



90 Sargent Drive • New Haven, Connecticut 06511-5966  
203-401-6743 or 877-894-5773 (Telephone) • Website: [www.rwater.com](http://www.rwater.com)

**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](http://www.rwalab.com/rwa-lab-certifications), for certified analyte list.

**Client:** Paul Hennessy  
Randolph-Holbrook Joint Water

275 Pond St  
Randolph, MA 02368

781-964-9292  
[phennessy@holbrookmassachusetts.us](mailto:phennessy@holbrookmassachusetts.us)

**ANALYTICAL REPORT**

**Project: FEE-RANDOLPHHOLBROOK-25-000005**

**Report Date: 5/28/2025**

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**

<b>Sample ID</b>	<b>Customer ID</b>	<b>Collection Date/Time</b>	<b>Receipt Date</b>
300700589	Raw	5/14/2025 1200	5/15/25
300700590	Field Blank - Raw	5/14/2025 1200	5/15/25
300700591	Finished	5/14/2025 1200	5/15/25
300700592	Field Blank - Finished	5/14/2025 1200	5/15/25

**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	Perfluoroheptanoic 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-chloroeicosafuoro-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.

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Sample ID: 300700589

Customer ID: Raw

Collection Date: 05/14/2025 12:00

PWS ID# / LOC ID#: RAW

Project: FEE-RANDOLPHHOLBROOK-25-000005

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	2.04	0.97	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFHxA	307-24-4	3.16	0.77	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
HFPO-DA	13252-13-6	ND	1.16	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFHpA	375-85-9	1.92	0.71	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0054	CSS
PFHxS	355-46-4	1.99	0.85	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0054	CSS
ADONA	919005-14-4	ND	0.64	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFOA	335-67-1	3.95	0.78	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFOS	1763-23-1	6.35	1.03	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFNA	375-95-1	0.82	0.73	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0054	CSS
9CI-PF3ONS	756426-58-1	ND	0.86	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFDA	335-76-2	ND	0.77	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFUnA	2058-94-8	ND	0.96	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
11CI-PF3OUdS	763051-92-9	ND	1.06	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
NMeFOSAA	2355-31-9	ND	1.17	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
NEtFOSAA	2991-50-6	ND	1.17	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFDoA	307-55-1	ND	0.92	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFTTrDA	72629-94-8	ND	0.95	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFTA	376-06-7	ND	1.06	2.04	ng/L	1.02		EPA 537.1	5/21/25 0054	CSS
PFAS6 (MassDEP)		10.30	2.04	2.04	ng/L	1.02				
	Surrogates				Results			Recovery Limits		Pass/Fail
	13C-PFHxA (SUR) % Recovery				90.30			70 - 130		Pass
	13C3-HFPO-DA (SUR) % Recovery				86.60			70 - 130		Pass
	13C-PFDA (SUR) % Recovery				90.70			70 - 130		Pass
	d5-NEtFOSAA (SUR) % Recovery				79.60			70 - 130		Pass

**Sample Extraction Data:**

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300700589	PFAS_537	537_EXT-250515-1	244	05/15/2025

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Sample ID: 300700590

Customer ID: Field Blank - Raw

Collection Date: 05/14/2025 12:00

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000005

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.96	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFHxA	307-24-4	ND	0.76	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
HFPO-DA	13252-13-6	ND	1.15	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFHpA	375-85-9	ND	0.71	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFHxS	355-46-4	ND	0.84	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
ADONA	919005-14-4	ND	0.64	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFOA	335-67-1	ND	0.77	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFOS	1763-23-1	ND	1.02	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFNA	375-95-1	ND	0.73	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
9CI-PF3ONS	756426-58-1	ND	0.85	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFDA	335-76-2	ND	0.76	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFUnA	2058-94-8	ND	0.95	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
11CI-PF3OUdS	763051-92-9	ND	1.05	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
NMeFOSAA	2355-31-9	ND	1.16	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
NEtFOSAA	2991-50-6	ND	1.16	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFDoA	307-55-1	ND	0.91	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFTTrDA	72629-94-8	ND	0.94	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFTA	376-06-7	ND	1.05	2.02	ng/L	1.01		EPA 537.1	5/21/25 0110	CSS
PFAS6 (MassDEP)		ND	2.02	2.02	ng/L	1.01				
Surrogates			Results		Recovery Limits		Pass/Fail			
13C-PFHxA (SUR) % Recovery			96.10		70 - 130		Pass			
13C3-HFPO-DA (SUR) % Recovery			88.60		70 - 130		Pass			
13C-PFDA (SUR) % Recovery			91.70		70 - 130		Pass			
d5-NEtFOSAA (SUR) % Recovery			86.30		70 - 130		Pass			

**Sample Extraction Data:**

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300700590	PFAS_537	537_EXT-250515-1	248	05/15/2025

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Sample ID: 300700591

Customer ID: Finished

Collection Date: 05/14/2025 12:00

PWS ID# / LOC ID#: 4244001/10296

Project: FEE-RANDOLPHHOLBROOK-25-000005

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	1.95	0.97	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0125	CSS
PFHxA	307-24-4	3.21	0.77	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
HFPO-DA	13252-13-6	ND	1.16	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFHpA	375-85-9	1.80	0.71	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0125	CSS
PFHxS	355-46-4	2.28	0.85	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
ADONA	919005-14-4	ND	0.64	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFOA	335-67-1	4.36	0.78	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFOS	1763-23-1	6.72	1.03	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFNA	375-95-1	0.77	0.73	2.04	ng/L	1.02	J	EPA 537.1	5/21/25 0125	CSS
9CI-PF3ONS	756426-58-1	ND	0.86	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFDA	335-76-2	ND	0.77	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFUnA	2058-94-8	ND	0.96	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
11CI-PF3OUdS	763051-92-9	ND	1.06	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
NMeFOSAA	2355-31-9	ND	1.17	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
NEtFOSAA	2991-50-6	ND	1.17	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFDoA	307-55-1	ND	0.92	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFTTrDA	72629-94-8	ND	0.95	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFTA	376-06-7	ND	1.06	2.04	ng/L	1.02		EPA 537.1	5/21/25 0125	CSS
PFAS6 (MassDEP)		13.36	2.04	2.04	ng/L	1.02				
Surrogates										
					Results			Recovery Limits		Pass/Fail
13C-PFHxA (SUR) % Recovery					90.60			70 - 130		Pass
13C3-HFPO-DA (SUR) % Recovery					89.10			70 - 130		Pass
13C-PFDA (SUR) % Recovery					89.30			70 - 130		Pass
d5-NEtFOSAA (SUR) % Recovery					79.90			70 - 130		Pass

**Sample Extraction Data:**

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300700591	PFAS_537	537_EXT-250515-1	246	05/15/2025

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Sample ID: 300700592

Customer ID: Field Blank - Finished

Collection Date: 05/14/2025 12:00

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000005

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.96	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFHxA	307-24-4	ND	0.76	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
HFPO-DA	13252-13-6	ND	1.15	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFHpA	375-85-9	ND	0.71	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFHxS	355-46-4	ND	0.84	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
ADONA	919005-14-4	ND	0.64	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFOA	335-67-1	ND	0.77	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFOS	1763-23-1	ND	1.02	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFNA	375-95-1	ND	0.73	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
9CI-PF3ONS	756426-58-1	ND	0.85	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFDA	335-76-2	ND	0.76	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFUnA	2058-94-8	ND	0.95	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
11CI-PF3OUdS	763051-92-9	ND	1.05	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
NMeFOSAA	2355-31-9	ND	1.16	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
NEtFOSAA	2991-50-6	ND	1.16	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFDoA	307-55-1	ND	0.91	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFTrDA	72629-94-8	ND	0.94	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFTA	376-06-7	ND	1.05	2.02	ng/L	1.01		EPA 537.1	5/21/25 0141	CSS
PFAS6 (MassDEP)		ND	2.02	2.02	ng/L	1.01				
Surrogates					Results	Recovery Limits		Pass/Fail		
13C-PFHxA (SUR) % Recovery					108.40	70 - 130		Pass		
13C3-HFPO-DA (SUR) % Recovery					94.40	70 - 130		Pass		
13C-PFDA (SUR) % Recovery					106.50	70 - 130		Pass		
d5-NEtFOSAA (SUR) % Recovery					104.10	70 - 130		Pass		

**Sample Extraction Data:**

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300700592	PFAS_537	537_EXT-250515-1	248	05/15/2025



## 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: 5/15/2025

Sample ID for LFSM/LFSMD: 300699013

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	94.2	89.6	4.8	ND	[ Y ]	91.4
PFHxA	99.2	91.8	6.8	ND	[ Y ]	91.1
HFPO-DA	97.7	83.0	16.2	ND	[ Y ]	86.5
PFHpA	97.7	90.4	7.1	ND	[ Y ]	90.7
PFHxS	99.9	94.1	5.7	ND	[ Y ]	92.6
ADONA	97.4	92.3	5.4	ND	[ Y ]	91.3
PFOA	100.0	91.8	7.7	ND	[ Y ]	90.3
PFOS	98.7	89.9	8.5	ND	[ Y ]	89.3
PFNA	98.6	91.6	7.3	ND	[ Y ]	90.9
9CI-PF3ONS	98.8	89.9	9.4	ND	[ Y ]	87.9
PFDA	97.3	88.5	9.4	ND	[ Y ]	89.7
PFUnA	95.5	88.4	7.8	ND	[ Y ]	86.6
11CI-PF3OUdS	99.3	92.3	7.2	ND	[ Y ]	87.1
NMeFOSAA	100.1	92.0	8.4	ND	[ Y ]	86.1
NEtFOSAA	95.3	90.0	5.7	ND	[ Y ]	87.0
PFDoA	100.7	94.3	6.5	ND	[ Y ]	88.7
PFTTrDA	97.2	92.5	5.0	ND	[ Y ]	87.3
PFTA	97.8	91.0	7.2	ND	[ Y ]	87.0

### Surrogate %Recovery

<sup>13</sup> C <sub>2</sub> -PFHxA	<sup>13</sup> C <sub>3</sub> -HFPO-DA	<sup>13</sup> C <sub>2</sub> -PFDA	<sup>d</sup> <sub>5</sub> -NEtFOSAA	
100.60	95.20	99.50	97.00	LFSM
100.20	95.00	98.50	96.40	LFSMD
97.50	90.20	96.00	94.00	LRB
93.60	88.70	91.60	85.60	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 **NOT** 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