

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
Randolph-Holbrook Joint Water

275 Pond St
Randolph, MA 02368

781-964-9292
phennessy@holbrookmassachusetts.us

ANALYTICAL REPORT

Project: FEE-RANDOLPHHOLBROOK-25-000012

Report Date: 1/7/2026

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
300778468	RAW	12/18/2025 1300	12/19/25
300778469	Field Blank - RAW	12/18/2025 1300	12/19/25
300778470	FINISHED	12/18/2025 1300	12/19/25
300778471	Field Blank - FINISHED	12/18/2025 1300	12/19/25

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.

Method	CAS#	PFAS Analyte (Acronym)
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-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.

Sample# 300778468 RAW for EPA 537.1: fails low for 13C-PFDA surrogate recovery; the associated analytes PFOA, PFHxA, PFHpA, PFNA, PFDA, PFUnA, PFDoA, PFTrDA, PFTA, PFOS, PFBS, PFHxS, ADONA, 11C1-PF3OUdS, 9C1-PF3ONS are suspect.

Sample ID: 300778468

Customer ID: RAW

Collection Date: 12/18/2025 13:00

PWS ID# / LOC ID#: RAW

Project: FEE-RANDOLPHHOLBROOK-25-000012

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	2.43	0.95	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFHxA	307-24-4	3.33	0.75	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFHpA	375-85-9	2.08	0.70	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFHxS	355-46-4	2.12	0.83	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFOA	335-67-1	4.77	0.76	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFOS	1763-23-1	8.24	1.01	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFNA	375-95-1	0.88	0.72	2.0	ng/L	1.0	J	EPA 537.1	12/30/25 0241	CSS
9CI-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
11CI-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	12/30/25 0241	CSS
PFAS6 (MassDEP)		17.21	2.00	2.0	ng/L	1.0				
Surrogates		Results	Recovery Limits		Pass/Fail					
13C-PFHxA (SUR) % Recovery		96.90	70 - 130		Pass					
13C3-HFPO-DA (SUR) % Recovery		115.70	70 - 130		Pass					
13C-PFDA (SUR) % Recovery		67.00	70 - 130		Fail					
d5-NEtFOSAA (SUR) % Recovery		91.50	70 - 130		Pass					

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300778468	PFAS_537	537_EXT-251223-2	250	12/23/2025

Sample ID: 300778469

Customer ID: Field Blank - RAW

Collection Date: 12/18/2025 13:00

PWS ID# / LOC ID#: Field Blank

Project: FEE-RANDOLPHHOLBROOK-25-000012

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.92	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFHxA	307-24-4	ND	0.73	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
HFPO-DA	13252-13-6	ND	1.11	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFHpA	375-85-9	ND	0.68	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFHxS	355-46-4	ND	0.81	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
ADONA	919005-14-4	ND	0.61	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFOA	335-67-1	ND	0.74	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFOS	1763-23-1	ND	0.98	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFNA	375-95-1	ND	0.70	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
9CI-PF3ONS	756426-58-1	ND	0.81	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFDA	335-76-2	ND	0.73	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFUnA	2058-94-8	ND	0.91	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
11CI-PF3OUdS	763051-92-9	ND	1.01	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
NMeFOSAA	2355-31-9	ND	1.12	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
NEtFOSAA	2991-50-6	ND	1.12	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFDoA	307-55-1	ND	0.87	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFTrDA	72629-94-8	ND	0.90	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFTA	376-06-7	ND	1.01	1.94	ng/L	0.97		EPA 537.1	12/30/25 0257	CSS
PFAS6 (MassDEP)		ND	1.94	1.94	ng/L	0.97				
Surrogates		Results	Recovery Limits		Pass/Fail					
13C-PFHxA (SUR) % Recovery		105.60	70 - 130		Pass					
13C3-HFPO-DA (SUR) % Recovery		101.80	70 - 130		Pass					
13C-PFDA (SUR) % Recovery		104.10	70 - 130		Pass					
d5-NEtFOSAA (SUR) % Recovery		101.80	70 - 130		Pass					

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300778469	PFAS_537	537_EXT-251223-2	258	12/23/2025

Sample ID: 300778470

Customer ID: FINISHED

Collection Date: 12/18/2025 13:00

PWS ID# / LOC ID#: 4244001/10296

Project: FEE-RANDOLPHHOLBROOK-25-000012

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	2.40	0.93	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFHxA	307-24-4	3.57	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
HFPO-DA	13252-13-6	ND	1.12	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFHpA	375-85-9	2.13	0.69	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFHxS	355-46-4	2.15	0.81	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
ADONA	919005-14-4	ND	0.62	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFOA	335-67-1	4.40	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFOS	1763-23-1	6.29	0.99	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFNA	375-95-1	0.80	0.71	1.96	ng/L	0.98	J	EPA 537.1	12/30/25 0313	CSS
9CI-PF3ONS	756426-58-1	ND	0.82	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFDA	335-76-2	ND	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFUnA	2058-94-8	ND	0.92	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
11CI-PF3OUdS	763051-92-9	ND	1.02	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
NMeFOSAA	2355-31-9	ND	1.13	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
NEtFOSAA	2991-50-6	ND	1.13	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFDoA	307-55-1	ND	0.88	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFTrDA	72629-94-8	ND	0.91	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFTA	376-06-7	ND	1.02	1.96	ng/L	0.98		EPA 537.1	12/30/25 0313	CSS
PFAS6 (MassDEP)		14.97	1.96	1.96	ng/L	0.98				
Surrogates		Results	Recovery Limits		Pass/Fail					
13C-PFHxA (SUR) % Recovery		101.70	70 - 130		Pass					
13C3-HFPO-DA (SUR) % Recovery		125.40	70 - 130		Pass					
13C-PFDA (SUR) % Recovery		102.40	70 - 130		Pass					
d5-NEtFOSAA (SUR) % Recovery		96.40	70 - 130		Pass					

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300778470	PFAS_537	537_EXT-251223-2	254	12/23/2025

Sample ID: 300778471

Customer ID: Field Blank - FINISHED

Collection Date: 12/18/2025 13:00

PWS ID# / LOC ID#: Field Blank

Project: FEE-RANDOLPHHOLBROOK-25-000012

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	ND	0.93	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFHxA	307-24-4	ND	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
HFPO-DA	13252-13-6	ND	1.12	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFHpA	375-85-9	ND	0.69	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFHxS	355-46-4	ND	0.81	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
ADONA	919005-14-4	ND	0.62	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFOA	335-67-1	ND	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFOS	1763-23-1	ND	0.99	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFNA	375-95-1	ND	0.71	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
9CI-PF3ONS	756426-58-1	ND	0.82	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFDA	335-76-2	ND	0.74	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFUnA	2058-94-8	ND	0.92	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
11CI-PF3OUdS	763051-92-9	ND	1.02	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
NMeFOSAA	2355-31-9	ND	1.13	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
NEtFOSAA	2991-50-6	ND	1.13	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFDoA	307-55-1	ND	0.88	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFTrDA	72629-94-8	ND	0.91	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFTA	376-06-7	ND	1.02	1.96	ng/L	0.98		EPA 537.1	12/30/25 0329	CSS
PFAS6 (MassDEP)		ND	1.96	1.96	ng/L	0.98				
Surrogates		Results	Recovery Limits		Pass/Fail					
13C-PFHxA (SUR) % Recovery		94.70	70 - 130		Pass					
13C3-HFPO-DA (SUR) % Recovery		89.10	70 - 130		Pass					
13C-PFDA (SUR) % Recovery		95.10	70 - 130		Pass					
d5-NEtFOSAA (SUR) % Recovery		91.80	70 - 130		Pass					

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300778471	PFAS_537	537_EXT-251223-2	254	12/23/2025

Chain of Custody Form

Company Name
 RANDOLPH/HOUBROOK
 JOINT WATER

Company Address
 275 POND ST.
 RANDOLPH, MA
 02368

Sampler
 PAUL HENNESSY

PO Number

RWA LIMS Number	Date Collected
300778468	12/18/25
470	12/18/25

Time Collected	Sample ID / Sample Location
1PM	① RAW
1PM	② FINISHED

Relinquished By (Signature): <i>Paul Hennessy</i>	Relinquished by (Signature): <i>Fed Ex</i>
Date & Time: 12/18/25, 1:15 PM	Date & Time:
Received By (Signature):	Received By (Signature): <i>[Signature]</i>
Date & Time:	Date & Time: 12/19/25 1:55

Test Requested, Container, & Preservative	Number of Bottles
EPA 537.1 - Poured Field Blank & Tris (Hydroxymethyl) Aminomethane	5
EPA 537.1 - Poured Field Blank & Tris (Hydroxymethyl) Aminomethane	4
EPA 537.1 - Poured Field Blank & Tris (Hydroxymethyl) Aminomethane	4
EPA 537.1 - Poured Field Blank & Tris (Hydroxymethyl) Aminomethane	1
EPA 537.1 - Poured Field Blank & Tris (Hydroxymethyl) Aminomethane	1

Comments:
 Lot # 410928
 Lot # 456870
 Fee - Randolph/Hou Brook - 25-000012

State Sample Collected:
 CT ___ NY ___ Other (specify) ___
 Evidence of Cooling (Circle): or N
 Cooler Temp °C: 1.1
 Container & Preservative Meet Criteria (Circle): Yes / No

Remarks
 NOT FOR COMPLIANCE
 MA DEP COMPLIANCE

Field Blank #
 300778469
 471

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: 12/23/2025

Sample ID for LFSM/LFSMD: 300778295

Analyte	LFSM %Recovery	LFSMD %Recovery	RPD of LFSM/LFSMD	LRB (MRL is 2)		LFB 20.0 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	94.8	89.9	5.3	ND	[Y]	95.2
PFHxA	91.3	78.4	5.6	ND	[Y]	94.6
HFPO-DA	87.4	75.0	15.2	ND	[Y]	77.2
PFHpA	92.9	86.7	5.2	ND	[Y]	95.3
PFHxS	96.0	94.0	2.1	ND	[Y]	100.4
ADONA	93.3	88.2	5.6	ND	[Y]	92.0
PFOA	95.1	88.8	6.9	ND	[Y]	96.6
PFOS	98.0	89.1	9.5	ND	[Y]	100.6
PFNA	94.6	89.8	5.2	ND	[Y]	96.4
9Cl-PF3ONS	98.4	89.9	9.1	ND	[Y]	97.9
PFDA	90.6	87.9	3.0	ND	[Y]	94.5
PFUnA	89.8	84.9	5.6	ND	[Y]	92.4
11Cl-PF3OUdS	95.4	87.2	8.9	ND	[Y]	96.0
NMeFOSAA	95.5	87.4	8.9	ND	[Y]	98.6
NEtFOSAA	93.6	88.9	5.1	ND	[Y]	97.4
PFDoA	92.3	87.4	5.4	ND	[Y]	95.5
PFTTrDA	90.0	85.4	5.3	ND	[Y]	93.7
PFTA	90.2	86.2	4.6	ND	[Y]	93.8

Surrogate %Recovery

¹³ C ₂ -PFHxA	¹³ C ₃ -HFPO-DA	¹³ C ₂ -PFDA	^d ₅ -NEtFOSAA	
106.80	105.20	106.50	107.10	LFSM
88.80	84.00	88.20	88.70	LFSMD
95.90	89.00	93.10	96.10	LRB
106.70	96.50	105.30	108.80	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