

Laboratory Certification IDs

CT: PH-0411, NH: 2239, NY: 11867, PA: 68-05519, RI: LAO00339, MA: M-CT004
See website, www.rwalab.com/rwa-lab-certifications, for certified analyte list.

Client: Paul Hennessy
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ANALYTICAL REPORT

Project: FEE-RANDOLPHHOLBROOK-25-000006

Report Date: 6/30/2025

This Laboratory is in compliance with the NELAP requirements of procedures used except where indicated. This report contains results for the analysis tested, under the sampling conditions described on the Chain Of Custody (COC), as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

The COC form has been scanned to accompany the analytical report and is an exact copy of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact RWA Client Services at (203) 401-6743 or (877) 894-5773. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Richard Sibley
Laboratory Manager
Technical Representative

SAMPLE SUMMARY

Sample ID	Customer ID	Collection Date/Time	Receipt Date
300714350	Raw	6/10/2025 1300	6/11/25
300714351	Field Blank - Raw	6/10/2025 1300	6/11/25
300714352	Finished	6/10/2025 1300	6/11/25
300714353	Field Blank - Finished	6/10/2025 1300	6/11/25

Case Narrative and Comments

All QC passes criteria unless noted in a Comment below.

Samples were received at the appropriate temperature and in accordance with the chain of custody unless noted.

E = Exceeds calibration range ND = Non Detect FB = Field Blank

RL = Minimum Reporting Level MDL = Method Detection Limit

J = The reported result is below RL but greater than the MDL. The reported result is an estimate.

Massachusetts samples for required water quality sampling are included.

Samples and FBs were received in bottles with preservatives Trizma HCL & Trizma base per method requirements.

"FB" added at beginning/end designates "Field Blank" (Field Reagent Blank) for associated Customer ID sample. Field Blank analytes (unless noted) were shown to be less than 1/3 of the RL as per EPA537 or EPA537.1.

Method EPA537 or EPA537.1 Analyte Results, MDL and RL are adjusted to reflect the actual Final (mL) volume used.

<u>Method</u>	<u>CAS#</u>	<u>PFAS Analyte (Acronym)</u>
537, 537.1	1763-23-1	Perfluorooctanesulfonic acid (PFOS)
537, 537.1	335-67-1	Perfluorooctanoic acid (PFOA)
537, 537.1	355-46-4	Perfluorohexanesulfonic acid (PFHxS)
537, 537.1	375-95-1	Perfluorononanoic acid (PFNA)
537, 537.1	375-85-9	Perfluorohepatanoic acid (PFHpA)
537, 537.1	335-76-2	Perfluorodecanoic acid (PFDA)
537, 537.1	375-73-5	Perfluorobutanesulfonic acid (PFBS)
537, 537.1	307-55-1	Perfluorododecanoic acid (PFDoA)
537, 537.1	307-24-4	Perfluorohexanoic acid (PFHxA)
537, 537.1	376-06-7	Perfluorotetradecanoic acid (PFTA)
537, 537.1	72629-94-8	Perfluorotridecanoic acid (PFTrDA)
537, 537.1	2058-94-8	Perfluoroundecanoic acid (PFUnA)
537, 537.1	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537, 537.1	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537.1	763051-92-9	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
537.1	756426-58-1	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)
537.1	919005-14-4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)
537.1	13252-13-6	Hexafluoropropylene oxide dimer acid (HFPO-DA)

PFAS6 (MassDEP) = sum of PFOS, PFOA, PFHxS, PFNA, PFHpA and PFDA (only include Results at or above the RL)

MassDEP has established a maximum contaminant level (MCL) of 20 ng/L for PFAS6.

Method EPA537.1 Analyte Results and RL are adjusted to reflect the actual sample Final (mL) volume used.

Sample ID: 300714350

Customer ID: Raw

Collection Date: 06/10/2025 13:00

PWS ID# / LOC ID#: RAW

Project: FEE-RANDOLPHHOLBROOK-25-000006

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	1.75	0.95	2.0	ng/L	1.0	J	EPA 537.1	6/23/25 2310	CSS
PFHxA	307-24-4	2.92	0.75	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFHpA	375-85-9	1.90	0.70	2.0	ng/L	1.0	J	EPA 537.1	6/23/25 2310	CSS
PFHxS	355-46-4	1.90	0.83	2.0	ng/L	1.0	J	EPA 537.1	6/23/25 2310	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFOA	335-67-1	4.49	0.76	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFOS	1763-23-1	7.35	1.01	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFNA	375-95-1	0.86	0.72	2.0	ng/L	1.0	J	EPA 537.1	6/23/25 2310	CSS
9CI-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
11CI-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFTTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	6/23/25 2310	CSS
PFAS6 (MassDEP)		11.84	2.00	2.0	ng/L	1.0				
Surrogates					Results		Recovery Limits		Pass/Fail	
13C-PFHxA (SUR) % Recovery					101.90		70 - 130		Pass	
13C3-HFPO-DA (SUR) % Recovery					106.30		70 - 130		Pass	
13C-PFDA (SUR) % Recovery					110.00		70 - 130		Pass	
d5-NEtFOSAA (SUR) % Recovery					98.40		70 - 130		Pass	

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300714350	PFAS_537	537_EXT-250613-1	250	06/13/2025

Sample ID: 300714351

Customer ID: Field Blank - Raw

Collection Date: 06/10/2025 13:00

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000006

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.94	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFHxA	307-24-4	ND	0.74	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
HFPO-DA	13252-13-6	ND	1.13	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFHpA	375-85-9	ND	0.69	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFHxS	355-46-4	ND	0.82	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
ADONA	919005-14-4	ND	0.62	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFOA	335-67-1	ND	0.75	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFOS	1763-23-1	ND	1.00	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFNA	375-95-1	ND	0.71	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
9CI-PF3ONS	756426-58-1	ND	0.83	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFDA	335-76-2	ND	0.74	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFUnA	2058-94-8	ND	0.93	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
11CI-PF3OUdS	763051-92-9	ND	1.03	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
NMeFOSAA	2355-31-9	ND	1.14	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
NEtFOSAA	2991-50-6	ND	1.14	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFDoA	307-55-1	ND	0.89	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFTTrDA	72629-94-8	ND	0.92	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFTA	376-06-7	ND	1.03	1.98	ng/L	0.99		EPA 537.1	6/23/25 2326	CSS
PFAS6 (MassDEP)		ND	1.98	1.98	ng/L	0.99				
	Surrogates				Results			Recovery Limits		Pass/Fail
	13C-PFHxA (SUR) % Recovery				94.90			70 - 130		Pass
	13C3-HFPO-DA (SUR) % Recovery				89.70			70 - 130		Pass
	13C-PFDA (SUR) % Recovery				96.20			70 - 130		Pass
	d5-NEtFOSAA (SUR) % Recovery				88.10			70 - 130		Pass

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300714351	PFAS_537	537_EXT-250613-1	252	06/13/2025

Sample ID: 300714352

Customer ID: Finished

Collection Date: 06/10/2025 13:00

PWS ID# / LOC ID#: 4244001/10296

Project: FEE-RANDOLPHHOLBROOK-25-000006

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	1.88	0.97	2.04	ng/L	1.02	J	EPA 537.1	6/23/25 2342	CSS
PFHxA	307-24-4	2.70	0.77	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
HFPO-DA	13252-13-6	ND	1.16	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFHpA	375-85-9	1.71	0.71	2.04	ng/L	1.02	J	EPA 537.1	6/23/25 2342	CSS
PFHxS	355-46-4	2.04	0.85	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
ADONA	919005-14-4	ND	0.64	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFOA	335-67-1	4.03	0.78	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFOS	1763-23-1	7.52	1.03	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFNA	375-95-1	0.87	0.73	2.04	ng/L	1.02	J	EPA 537.1	6/23/25 2342	CSS
9CI-PF3ONS	756426-58-1	ND	0.86	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFDA	335-76-2	ND	0.77	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFUnA	2058-94-8	ND	0.96	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
11CI-PF3OUdS	763051-92-9	ND	1.06	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
NMeFOSAA	2355-31-9	ND	1.17	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
NEtFOSAA	2991-50-6	ND	1.17	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFDoA	307-55-1	ND	0.92	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFTrDA	72629-94-8	ND	0.95	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFTA	376-06-7	ND	1.06	2.04	ng/L	1.02		EPA 537.1	6/23/25 2342	CSS
PFAS6 (MassDEP)		13.59	2.04	2.04	ng/L	1.02				
Surrogates		Results		Recovery Limits		Pass/Fail				
13C-PFHxA (SUR) % Recovery		85.00		70 - 130		Pass				
13C3-HFPO-DA (SUR) % Recovery		87.50		70 - 130		Pass				
13C-PFDA (SUR) % Recovery		90.30		70 - 130		Pass				
d5-NEtFOSAA (SUR) % Recovery		80.90		70 - 130		Pass				

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300714352	PFAS_537	537_EXT-250613-1	246	06/13/2025

Sample ID: 300714353

Customer ID: Field Blank - Finished

Collection Date: 06/10/2025 13:00

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000006

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.95	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFHxA	307-24-4	ND	0.75	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFHpA	375-85-9	ND	0.70	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFHxS	355-46-4	ND	0.83	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFOA	335-67-1	ND	0.76	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFOS	1763-23-1	ND	1.01	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFNA	375-95-1	ND	0.72	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
9CI-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
11CI-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	6/24/25 0029	CSS
PFAS6 (MassDEP)		ND	2.00	2.0	ng/L	1.0				
	Surrogates			Results		Recovery Limits		Pass/Fail		
	13C-PFHxA (SUR) % Recovery			93.00		70 - 130		Pass		
	13C3-HFPO-DA (SUR) % Recovery			91.80		70 - 130		Pass		
	13C-PFDA (SUR) % Recovery			94.20		70 - 130		Pass		
	d5-NEtFOSAA (SUR) % Recovery			93.30		70 - 130		Pass		

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300714353	PFAS_537	537_EXT-250613-1	250	06/13/2025

South Central Connecticut Regional Water Authority PFAS QA/QC Summary

Extraction Batch QC for: EPA 537.1

MA Lab Cert.#: M-CT004

Extraction Batch Date: 6/13/2025

Sample ID for LFSM/LFSMD: 300714352

Analyte	LFSM %Recovery	LFSMD %Recovery	RPD of LFSM/LFSMD	LRB (MRL is 2)		LFB 60 ng/L %Recovery
	Acceptance Range 70-130%	Acceptance Range 70-130%	Acceptance Limit <30%	Result, ng/L	Meets < 1/3 of MRL criteria?	Acceptance Range 70-130%
PFBS	100.7	100.4	0.3	ND	[Y]	97.6
PFHxA	98.1	105.7	6.6	ND	[Y]	97.4
HFPO-DA	103.3	110.1	6.3	ND	[Y]	95.9
PFHpA	101.1	106.4	4.7	ND	[Y]	98.1
PFHxS	101.9	106.0	3.6	ND	[Y]	99.9
ADONA	102.5	108.0	5.2	ND	[Y]	97.6
PFOA	105.7	113.3	5.8	ND	[Y]	98.9
PFOS	96.6	104.2	5.5	ND	[Y]	101.4
PFNA	102.6	108.8	5.7	ND	[Y]	99.7
9Cl-PF3ONS	100.5	105.7	5.0	ND	[Y]	100.2
PFDA	102.3	108.5	5.8	ND	[Y]	100.8
PFUnA	101.2	110.0	8.4	ND	[Y]	99.6
11Cl-PF3OUdS	100.5	108.5	7.7	ND	[Y]	103.6
NMeFOSAA	98.8	107.0	7.8	ND	[Y]	101.9
NEtFOSAA	96.1	100.8	4.8	ND	[Y]	98.3
PFDoA	96.9	104.2	7.1	ND	[Y]	101.5
PFTTrDA	96.6	104.9	8.2	ND	[Y]	102.3
PFTA	96.1	102.1	6.1	ND	[Y]	103.8

Surrogate %Recovery

¹³ C ₂ -PFHxA	¹³ C ₃ -HFPO-DA	¹³ C ₂ -PFDA	^d ₅ -NEtFOSAA	
93.30	95.50	98.10	91.60	LFSM
97.10	105.90	105.10	97.60	LFSMD
93.30	92.30	96.40	91.10	LRB
97.20	101.30	100.00	100.00	LFB

Note: The Surrogate %Recovery for Samples and Poured Field Blanks is included on Final Reports.

All Batch QC passes method criteria unless noted in "Comments" section below

Comments: The matrix spike data IS from a sample in this upload batch.

LRB = Laboratory Reagent Blank

RPD = relative percent difference

FB = Field Blank

ND = Non-Detect

LFB = Laboratory Fortified Blank

MRL = Method Reporting Level

Results are ng/L (ppt)

LFSM = Laboratory Fortified Sample Matrix

LFSM/LFSMD spike concentration is 20 ng/L, unless noted otherwise

LFSMD = Laboratory Fortified Sample Matrix Duplicate

Surrogate Acceptance Limit is 70 - 130% Recovery