Regional Water Authority

90 Sargent Drive ● New Haven, Connecticut 06511-5966
203-401-6743 or 877-894-5773 (Telephone) ● Website: 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, 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-25-000010

Report Date: 11/4/2025

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

Regional Water Authority
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SAMPLE SUMMARY

Sample ID	Customer ID	Collection Date/Time	Receipt Date
300761710	RAW	10/22/2025 1600	10/23/25
300761711	Field Blank - Raw	10/22/2025 1600	10/23/25
300761712	FINISHED	10/22/2025 1600	10/23/25
300761713	Field Blank - Finished	10/22/2025 1600	10/23/25

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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 EPA537.1.

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

Method	CAS#	PFAS Analyte (Acronymn)
537.1	1763-23-1	Perfluorooctanesulfonic acid (PFOS)
537.1	335-67-1	Perfluorooctanoic acid (PFOA)
537.1	355-46-4	Perfluorohexanesulfonic acid (PFHxS)
537.1	375-95-1	Perfluorononanoic acid (PFNA)
537.1	375-85-9	Perfluorohepatanoic acid (PFHpA)
537.1	335-76-2	Perfluorodecanoic acid (PFDA)
537.1	375-73-5	Perfluorobutanesulfonic acid (PFBS)
537.1	307-55-1	Perfluorododecanoic acid (PFDoA)
537.1	307-24-4	Perfluorohexanoic acid (PFHxA)
537.1	376-06-7	Perfluorotetradecanoic acid (PFTA)
537.1	72629-94-8	Perfluorotridecanoic acid (PFTrDA)
537.1	2058-94-8	Perfluoroundecanoic acid (PFUnA)
537.1	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)
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.

Regional Water Authority

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203-401-6743 or 877-894-5773 (Telephone) • Website: www.rwater.com

Sample ID: 300761710

Collection Date: 10/22/2025 16:00

Customer ID: 1) Raw

PWS ID# / LOC ID#: RAW

Project: FEE-RANDOLPHHOLBROOK-25-000010

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	2.48	0.95	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFHxA	307-24-4	3.81	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFHpA	375-85-9	2.15	0.70	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFHxS	355-46-4	2.43	0.83	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFOA	335-67-1	5.01	0.76	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFOS	1763-23-1	8.47	1.01	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFNA	375-95-1	1.06	0.72	2.0	ng/L	1.0	J	EPA 537.1	10/30/25 0315	CSS
9Cl-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
11Cl-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0315	CSS
PFAS6 (MassDEP)		18.06	2.00	2.0	ng/L	1.0				

Surrogates	Results	Recovery Limits	Pass/Fail
13C-PFHxA (SUR) % Recovery	95.10	70 - 130	Pass
13C3-HFPO-DA (SUR) % Recovery	88.70	70 - 130	Pass
13C-PFDA (SUR) % Recovery	96.80	70 - 130	Pass
d5-NEtFOSAA (SUR) % Recovery	87.80	70 - 130	Pass

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300761710	PFAS_537	537_EXT-251027-1	250	10/24/2025

Regional Water Authority

90 Sargent Drive • New Haven, Connecticut 06511-5966

203-401-6743 or 877-894-5773 (Telephone) • Website: www.rwater.com

Sample ID: 300761711

Collection Date: 10/22/2025 16:00

Customer ID: Field Blank - 1) Raw

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000010

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	10/30/25 0330	CSS
PFHxA	307-24-4	ND	0.74	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
HFPO-DA	13252-13-6	ND	1.12	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFHpA	375-85-9	ND	0.69	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFHxS	355-46-4	ND	0.81	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
ADONA	919005-14-4	ND	0.62	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFOA	335-67-1	ND	0.74	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFOS	1763-23-1	ND	0.99	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFNA	375-95-1	ND	0.71	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
9Cl-PF3ONS	756426-58-1	ND	0.82	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFDA	335-76-2	ND	0.74	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFUnA	2058-94-8	ND	0.92	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
11Cl-PF3OUdS	763051-92-9	ND	1.02	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
NMeFOSAA	2355-31-9	ND	1.13	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
NEtFOSAA	2991-50-6	ND	1.13	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFDoA	307-55-1	ND	0.88	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFTrDA	72629-94-8	ND	0.91	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFTA	376-06-7	ND	1.02	1.96	ng/L	0.98		EPA 537.1	10/30/25 0330	CSS
PFAS6 (MassDEP)		ND	1.96	1.96	ng/L	0.98				

Surrogates	Results	Recovery Limits	Pass/Fail
13C-PFHxA (SUR) % Recovery	97.10	70 - 130	Pass
13C3-HFPO-DA (SUR) % Recovery	86.70	70 - 130	Pass
13C-PFDA (SUR) % Recovery	92.00	70 - 130	Pass
d5-NEtFOSAA (SUR) % Recovery	93.90	70 - 130	Pass

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300761711	PFAS_537	537_EXT-251027-1	256	10/24/2025

Regional Water Authority

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203-401-6743 or 877-894-5773 (Telephone) • Website: www.rwater.com

Sample ID: 300761712

Collection Date: 10/22/2025 16:00

Customer ID: 2) Finished

PWS ID# / LOC ID#: 4244001/10296

Project: FEE-RANDOLPHHOLBROOK-25-000010

Analyte	CAS#	Results	MDL	RL	Units	Dilution	Qualifier	Method	Date Time/ Analyzed	Analyst
PFBS	375-73-5	2.21	0.95	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFHxA	307-24-4	3.63	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFHpA	375-85-9	2.15	0.70	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFHxS	355-46-4	2.34	0.83	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFOA	335-67-1	4.98	0.76	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFOS	1763-23-1	10.05	1.01	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFNA	375-95-1	0.99	0.72	2.0	ng/L	1.0	J	EPA 537.1	10/30/25 0243	CSS
9Cl-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
11Cl-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0243	CSS
PFAS6 (MassDEP)		19.52	2.00	2.0	ng/L	1.0				

Surrogates	Results	Recovery Limits	Pass/Fail
13C-PFHxA (SUR) % Recovery	83.10	70 - 130	Pass
13C3-HFPO-DA (SUR) % Recovery	82.20	70 - 130	Pass
13C-PFDA (SUR) % Recovery	85.00	70 - 130	Pass
d5-NEtFOSAA (SUR) % Recovery	80.70	70 - 130	Pass

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300761712	PFAS_537	537_EXT-251027-1	250	10/24/2025

Regional Water Authority

90 Sargent Drive • New Haven, Connecticut 06511-5966

203-401-6743 or 877-894-5773 (Telephone) • Website: www.rwater.com

Sample ID: 300761713

Collection Date: 10/22/2025 16:00

Customer ID: Field Blank - 2) Finished

PWS ID# / LOC ID#: FIELD BLANK

Project: FEE-RANDOLPHHOLBROOK-25-000010

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	10/30/25 0259	CSS
PFHxA	307-24-4	ND	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
HFPO-DA	13252-13-6	ND	1.14	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFHpA	375-85-9	ND	0.70	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFHxS	355-46-4	ND	0.83	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
ADONA	919005-14-4	ND	0.63	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFOA	335-67-1	ND	0.76	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFOS	1763-23-1	ND	1.01	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFNA	375-95-1	ND	0.72	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
9Cl-PF3ONS	756426-58-1	ND	0.84	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFDA	335-76-2	ND	0.75	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFUnA	2058-94-8	ND	0.94	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
11Cl-PF3OUdS	763051-92-9	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
NMeFOSAA	2355-31-9	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
NEtFOSAA	2991-50-6	ND	1.15	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFDoA	307-55-1	ND	0.90	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFTrDA	72629-94-8	ND	0.93	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFTA	376-06-7	ND	1.04	2.0	ng/L	1.0		EPA 537.1	10/30/25 0259	CSS
PFAS6 (MassDEP)		ND	2.00	2.0	ng/L	1.0				

Surrogates	Results	Recovery Limits	Pass/Fail
13C-PFHxA (SUR) % Recovery	95.40	70 - 130	Pass
13C3-HFPO-DA (SUR) % Recovery	89.90	70 - 130	Pass
13C-PFDA (SUR) % Recovery	91.10	70 - 130	Pass
d5-NEtFOSAA (SUR) % Recovery	93.00	70 - 130	Pass

Sample Extraction Data:

Lab Number (Field ID)	Prep Method	Batch	Final (mL)	Date
300761713	PFAS_537	537_EXT-251027-1	250	10/24/2025

Regional Water Authority
90 Sargent Dr, New Haven, CT 06511
Phone: 203-401-2700
Fax: 203-401-6799

Chain of Custody Form

Company Name: RANDOLPH/HOLBROOK JOINT WATER

Company Address: 275 POND ST. RANDOLPH MA 02368

Sampler: PAUL HENNESSY

PO Number:

Test Requested, Container, & Preservative

State Sample Collected: CT___ NY___ Other(specify)___

Thermometer ID:

Evidence of Cooling (Circle): Yes or No

Cooler Temp °C: 1.6

Container & Preservative Meet Criteria (Circle): Yes/ No

RWA LIMS Number	Date Collected	Time Collected	Sample ID / Sample Location	Number of Bottles	EPA 537.1 PFAS14 250mL Plastic w/Trizma & Tris (Hydroxymethyl) Aminomethane	EPA 537.1 - Poured Field Blank 250mL Plastic w/Trizma & Tris (Hydroxymethyl) Aminomethane	Field Blank #				Remarks
300761710	10/22/25	4PM	① RAW	5	4	1	300761711				NOT FOR COMPLIANCE
712	10/22/25	4PM	② FINISHED	5	4	1			713		MA DEP COMPLIANCE

Relinquished By (Signature): PAUL HENNESSY

Date & Time: 10/22/25 4PM

Received By (Signature):

Date & Time:

Relinquished by (Signature): Fed Ex

Date & Time:

Received By (Signature):

Date & Time: 10/23/25 1411

Comments:
Lot # 333588
Lot # 378400

PFAS14

Fee-Randolphholbrook-25-000010

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: 10/24/2025 **Sample ID for LFSM/LFSMD:** 300761684

Analyte	LFSM %Recovery	LFSMD %Recovery	RPD of LFSM/LFSMD	LRB (MRL is 2)		LFB 10 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	92.3	95.7	3.5	ND	[Y]	99.8
PFHxA	91.9	91.8	0.1	ND	[Y]	92.4
HFPO-DA	90.7	88.9	2.0	ND	[Y]	97.4
PFHpA	91.4	92.7	1.4	ND	[Y]	93.4
PFHxS	96.1	95.1	1.0	ND	[Y]	98.8
ADONA	93.6	93.1	0.5	ND	[Y]	92.7
PFOA	94.9	95.2	0.3	ND	[Y]	92.9
PFOS	89.4	95.2	6.3	ND	[Y]	99.3
PFNA	93.2	91.9	1.4	ND	[Y]	96.1
9Cl-PF3ONS	89.3	92.3	3.2	ND	[Y]	93.0
PFDA	89.6	89.2	0.4	ND	[Y]	90.3
PFUnA	89.6	88.8	1.0	ND	[Y]	89.1
11Cl-PF3OUdS	84.8	87.4	3.0	ND	[Y]	87.1
NMeFOSAA	91.2	91.3	0.0	ND	[Y]	86.0
NEtFOSAA	88.1	90.2	2.3	ND	[Y]	84.5
PFDoA	93.8	92.8	1.1	ND	[Y]	93.8
PFTrDA	92.1	91.0	1.2	ND	[Y]	88.4
PFTA	95.5	93.0	2.6	ND	[Y]	93.9

Surrogate %Recovery

$^{13}C_2$-PFHxA	$^{13}C_3$-HFPO-DA	$^{13}C_2$-PFDA	$^{d}_5$-NEtFOSAA	
105.80	97.40	105.70	103.40	LFSM
96.90	87.10	95.00	92.30	LFSMD
93.20	84.60	90.00	90.10	LRB
99.20	88.40	96.80	94.20	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