con-test®
A Pace Analytical® Laboratory

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

November 18, 2021

John Zbell
Weston & Sampson
712 Brook Street, Suite 103
Rocky Hill, CT 06067

Project Location: Beacon Falls WPCF
Client Job Number:
Project Number: ENG21-0609
Laboratory Work Order Number: 21I0884

Enclosed are results of analyses for samples as received by the laboratory on September 16, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee
Project Manager

Table of Contents

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

Weston & Sampson
712 Brook Street, Suite 103
Rocky Hill, CT 06067
ATTN: John Zbell

REPORT DATE: 11/18/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: ENG21-0609

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21I0884

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Beacon Falls WPCF

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Beacon Falls WPCF- Upstream-09162021	21I0884-01	Surface Water		SOP-454 PFAS	
Beacon Falls WPCF- Downstream-09162021	21I0884-02	Surface Water		SOP-454 PFAS	

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

CASE NARRATIVE SUMMARY

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

REVISED REPORT 11-18-21: Per client request PFAS results reported to the MDL.

SOP-454 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:

Perfluorodecanoic acid (PFDA)
B290622-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:

M3HFPO-DA
B290622-BLK1

M6PFDA
21I0884-02[Beacon Falls WPCF- Downstream-09162021]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, 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.

Lisa A. Worthington
Technical Representative

con-test®
A Pace Analytical® Laboratory

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

Project Location: Beacon Falls WPCF | Sample Description: | Work Order: 21I0884

Date Received: 9/16/2021

Field Sample #: Beacon Falls WPCF- Upstream-09162021 | Sampled: 9/16/2021 12:50

Sample ID: 21I0884-01

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	11	3.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorobutanesulfonic acid (PFBS)	1.9	11	1.5	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoropentanoic acid (PFPeA)	3.7	11	2.1	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorohexanoic acid (PFHxA)	3.0	11	2.0	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
11Cl-PF3OUdS (F53B Minor)	ND	11	3.4	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
9Cl-PF3ONS (F53B Major)	ND	11	2.1	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	11	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	11	1.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	11	3.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorodecanoic acid (PFDA)	ND	11	2.6	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorododecanoic acid (PFDoA)	ND	11	2.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	11	1.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoroheptanesulfonic acid (PFHpS)	ND	11	5.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
N-EtFOSAA	ND	11	3.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
N-MeFOSAA	ND	11	4.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorotetradecanoic acid (PFTA)	ND	11	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	11	1.5	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	11	1.5	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorodecanesulfonic acid (PFDS)	ND	11	1.7	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorooctanesulfonamide (FOSA)	ND	11	2.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorononanesulfonic acid (PFNS)	ND	11	0.89	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	11	1.6	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoro-1-butanesulfonamide (FBSA)	ND	11	1.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	11	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	11	2.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	11	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	11	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoropetanesulfonic acid (PFPeS)	ND	11	1.4	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoroundecanoic acid (PFUnA)	ND	11	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	11	1.5	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluoroheptanoic acid (PFHpA)	2.0	11	1.8	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorooctanoic acid (PFOA)	3.8	11	3.6	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorooctanesulfonic acid (PFOS)	5.1	11	3.2	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC
Perfluorononanoic acid (PFNA)	ND	11	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:44	JFC

con-test®
A Pace Analytical® Laboratory

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

Project Location: Beacon Falls WPCF | Sample Description: | Work Order: 21I0884

Date Received: 9/16/2021

Field Sample #: Beacon Falls WPCF- Downstream-0916202 | Sampled: 9/16/2021 12:56

Sample ID: 21I0884-02

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	10	3.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorobutanesulfonic acid (PFBS)	1.7	10	1.5	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoropentanoic acid (PFPeA)	3.2	10	2.0	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorohexanoic acid (PFHxA)	2.4	10	2.0	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
11Cl-PF3OUdS (F53B Minor)	ND	10	3.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
9Cl-PF3ONS (F53B Major)	ND	10	2.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	10	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	10	1.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	10	3.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorodecanoic acid (PFDA)	ND	10	2.6	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorododecanoic acid (PFDoA)	ND	10	2.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	10	1.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoroheptanesulfonic acid (PFHpS)	ND	10	4.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
N-EtFOSAA	ND	10	3.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
N-MeFOSAA	ND	10	4.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorotetradecanoic acid (PFTA)	ND	10	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	10	1.4	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	10	1.5	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorodecanesulfonic acid (PFDS)	ND	10	1.7	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorooctanesulfonamide (FOSA)	ND	10	2.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorononanesulfonic acid (PFNS)	ND	10	0.88	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	10	1.6	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoro-1-butanesulfonamide (FBSA)	ND	10	1.0	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	10	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	10	2.2	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	10	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	10	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoropetanesulfonic acid (PFPeS)	ND	10	1.3	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoroundecanoic acid (PFUnA)	ND	10	1.9	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	10	1.4	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluoroheptanoic acid (PFHpA)	ND	10	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorooctanoic acid (PFOA)	ND	10	3.6	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorooctanesulfonic acid (PFOS)	5.4	10	3.1	ng/L	1	J	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC
Perfluorononanoic acid (PFNA)	ND	10	1.8	ng/L	1	U	SOP-454 PFAS	9/21/21	10/1/21 20:51	JFC

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

Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
21I0884-01 [Beacon Falls WPCF- Upstream-09162021]	B290622	47.3	1.00	09/21/21
21I0884-02 [Beacon Falls WPCF- Downstream-09162021]	B290622	47.9	1.00	09/21/21

con-test® A Pace Analytical® Laboratory

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 B290622 - SOP 454-PFAAS											
Blank (B290622-BLK1)				Prepared: 09/21/21 Analyzed: 09/27/21							
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L								U
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L								U
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L								U
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L								U
11Cl-PF3OUdS (F53B Minor)	ND	2.0	ng/L								U
9Cl-PF3ONS (F53B Major)	ND	2.0	ng/L								U
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L								U
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L								U
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.0	ng/L								U
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L								U
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L								U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L								U
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L								U
N-EtFOSAA	ND	2.0	ng/L								U
N-MeFOSAA	ND	2.0	ng/L								U
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L								U
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L								U
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.0	ng/L								U
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L								U
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L								U
Perfluorononanesulfonic acid (PFNS)	ND	2.0	ng/L								U
Perfluoro-1-hexanesulfonamide (FHxSA)	ND	2.0	ng/L								U
Perfluoro-1-butanesulfonamide (FBSA)	ND	2.0	ng/L								U
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L								U
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0	ng/L								U
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0	ng/L								U
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.0	ng/L								U
Perfluoropetanesulfonic acid (PFPeS)	ND	2.0	ng/L								U
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L								U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L								U
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L								U
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L								U
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L								U
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L								U
LCS (B290622-BS1)				Prepared: 09/21/21 Analyzed: 09/27/21							
Perfluorobutanoic acid (PFBA)	7.90	2.0	ng/L	9.82		80.5		73-129			
Perfluorobutanesulfonic acid (PFBS)	6.74	2.0	ng/L	8.69		77.5		72-130			
Perfluoropentanoic acid (PFPeA)	7.13	2.0	ng/L	9.82		72.6		72-129			
Perfluorohexanoic acid (PFHxA)	7.41	2.0	ng/L	9.82		75.5		72-129			
11Cl-PF3OUdS (F53B Minor)	6.71	2.0	ng/L	9.25		72.5		50-150			
9Cl-PF3ONS (F53B Major)	6.76	2.0	ng/L	9.15		73.8		50-150			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	7.00	2.0	ng/L	9.25		75.7		50-150			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.46	2.0	ng/L	9.82		76.0		50-150			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	7.69	2.0	ng/L	9.43		81.5		67-138			
Perfluorodecanoic acid (PFDA)	6.91	2.0	ng/L	9.82		**70.4**	*	71-129			L-07
Perfluorododecanoic acid (PFDoA)	7.34	2.0	ng/L	9.82		74.7		72-134			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	8.43	2.0	ng/L	8.74		96.5		50-150			

con-test®
A Pace Analytical® Laboratory

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 B290622 - SOP 454-PFAAS										
LCS (B290622-BS1)				Prepared: 09/21/21 Analyzed: 09/27/21						
Perfluoroheptanesulfonic acid (PFHpS)	7.60	2.0	ng/L	9.38		81.1	69-134			
N-EtFOSAA	9.36	2.0	ng/L	9.82		95.2	61-135			
N-MeFOSAA	8.70	2.0	ng/L	9.82		88.6	65-136			
Perfluorotetradecanoic acid (PFTA)	7.06	2.0	ng/L	9.82		71.9	71-132			
Perfluorotridecanoic acid (PFTrDA)	7.49	2.0	ng/L	9.82		76.3	65-144			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.48	2.0	ng/L	9.18		81.5	63-143			
Perfluorodecanesulfonic acid (PFDS)	6.22	2.0	ng/L	9.48		65.6	53-142			
Perfluorooctanesulfonamide (FOSA)	7.68	2.0	ng/L	9.82		78.1	67-137			
Perfluorononanesulfonic acid (PFNS)	7.25	2.0	ng/L	9.43		76.9	69-127			
Perfluoro-1-hexanesulfonamide (FHxSA)	8.30	2.0	ng/L	9.82		84.5	50-150			
Perfluoro-1-butanesulfonamide (FBSA)	9.34	2.0	ng/L	9.82		95.0	50-150			
Perfluorohexanesulfonic acid (PFHxS)	6.82	2.0	ng/L	8.94		76.3	68-131			
Perfluoro-4-oxapentanoic acid (PFMPA)	9.21	2.0	ng/L	9.82		93.8	50-150			
Perfluoro-5-oxahexanoic acid (PFMBA)	9.21	2.0	ng/L	9.82		93.8	50-150			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.00	2.0	ng/L	9.33		85.8	64-140			
Perfluoropetanesulfonic acid (PFPeS)	6.82	2.0	ng/L	9.23		73.9	71-127			
Perfluoroundecanoic acid (PFUnA)	7.10	2.0	ng/L	9.82		72.3	69-133			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.36	2.0	ng/L	9.82		85.1	50-150			
Perfluoroheptanoic acid (PFHpA)	7.95	2.0	ng/L	9.82		80.9	72-130			
Perfluorooctanoic acid (PFOA)	7.30	2.0	ng/L	9.82		74.3	71-133			
Perfluorooctanesulfonic acid (PFOS)	6.68	2.0	ng/L	9.09		73.5	65-140			
Perfluorononanoic acid (PFNA)	7.65	2.0	ng/L	9.82		77.9	69-130			
LCS Dup (B290622-BSD1)				Prepared: 09/21/21 Analyzed: 09/27/21						
Perfluorobutanoic acid (PFBA)	8.33	2.0	ng/L	9.80		84.9	73-129	5.21	30	
Perfluorobutanesulfonic acid (PFBS)	7.46	2.0	ng/L	8.68		86.0	72-130	10.2	30	
Perfluoropentanoic acid (PFPeA)	7.90	2.0	ng/L	9.80		80.6	72-129	10.2	30	
Perfluorohexanoic acid (PFHxA)	8.24	2.0	ng/L	9.80		84.1	72-129	10.6	30	
11Cl-PF3OUdS (F53B Minor)	7.10	2.0	ng/L	9.24		76.8	50-150	5.59	30	
9Cl-PF3ONS (F53B Major)	7.50	2.0	ng/L	9.14		82.1	50-150	10.4	30	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.06	2.0	ng/L	9.24		87.2	50-150	14.0	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.16	2.0	ng/L	9.80		73.1	50-150	4.12	30	
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.18	2.0	ng/L	9.41		86.9	67-138	6.14	30	
Perfluorodecanoic acid (PFDA)	7.34	2.0	ng/L	9.80		74.9	71-129	6.03	30	
Perfluorododecanoic acid (PFDoA)	7.99	2.0	ng/L	9.80		81.4	72-134	8.42	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	9.47	2.0	ng/L	8.73		109	50-150	11.6	30	
Perfluoroheptanesulfonic acid (PFHpS)	8.22	2.0	ng/L	9.36		87.8	69-134	7.84	30	
N-EtFOSAA	8.94	2.0	ng/L	9.80		91.2	61-135	4.53	30	
N-MeFOSAA	10.2	2.0	ng/L	9.80		104	65-136	15.8	30	
Perfluorotetradecanoic acid (PFTA)	8.25	2.0	ng/L	9.80		84.2	71-132	15.5	30	
Perfluorotridecanoic acid (PFTrDA)	8.58	2.0	ng/L	9.80		87.5	65-144	13.5	30	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.44	2.0	ng/L	9.17		92.1	63-143	12.1	30	
Perfluorodecanesulfonic acid (PFDS)	7.20	2.0	ng/L	9.46		76.1	53-142	14.6	30	
Perfluorooctanesulfonamide (FOSA)	8.49	2.0	ng/L	9.80		86.6	67-137	10.0	30	
Perfluorononanesulfonic acid (PFNS)	8.30	2.0	ng/L	9.41		88.2	69-127	13.6	30	
Perfluoro-1-hexanesulfonamide (FHxSA)	8.92	2.0	ng/L	9.80		90.9	50-150	7.10	30	
Perfluoro-1-butanesulfonamide (FBSA)	10.3	2.0	ng/L	9.80		105	50-150	9.76	30	
Perfluorohexanesulfonic acid (PFHxS)	7.93	2.0	ng/L	8.92		88.9	68-131	15.1	30	
Perfluoro-4-oxapentanoic acid (PFMPA)	10.1	2.0	ng/L	9.80		103	50-150	9.28	30	
Perfluoro-5-oxahexanoic acid (PFMBA)	10.3	2.0	ng/L	9.80		105	50-150	10.7	30	

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 B290622 - SOP 454-PFAAS										
LCS Dup (B290622-BSD1)				Prepared: 09/21/21 Analyzed: 09/27/21						
6:2 Fluorotelomersulfonic acid (6:2FTS A)	9.12	2.0	ng/L	9.31		97.9	64-140	13.1	30	
Perfluoropetanesulfonic acid (PFPeS)	7.73	2.0	ng/L	9.22		83.8	71-127	12.5	30	
Perfluoroundecanoic acid (PFUnA)	8.21	2.0	ng/L	9.80		83.7	69-133	14.4	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	9.50	2.0	ng/L	9.80		96.9	50-150	12.7	30	
Perfluoroheptanoic acid (PFHpA)	9.08	2.0	ng/L	9.80		92.6	72-130	13.3	30	
Perfluorooctanoic acid (PFOA)	8.23	2.0	ng/L	9.80		84.0	71-133	12.0	30	
Perfluorooctanesulfonic acid (PFOS)	7.45	2.0	ng/L	9.07		82.2	65-140	11.0	30	
Perfluorononanoic acid (PFNA)	7.86	2.0	ng/L	9.80		80.2	69-130	2.78	30	

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

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.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
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.
U	Analyte included in the analysis, but not detected

con-test®
A Pace Analytical® Laboratory

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

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
Beacon Falls WPCF- Upstream-09162021 (21I0884-01)			Lab File ID: 21I0884-01.d			Analyzed: 10/01/21 20:44			
M8FOSA	353205.7	4.052516	350,276.00	4.052516	101	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	90732.78	2.644867	158,768.00	2.644867	57	50 - 150	0.0000	+/-0.50	
M2PFTA	1299066	4.4191	1,287,406.00	4.4191	101	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	120989.6	3.875067	133,725.00	3.875067	90	50 - 150	0.0000	+/-0.50	
MPFBA	542064.5	1.116633	520,994.00	1.116633	104	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	223249.7	2.954083	239,386.00	2.9622	93	50 - 150	-0.0081	+/-0.50	
M6PFDA	819146.6	3.8756	660,659.00	3.8756	124	50 - 150	0.0000	+/-0.50	
M3PFBS	171299.6	2.019367	145,942.00	2.019367	117	50 - 150	0.0000	+/-0.50	
M7PFUnA	1114984	4.025967	915,781.00	4.025967	122	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	67569.58	3.517617	82,933.00	3.517617	81	50 - 150	0.0000	+/-0.50	
M5PFPeA	597151.9	1.824517	532,969.00	1.8328	112	50 - 150	-0.0083	+/-0.50	
M5PFHxA	902167	2.73905	796,939.00	2.73905	113	50 - 150	0.0000	+/-0.50	
M3PFHxS	126843.5	3.2923	109,216.00	3.2923	116	50 - 150	0.0000	+/-0.50	
M4PFHpA	895862.5	3.25995	756,004.00	3.25995	118	50 - 150	0.0000	+/-0.50	
M8PFOA	872350.2	3.52615	739,447.00	3.52615	118	50 - 150	0.0000	+/-0.50	
M8PFOS	143309.5	3.716267	115,350.00	3.716267	124	50 - 150	0.0000	+/-0.50	
M9PFNA	829596.5	3.717267	689,438.00	3.717267	120	50 - 150	0.0000	+/-0.50	
MPFDoA	1034600	4.169267	937,883.00	4.169267	110	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	237772.5	4.03345	219,287.00	4.03345	108	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	300505.7	3.953867	258,551.00	3.953867	116	50 - 150	0.0000	+/-0.50	

con-test® A Pace Analytical® Laboratory

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

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
Beacon Falls WPCF- Downstream-09162021 (21I0884-02)			Lab File ID: 21I0884-02.d			Analyzed: 10/01/21 20:51			
M8FOSA	469114.2	4.052516	350,276.00	4.052516	134	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	116913.5	2.644867	158,768.00	2.644867	74	50 - 150	0.0000	+/-0.50	
M2PFTA	1509182	4.4191	1,287,406.00	4.4191	117	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	136917.7	3.875067	133,725.00	3.875067	102	50 - 150	0.0000	+/-0.50	
MPFBA	672300.6	1.116633	520,994.00	1.116633	129	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	244185.5	2.954083	239,386.00	2.9622	102	50 - 150	-0.0081	+/-0.50	
M6PFDA	1095753	3.8756	660,659.00	3.8756	166	50 - 150	0.0000	+/-0.50	*
M3PFBS	206937.4	2.019367	145,942.00	2.019367	142	50 - 150	0.0000	+/-0.50	
M7PFUnA	1274388	4.025967	915,781.00	4.025967	139	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	87541.18	3.517617	82,933.00	3.517617	106	50 - 150	0.0000	+/-0.50	
M5PFPeA	749627.9	1.824517	532,969.00	1.8328	141	50 - 150	-0.0083	+/-0.50	
M5PFHxA	1135106	2.73905	796,939.00	2.73905	142	50 - 150	0.0000	+/-0.50	
M3PFHxS	144762.2	3.2923	109,216.00	3.2923	133	50 - 150	0.0000	+/-0.50	
M4PFHpA	1064674	3.25995	756,004.00	3.25995	141	50 - 150	0.0000	+/-0.50	
M8PFOA	1050346	3.52615	739,447.00	3.52615	142	50 - 150	0.0000	+/-0.50	
M8PFOS	157372.7	3.716267	115,350.00	3.716267	136	50 - 150	0.0000	+/-0.50	
M9PFNA	959408.6	3.717267	689,438.00	3.717267	139	50 - 150	0.0000	+/-0.50	
MPFDoA	1212070	4.169267	937,883.00	4.169267	129	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	296207.5	4.03345	219,287.00	4.03345	135	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	378039.3	3.953867	258,551.00	3.953867	146	50 - 150	0.0000	+/-0.50	

con-test®
A Pace Analytical® Laboratory

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

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 (B290622-BLK1)			Lab File ID: B290622-BLK1.d			Analyzed: 09/27/21 15:20			
M8FOSA	288496.3	3.996567	250,282.00	4.00455	115	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	152220.3	2.472183	138,662.00	2.472183	110	50 - 150	0.0000	+/-0.50	
M2PFTA	1067485	4.32155	993,935.00	4.32155	107	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	114527.8	3.8028	115,726.00	3.8028	99	50 - 150	0.0000	+/-0.50	
MPFBA	540950.7	1.0834	387,274.00	1.0834	140	50 - 150	0.0000	+/-0.50	
M3HFPO-DA	206607.3	2.81475	135,191.00	2.81475	153	50 - 150	0.0000	+/-0.50	*
M6PFDA	668002.8	3.803317	491,648.00	3.803317	136	50 - 150	0.0000	+/-0.50	
M3PFBS	141526.3	1.878383	108,781.00	1.878383	130	50 - 150	0.0000	+/-0.50	
M7PFUnA	846873.6	3.946033	703,950.00	3.946033	120	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	93263.59	3.445283	83,444.00	3.445283	112	50 - 150	0.0000	+/-0.50	
M5PFPeA	512396.9	1.714833	388,897.00	1.706567	132	50 - 150	0.0083	+/-0.50	
M5PFHxA	757615.1	2.555917	581,904.00	2.555917	130	50 - 150	0.0000	+/-0.50	
M3PFHxS	104560.4	3.21025	77,212.00	3.21025	135	50 - 150	0.0000	+/-0.50	
M4PFHpA	758344.7	3.170783	573,666.00	3.178867	132	50 - 150	-0.0081	+/-0.50	
M8PFOA	677204.9	3.453817	511,135.00	3.461933	132	50 - 150	-0.0081	+/-0.50	
M8PFOS	105944.3	3.65215	82,431.00	3.65215	129	50 - 150	0.0000	+/-0.50	
M9PFNA	569985.4	3.653183	431,895.00	3.653183	132	50 - 150	0.0000	+/-0.50	
MPFDoA	802470.9	4.08065	724,624.00	4.08065	111	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	184237.1	3.945517	164,452.00	3.9535	112	50 - 150	-0.0080	+/-0.50	
d3-NMeFOSAA	236298.5	3.873767	197,279.00	3.873767	120	50 - 150	0.0000	+/-0.50	

con-test®
A Pace Analytical® Laboratory

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

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 (B290622-BS1)			Lab File ID: B290622-BS1R.d			Analyzed: 09/27/21 15:30			
M8FOSA	297585.1	4.00455	250,282.00	4.00455	119	50 - 150	0.0000	+/-0.50	
M2-4:2FTS	163522.9	2.472183	138,662.00	2.472183	118	50 - 150	0.0000	+/-0.50	
M2PFTA	1106012	4.32155	993,935.00	4.32155	111	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	129603.7	3.8028	115,726.00	3.8028	112	50 - 150	0.0000	+/-0.50	
MPFBA	556560.8	1.0917	387,274.00	1.0834	144	50 - 150	0.0083	+/-0.50	
M3HFPO-DA	189966.5	2.81475	135,191.00	2.81475	141	50 - 150	0.0000	+/-0.50	
M6PFDA	701330.9	3.803317	491,648.00	3.803317	143	50 - 150	0.0000	+/-0.50	
M3PFBS	145398.1	1.886667	108,781.00	1.878383	134	50 - 150	0.0083	+/-0.50	
M7PFUnA	878551.9	3.946033	703,950.00	3.946033	125	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	95961.43	3.445283	83,444.00	3.445283	115	50 - 150	0.0000	+/-0.50	
M5PFPeA	528400.5	1.714833	388,897.00	1.706567	136	50 - 150	0.0083	+/-0.50	
M5PFHxA	791708.7	2.555917	581,904.00	2.555917	136	50 - 150	0.0000	+/-0.50	
M3PFHxS	104211.4	3.21025	77,212.00	3.21025	135	50 - 150	0.0000	+/-0.50	
M4PFHpA	786299.5	3.178867	573,666.00	3.178867	137	50 - 150	0.0000	+/-0.50	
M8PFOA	721085.8	3.461933	511,135.00	3.461933	141	50 - 150	0.0000	+/-0.50	
M8PFOS	111618.8	3.65215	82,431.00	3.65215	135	50 - 150	0.0000	+/-0.50	
M9PFNA	597512.4	3.6532	431,895.00	3.653183	138	50 - 150	0.0000	+/-0.50	
MPFDoA	860066.6	4.08065	724,624.00	4.08065	119	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	187234	3.9535	164,452.00	3.9535	114	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	244578.3	3.873767	197,279.00	3.873767	124	50 - 150	0.0000	+/-0.50	

con-test®
A Pace Analytical® Laboratory

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

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 (B290622-BSD1)			Lab File ID: B290622-BSD1.d			Analyzed: 09/27/21 15:12			
M8FOSA	260121.8	3.996567	250,282.00	4.00455	104	50 - 150	-0.0080	+/-0.50	
M2-4:2FTS	126333.3	2.472183	138,662.00	2.472183	91	50 - 150	0.0000	+/-0.50	
M2PFTA	1008919	4.32155	993,935.00	4.32155	102	50 - 150	0.0000	+/-0.50	
M2-8:2FTS	99408.87	3.8028	115,726.00	3.8028	86	50 - 150	0.0000	+/-0.50	
MPFBA	483923.5	1.0917	387,274.00	1.0834	125	50 - 150	0.0083	+/-0.50	
M3HFPO-DA	197629.5	2.81475	135,191.00	2.81475	146	50 - 150	0.0000	+/-0.50	
M6PFDA	597198.3	3.803317	491,648.00	3.803317	121	50 - 150	0.0000	+/-0.50	
M3PFBS	126630.3	1.886667	108,781.00	1.878383	116	50 - 150	0.0083	+/-0.50	
M7PFUnA	781096.3	3.946033	703,950.00	3.946033	111	50 - 150	0.0000	+/-0.50	
M2-6:2FTS	72029.63	3.445283	83,444.00	3.445283	86	50 - 150	0.0000	+/-0.50	
M5PFPeA	460361.8	1.714833	388,897.00	1.706567	118	50 - 150	0.0083	+/-0.50	
M5PFHxA	685654.8	2.555917	581,904.00	2.555917	118	50 - 150	0.0000	+/-0.50	
M3PFHxS	87581.88	3.21025	77,212.00	3.21025	113	50 - 150	0.0000	+/-0.50	
M4PFHpA	675474.6	3.178867	573,666.00	3.178867	118	50 - 150	0.0000	+/-0.50	
M8PFOA	615210.3	3.461933	511,135.00	3.461933	120	50 - 150	0.0000	+/-0.50	
M8PFOS	96139.49	3.65215	82,431.00	3.65215	117	50 - 150	0.0000	+/-0.50	
M9PFNA	541285.7	3.6532	431,895.00	3.653183	125	50 - 150	0.0000	+/-0.50	
MPFDoA	786160.9	4.08065	724,624.00	4.08065	108	50 - 150	0.0000	+/-0.50	
d5-NEtFOSAA	177306.4	3.9535	164,452.00	3.9535	108	50 - 150	0.0000	+/-0.50	
d3-NMeFOSAA	204756.3	3.88175	197,279.00	3.873767	104	50 - 150	0.0080	+/-0.50	

con-test®
A Pace Analytical® Laboratory

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SOP-454 PFAS in Drinking Water	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
11Cl-PF3OUdS (F53B Minor)	NH-P
9Cl-PF3ONS (F53B Major)	NH-P
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P
Perfluoroheptanesulfonic acid (PFHpS)	NH-P
N-EtFOSAA	NH-P
N-MeFOSAA	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P
Perfluorodecanesulfonic acid (PFDS)	NH-P
Perfluorooctanesulfonamide (FOSA)	NH-P
Perfluorononanesulfonic acid (PFNS)	NH-P
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P
Perfluoro-1-butanesulfonamide (FBSA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P
Perfluoropetanesulfonic acid (PFPeS)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P
SOP-454 PFAS in Water	
Perfluorobutanoic acid (PFBA)	NH-P
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluoropentanoic acid (PFPeA)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
11Cl-PF3OUdS (F53B Minor)	NH-P
9Cl-PF3ONS (F53B Major)	NH-P
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P

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

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SOP-454 PFAS in Water	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P
Perfluoroheptanesulfonic acid (PFHpS)	NH-P
N-EtFOSAA	NH-P
N-MeFOSAA	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH-P
Perfluorodecanesulfonic acid (PFDS)	NH-P
Perfluorooctanesulfonamide (FOSA)	NH-P
Perfluorononanesulfonic acid (PFNS)	NH-P
Perfluoro-1-hexanesulfonamide (FHxSA)	NH-P
Perfluoro-1-butanesulfonamide (FBSA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluoro-4-oxapentanoic acid (PFMPA)	NH-P
Perfluoro-5-oxahexanoic acid (PFMBA)	NH-P
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH-P
Perfluoropetanesulfonic acid (PFPeS)	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publilc Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

21I0884

con-test
A Pace Analytical® Laboratory

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 4_01/08/2020

Page 1 of 1

Company Name:	Weston & Sampson
Address:	712 Brook Street, Suite 103, Rocky Hill, CT 06067
Phone:	(959) 777-5822
Project Name:	CTDEEP - POTW PFAS
Project Location:	Beacon Falls WPCF
Project Number:	ENG21-0609
Project Manager:	John Zbell
Con-Test Quote Name/Number:	00093567
Invoice Recipient:	John Zbell
Sampled By:	

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☑ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☐
Other: EnviroData8
CLP Like Data Pkg Required: ☐
Email To: zbell.john@wseinc.com
Fax To #:

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

PCB ONLY
SOXHLET ☐
NON SOXHLET ☐

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS - SOP ID 454	PFAS - SOP ID 466
1	Beacon Falls WPCF - Upstream - 09162021	9/16/21	1250	Grab	SW							X	
2	Beacon Falls WPCF - Downstream - 09162021	↓	1256	Grab	SW							X	

[2] Preservation Code

Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N

Glassware in freezer? Y / N

Prepackaged Cooler? Y / N

*Contest 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)

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time: 1710 9/16/2021
Relinquished by: (signature)	Date/Time: 9/16/21 1830
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments:

Detection Limit Requirements
MA
CT
Other

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

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

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

Lab Comments:

Disclaimer: Con-Test Labs 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. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

Table of Contents

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client WTS

Received By _____ Date 9/16/21 Time 1830

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____ Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 4.1 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? n/a Were Samples Tampered with? n/a

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name F Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? n/a MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? Acid n/a Base n/a

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments: