141	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	381155.5	2.538883	282,023.00	2.555433	135	50 - 150	-0.0166	+/-0.50	
M2PF _T A	2550654	4.264616	1,553,820.00	4.2889	164	50 - 150	-0.0243	+/-0.50	*
M2-8:2FTS	392035.5	3.75465	241,352.00	3.770567	162	50 - 150	-0.0159	+/-0.50	*
MPFBA	1347999	1.051233	964,948.00	1.051233	140	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	422353.4	2.848517	426,243.00	2.8649	99	50 - 150	-0.0164	+/-0.50	
M6PFDA	2128356	3.755133	1,650,703.00	3.77105	129	50 - 150	-0.0159	+/-0.50	
M3PFBS	377362.6	1.920667	263,122.00	1.92895	143	50 - 150	-0.0083	+/-0.50	
M7PFUnA	2851300	3.897	1,964,259.00	3.91325	145	50 - 150	-0.0163	+/-0.50	
M2-6:2FTS	280019.2	3.413217	244,494.00	3.421233	115	50 - 150	-0.0080	+/-0.50	
M5PFPeA	1209067	1.741717	854,978.00	1.749983	141	50 - 150	-0.0083	+/-0.50	
M5PFHxA	1918093	2.623167	1,291,356.00	2.639633	149	50 - 150	-0.0165	+/-0.50	
M3PFHxS	382229.6	3.194933	256,892.00	3.203017	149	50 - 150	-0.0081	+/-0.50	
M4PFHpA	2344609	3.163817	1,604,318.00	3.1719	146	50 - 150	-0.0081	+/-0.50	
M8PFOA	2536704	3.421817	1,694,246.00	3.437833	150	50 - 150	-0.0160	+/-0.50	
M8PFOS	377615.8	3.603817	273,894.00	3.619767	138	50 - 150	-0.0160	+/-0.50	
M9PFNA	2320765	3.604833	1,516,632.00	3.620783	153	50 - 150	-0.0159	+/-0.50	*
MPFDoA	2787428	4.03205	1,730,456.00	4.05605	161	50 - 150	-0.0240	+/-0.50	*
D5-NEtFOSAA	436521.2	3.904717	347,472.00	3.928717	126	50 - 150	-0.0240	+/-0.50	
D3-NMeFOSAA	537682.4	3.825017	413,521.00	3.848867	130	50 - 150	-0.0238	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (B422126-MS1)			Lab File ID: B422126-MS1.d			Analyzed: 02/12/26 12:51			
M8FOSA	1033068	3.980017	846,341.00	3.988	122	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	130061	2.505917	282,023.00	2.555433	46	50 - 150	-0.0495	+/-0.50	*
M2PFTA	1998303	4.264616	1,553,820.00	4.2889	129	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	262012.1	3.746333	241,352.00	3.770567	109	50 - 150	-0.0242	+/-0.50	
MPFBA	927596.3	1.042933	964,948.00	1.051233	96	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	319698.3	2.832133	426,243.00	2.8649	75	50 - 150	-0.0328	+/-0.50	
M6PFDA	1863755	3.74685	1,650,703.00	3.77105	113	50 - 150	-0.0242	+/-0.50	
M3PFBS	303389.2	1.895833	263,122.00	1.92895	115	50 - 150	-0.0331	+/-0.50	
M7PFUnA	2563550	3.889017	1,964,259.00	3.91325	131	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	166471.1	3.405217	244,494.00	3.421233	68	50 - 150	-0.0160	+/-0.50	
M5PFPeA	965984.8	1.716883	854,978.00	1.749983	113	50 - 150	-0.0331	+/-0.50	
M5PFHxA	1541323	2.598483	1,291,356.00	2.639633	119	50 - 150	-0.0412	+/-0.50	
M3PFHxS	332446.3	3.18685	256,892.00	3.203017	129	50 - 150	-0.0162	+/-0.50	
M4PFHpA	1798993	3.155733	1,604,318.00	3.1719	112	50 - 150	-0.0162	+/-0.50	
M8PFOA	2095927	3.4138	1,694,246.00	3.437833	124	50 - 150	-0.0240	+/-0.50	
M8PFOS	329412.9	3.59585	273,894.00	3.619767	120	50 - 150	-0.0239	+/-0.50	
M9PFNA	1883114	3.596867	1,516,632.00	3.620783	124	50 - 150	-0.0239	+/-0.50	
MPFDoA	2063764	4.02405	1,730,456.00	4.05605	119	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	377193.4	3.896517	347,472.00	3.928717	109	50 - 150	-0.0322	+/-0.50	
D3-NMeFOSAA	503835.3	3.825017	413,521.00	3.848867	122	50 - 150	-0.0238	+/-0.50	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY

SOP-466 PFAS

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (B422126-MSD1)			Lab File ID: B422126-MSD1.d			Analyzed: 02/12/26 12:58			
M8FOSA	896352.9	3.980017	846,341.00	3.988	106	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	107889.9	2.505917	282,023.00	2.555433	38	50 - 150	-0.0495	+/-0.50	*
M2PFTA	1594404	4.264616	1,553,820.00	4.2889	103	50 - 150	-0.0243	+/-0.50	
M2-8:2FTS	246314.9	3.746333	241,352.00	3.770567	102	50 - 150	-0.0242	+/-0.50	
MPFBA	833019.6	1.042933	964,948.00	1.051233	86	50 - 150	-0.0083	+/-0.50	
M3HFPO-DA	320045.7	2.832133	426,243.00	2.8649	75	50 - 150	-0.0328	+/-0.50	
M6PFDA	1643310	3.74685	1,650,703.00	3.77105	100	50 - 150	-0.0242	+/-0.50	
M3PFBS	271379.6	1.895833	263,122.00	1.92895	103	50 - 150	-0.0331	+/-0.50	
M7PFUnA	1995043	3.889017	1,964,259.00	3.91325	102	50 - 150	-0.0242	+/-0.50	
M2-6:2FTS	163728.2	3.405217	244,494.00	3.421233	67	50 - 150	-0.0160	+/-0.50	
M5PFPeA	871041.3	1.716883	854,978.00	1.749983	102	50 - 150	-0.0331	+/-0.50	
M5PFHxA	1390198	2.598483	1,291,356.00	2.639633	108	50 - 150	-0.0412	+/-0.50	
M3PFHxS	294304.2	3.18685	256,892.00	3.203017	115	50 - 150	-0.0162	+/-0.50	
M4PFHpA	1673032	3.155733	1,604,318.00	3.1719	104	50 - 150	-0.0162	+/-0.50	
M8PFOA	1752687	3.4138	1,694,246.00	3.437833	103	50 - 150	-0.0240	+/-0.50	
M8PFOS	283498.4	3.59585	273,894.00	3.619767	104	50 - 150	-0.0239	+/-0.50	
M9PFNA	1702280	3.596867	1,516,632.00	3.620783	112	50 - 150	-0.0239	+/-0.50	
MPFDoA	2020962	4.02405	1,730,456.00	4.05605	117	50 - 150	-0.0320	+/-0.50	
D5-NEtFOSAA	390251.4	3.896517	347,472.00	3.928717	112	50 - 150	-0.0322	+/-0.50	
D3-NMeFOSAA	404886.2	3.825017	413,521.00	3.848867	98	50 - 150	-0.0238	+/-0.50	

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SOP-454 PFAS in Water	
Perfluorobutanoic acid (PFBA)	NH-P,PA,NY
Perfluorobutanesulfonic acid (PFBS)	NH-P,PA,NY
Perfluoropentanoic acid (PFPeA)	NH-P,PA,NY
Perfluorohexanoic acid (PFHxA)	NH-P,PA,NY
11Cl-PF3OUdS	NH-P,PA,NY
9Cl-PF3ONS	NH-P,PA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,PA,NY
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,PA,NY
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P,PA
Perfluorodecanoic acid (PFDA)	NH-P,PA,NY
Perfluorododecanoic acid (PFDoA)	NH-P,PA,NY
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	NH-P,PA,NY
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,PA,NY
N-EtFOSAA (NEtFOSAA)	NH-P,PA,NY
N-MeFOSAA (NMeFOSAA)	NH-P,PA,NY
Perfluorotetradecanoic acid (PFTA)	NH-P,PA,NY
Perfluorotridecanoic acid (PFTrDA)	NH-P,PA,NY
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P,PA,NY
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA
Perfluorooctanesulfonamide (FOSA)	NH-P,PA
Perfluorononanesulfonic acid (PFNS)	NH-P,PA
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P,PA
Perfluoro-1-butanesulfonamide (FBSA)	NH-P,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,PA,NY
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P,PA,NY
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P,PA,NY
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P,PA,NY
Perfluoropentanesulfonic acid (PFPeS)	NH-P,PA,NY
Perfluoroundecanoic acid (PFUnA)	NH-P,PA,NY
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,PA,NY
Perfluorooctanoic acid (PFOA)	NH-P,PA,NY
Perfluorooctanesulfonic acid (PFOS)	NH-P,PA,NY
Perfluorononanoic acid (PFNA)	NH-P,PA,NY

SOP-466 PFAS in Soil

Perfluorobutanoic acid (PFBA)	NH-P,PA,NY
Perfluorobutanesulfonic acid (PFBS)	NH-P,PA
Perfluoropentanoic acid (PFPeA)	NH-P,PA,NY
Perfluorohexanoic acid (PFHxA)	NH-P,PA,NY
11Cl-PF3OUdS	NH-P,PA
9Cl-PF3ONS	NH-P,PA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,PA
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P,PA,NY
Perfluorodecanoic acid (PFDA)	NH-P,PA,NY
Perfluorododecanoic acid (PFDoA)	NH-P,PA,NY

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SOP-466 PFAS in Soil</i>	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,PA
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,PA
N-EtFOSAA (NEtFOSAA)	NH-P,PA,NY
N-MeFOSAA (NMeFOSAA)	NH-P,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,PA,NY
Perfluorotridecanoic acid (PFTrDA)	NH-P,PA,NY
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P,PA
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA
Perfluorooctanesulfonamide (FOSA)	NH-P,PA
Perfluorononanesulfonic acid (PFNS)	NH-P,PA
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P,PA
Perfluoro-1-butanefulfonamide (FBSA)	NH-P,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,PA
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P,PA
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P,PA
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P,PA
Perfluoropentanesulfonic acid (PFPeS)	NH-P,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,PA,NY
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,PA,NY
Perfluorooctanoic acid (PFOA)	NH-P,PA,NY
Perfluorooctanesulfonic acid (PFOS)	NH-P,PA,NY
Perfluorononanoic acid (PFNA)	NH-P,PA,NY

Pace Analytical Services, LLC - East Longmeadow, Ma, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NY	New York State Department of Health	10899 NELAP	04/1/2026
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2026
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2026

20A1B33-WAS

Doc # 381 Rev 5_07/13/2021
 39 Spruce Street
 East Longmeadow, MA 01028
 http://www.pacelabs.com

Phone: 413-525-2332
 Fax: 413-525-6405



Access COC's and Support Requests

Company Name: **Black Earth Compost**
 Address: **2 Hillside Rd, Chatham, MA 01019**
 Phone: **(917) 833-5435**
 Project Name:

Project Location:
 Project Number: **1026**
 Project Manager: **SYED DANI**
 Pace Quote Name/Number:
 Invoice Recipient: **SYED DANI**
 Sampled By: **SYED DANI (S.D)**

CHAIN OF CUSTODY RECORD

Requested Turnaround Time

7-Day 10-Day 15-Day 20-Day 30-Day 45-Day 60-Day 90-Day Other: _____

Rush-Approval Required

Format: PDF EXCEL Other: _____

CLP Like Data Pkg Required:

Ending Date/Time

Matrix Code

COMP/GRAB

Conc Code

Dissolved Metals Samples

Field Filtered Lab to Filter

Orthophosphate Samples

Field Filtered Lab to Filter

PCB ONLY

SOXHLET

NON SOXHLET

VIALS

GLASS

PLASTIC

BACTERIA

ENCORE

Glassware in the fridge? Y / N

Glassware in freezer? Y / N

Prepackaged Cooler? Y / N

*Pace Analytical is not responsible for missing samples from prepacked coolers

1 Matrix Codes:
 GW = Ground Water
 WW = Waste Water
 DW = Drinking Water
 A = Air
 S = Soil
 SL = Sludge
 SOL = Solid
 O = Other (please define)

2 Preservation Codes:
 I = Iced
 H = HCL
 M = Methanol
 N = Nitric Acid
 S = Sulfuric Acid
 B = Sodium Bisulfate
 X = Sodium Hydroxide
 T = Sodium Thiosulfate
 O = Other (please define)

3 Please use the following codes to indicate possible sample concentration within the Conc Code column above:
 H - High; M - Medium; L - Low; C - Clean; U - Unknown

Special Requirements

MA MCP Required
 MCP Certification Form Required
 CT RCP Required
 RCP Certification Form Required
 MA State DW Required

Other: _____

Project Entity

Government Municipality Other
 Federal City 21 J Brownfield
 WRTA MWRA School MBTA

NEIAC and AIHA-LAP, LLC Accredited

Pace Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	Analysis Requested
1	Grifton	1/24	1/24									
2	Muncheater	1/24	1/24									
3	Wareham	1/24	1/24									
4	Framingham	1/24	1/24									

Relinquished by: (signature)	Date/Time	Client Comments
SYED DANI	1/24/26 4:00	
[Signature]	1/29/26 4:08	
[Signature]	1/29/26 18:21	
[Signature]	1/29/26 18:20	
[Signature]		
[Signature]		
[Signature]		
[Signature]		
[Signature]		

Comments:
 Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will not be held accountable.

ENV-FRM-ELON-0001 v09_Sample Receiving Checklist

Log In Back-Sheet

Client BLACK EARTH COMPOST

Project _____

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location MA

PWSID# (When Applicable) N/A

Arrival Method:

Courier Fed Ex Walk In Other

Received By / Date / Time ASP 1/29/20 1820

Back-Sheet By / Date / Time I I 1850

Temperature Method GWD # 4

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 0.8

Rush Samples: Yes / No Notify _____

Short Hold: Yes / No Notify _____

Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy)
Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Received in Cooler	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Custody Seal: DATE TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC/Samples Labels Agree	<input type="checkbox"/>	<input checked="" type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Splitting Samples Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MS/MSD	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lab to Filters	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Included: (Check all included)		
Client <input checked="" type="checkbox"/>	Analysis <input checked="" type="checkbox"/>	Sampler Name <input checked="" type="checkbox"/>
Project <input checked="" type="checkbox"/>	IDs <input checked="" type="checkbox"/>	Collection <u>Date</u> / Time <input type="checkbox"/>
All Samples Proper pH:	<u>N/A</u>	<input type="checkbox"/>
Samples Chlorinated:	<u>N/A</u>	<input type="checkbox"/>

Notes regarding Samples/COC outside of SOP:

NO SAMPLE TIMES ON COC
 ↳ SAMPLE TIME ON LABELED BAGS
 + CONTAINER LABELS:
 - 1: "1/22/20 2PM"
 - 2: "1/29/20 02:00"
 - 3: "1/29/20 11AM"
 - 4: "1/29/20 800"
 ↳ LOGGED BASED ON CONTAINER LABEL / LABELED BAG
 FB LABELED "GROTON" RECEIVED NOT ON COC:
 ↳ TIME / DATE: "1/22/20 11:00"
 ↳ LOGGED AT END OF WO

Additional Container Notes

*Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

