



STATE OF NEW HAMPSHIRE

MEMORANDUM



DATE: December 3, 2021

FROM: Josh Whipple
NHDES MtBE Remediation Bureau

SUBJECT: **Portsmouth – Sagamore Creek Surface Water Sampling**
DES #202111042, Project #40379, Project Type EMCONFUND

REFERENCE: **October 2021 Surface Water Sampling Event**

TO: File

On October 21, 2021, Josh Whipple, Ted Walsh, and Ken Edwardson of NHDES mobilized to the Sagamore Creek area for the purpose of collecting surface water samples to evaluate water quality downgradient of the turf field located at the Portsmouth High School. Mr. Ted Jankowski, of Non-Toxic Portsmouth, brought it to NHDES's attention that Total Fluorine had been detected in a sample from the turf material and there was concern that runoff from the field may contain per- and polyfluoroalkyl substances (PFAS) and ultimately impact Sagamore Creek. Three sampling locations were selected; one from the inlet downgradient from the field (labeled WSHEDTB1 at 43.05558, -70.76521), one from an inlet to the west in the headland area of the creek accessed from and sampled upstream of Greenleaf Ave (labeled WSHEDTB2 at 43.05423, -70.77732), and one from an inlet on the south bank of the creek (labeled WSHEDTB3 at 43.04537, -70.76220) which drains from under Elwyn Road in the vicinity of Harding Road. Approximate sample locations are depicted on the attached aerial photo excerpt from Google Maps.

Sample locations were selected based on adequate depth and active flow observations to ensure that representative surface water samples could be collected upstream of typical tidal influence. Temperature and specific conductance measurements were made using a YSI meter prior to sample collection. Samples were collected in laboratory supplied bottles and stored in a cooler, on ice. Samples were obtained following the "Direct Method" protocol outlined in Appendix D Surface Water Sampling Standard Operating Procedure (SOP) in a report entitled, "PFAS Baseline Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, New Hampshire" by Weston Solutions, Inc. dated October 1, 2021. A copy of the SOP is attached.

One field blank sample (labeled FIELD BLANK) was collected at the first location (WSHEDTB1), one field duplicate sample (labeled FIELD DUP/WSHEDTB2) was collected at the second location, and a trip blank (supplied by the laboratory) accompanied the samples in storage from the field to the laboratory for analysis. Samples were submitted under proper chain-of-custody to Eurofins Lancaster Laboratories Env, LLC (Eurofins) for laboratory analysis of their long list of PFAS compounds using their modified Laboratory Analytical Method 537. A copy of the laboratory analytical report is attached.

Analytical results are summarized in Table 1, attached. All three surface water samples contained low-level concentrations of PFAS compounds with perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) detected at the highest concentrations. PFOA concentrations ranged from 4.0 ng/L in sample WSHEDTB2 to 8.3 ng/L in sample WSHEDTB1 and PFOS concentrations ranged from 3.0 ng/L in sample WSHEDTB2 to 7.1 ng/L in sample WSHEDTB1. For reference the NHDES Ambient Groundwater Quality Standard for PFOA is 12 ng/L and PFOS is 15 ng/L. No PFAS compounds were detected in the quality assurance samples (Trip Blank and Field Blank) suggesting that there were no outside contaminants introduced during sample collection, storage or transportation to the laboratory. The duplicate sample results showed either the same concentration or very close (within 0.2 ng/L) which further validates the concentrations reported in the laboratory analytical report. The specific conductance data is indicative of the urban nature of the sites. The specific conductance at WSHEDTB1 and WSHEDTB3 indicate the surface water chloride criteria may be exceeded, although, of the three sites WSHEDTB1 appeared the most likely to be flooded on a spring tide.

Given that a similar suite of PFAS compounds were detected at relatively low concentrations at all three sample locations, it suggests that the PFAS in surface water in the sampled locations is more indicative of area-wide impact in the region rather than specific sources near each of the Sagamore Creek inlets. It also should be noted that these results represent surface water quality at the time the samples were collected and water quality may vary based on changing conditions within the watershed (i.e. stream flow rate, recent precipitation or lack thereof, water and atmospheric temperature, etc.).



Figure 1: Approximate Sample Locations

**Table 1
Sagamore Creek
Surface Water Sampling Results**

Sample ID:	WSHEDTB1	WSHEDTB2	WSHEDTB2 (Duplicate)	WSHEDTB3	FIELD BLANK	TRIP BLANK	
<i>Sample Date:</i>	10/21/2021	10/21/2021	10/21/2021	10/21/2021	10/21/2021	NA	
PFAS Compound	AGQS						
Perfluorohexanoic acid (PFHxA)	NS	5.4	1.7 J	1.8	1.5 J	ND	ND
Perfluoroheptanoic acid (PFHpA)	NS	3.3	1.5 J	1.4 J	1.3 J	ND	ND
Perfluorooctanoic acid (PFOA)	12	8.3	4.0	4.0	4.1	ND	ND
Perfluorononanoic acid (PFNA)	11	1.1 J	ND	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	NS	0.44 J	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	NS	3.3	2.4	2.4	3.6	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	18	1.9	0.94 J	0.92 J	1.8	ND	ND
Perfluorooctanesulfonic acid (PFOS)	15	7.1	3.0	2.8	5.4 I	ND	ND
Perfluorobutanoic acid (HFBA)	NS	4.7	2.2 J	2.1 J	1.8 J	ND	ND
Perfluoropentanoic acid (PFPeA)	NS	5.9	1.7 J	1.6 J	1.5 J	ND	ND
Temperature (°C)	NS	16.4	13.0	13.0	16.9	NA	NA
Specific Conductance (uS)	NS	1170	402	402	961	NA	NA

Notes:

All analytical results are reported in ng/L or parts per trillion (PPT)

NA - Not Applicable

NS - No AGQS

ND - Not Detected Above Laboratory Method Detection Limit

AGQS - New Hampshire Department of Environmental Services Ambient Groundwater Quality Standard. Please note that there currently is no regulatory standard for PFAS in surface water.

I - Value reported by the laboratory is an estimated maximum possible concentration.

J - Concentration detected is reported as an approximate value by the laboratory since it was above the method detection limit but below the reporting limit.

APPENDIX D

**SURFACE WATER SAMPLING
STANDARD OPERATING PROCEDURE**

SURFACE WATER SAMPLING STANDARD OPERATING PROCEDURE

1.0 Scope and Application

- 1.1 This Standard Operating Procedure (SOP) is applicable to the collection of representative aqueous samples from New Hampshire lakes for per- and polyfluoroalkyl substances (PFAS) analyses. It includes samples collected from depth, as well as samples collected from the surface.

2.0 Summary of Method

- 2.1 Sampling situations vary widely and, therefore, no universal sampling procedure will be applicable for all possible conditions. However, sampling of liquids from the above mentioned sources is generally accomplished through the use of one of the following samplers or techniques:

- Niskin or Kemmerer bottle
- Peristaltic pump
- Direct method

- 2.2 These sampling techniques will allow for the collection of representative samples from the majority of surface waters and impoundments encountered. For this study, the peristaltic method will be used for collecting surface water samples.

- 2.3 Sampling depth will be determined on the basis of total water depth and measured water temperatures at the time of sampling. Prior to collecting samples for PFAS analyses, water column temperatures will be measured to establish the extent of thermal stratification and determine the appropriate sampling depths. Surface water samples will be collected from three water column depths representing the mid-epilimnion, metalimnion, and near bottom at each lake.

3.0 Health And Safety Warnings

- 3.1 When working with potentially hazardous materials, follow the United States Environmental Protection Agency (EPA), Occupational Health and Safety Administration, and specific health and safety procedures as documented in the site specific Health and Safety Plan (HASP).
- 3.2 When conducting sampling from a boat in an impoundment or flowing waters, follow appropriate boating safety procedures contained in the HASP.

4.0 Interferences

- 4.1 There are two primary potential interferences with surface water sampling. These include cross-contamination of samples and improper sample collection.
- Cross-contamination problems can be eliminated or minimized through the use of disposable and/or dedicated sampling equipment. If this is not possible or practical, then decontamination of sampling equipment is necessary.
 - Improper sample collection can involve using contaminated equipment, disturbance of the stream or impoundment substrate, or sampling in an obviously disturbed area.
- 4.2 It is important to note that sampling for PFAS requires special procedures including the type of equipment used and handling procedures. The precautions to be applied are as follows:
- Nitrile gloves should be worn at all times when handling equipment or sampling.
 - Teflon treated equipment should not be used for sampling activities. Sample containers should also be free of Teflon liners or seals.
 - Where possible, all sampling materials and equipment should be disposable to avoid potential cross-contamination between sampling locations.
- 4.3 Following proper decontamination procedures and minimizing disturbance of the sample site will eliminate these problems.

5.0 Personnel Qualifications

- 5.1 All surface water sample collection will be performed by WESTON personnel. All field sampling personnel are required to take the 40-hour health and safety training and regular refresher courses prior to engaging in any field effort. At a minimum, all personnel are required to be trained to recognize the hazards associated with field work, and specifically working from a boat, as well as be fully understanding of the provisions of the site specific HASP.

6.0 Equipment and Supplies

6.1 Equipment needed for collection of surface water samples include:

- Niskin or Kemmerer bottle*
- Line and messengers
- Peristaltic pump
- Masterflex tubing
- High density polyethylene (HDPE) tubing
- Sample bottle preservatives as specified by the analyses to be performed
- Plastic zip-sealed bags
- Cooler(s)
- Chain-of-custody forms, field data sheets
- Decontamination equipment and reagents
- Boat and boat trailer with working lights
- Maps/plot plans
- Safety equipment
- Compass
- Tape measure
- Global Positioning System device
- Survey stakes, flags, or buoys and anchors
- Logbook and waterproof pen
- Sample bottles and trip blank(s)
- Sample bottle labels
- Approved Work Plan
- Approved HASP

- * The appropriate sampling device must be of proper composition. Sampling equipment must not contain Teflon coatings or subassemblies. Samplers constructed of glass, stainless steel or PVC should be used based upon the analyses to be performed.

7.0 Sample Collection – Preparation

1. Determine the extent of the sampling effort, the sampling methods to be employed, minimum sample volume requirements, and which equipment and supplies are needed.
2. Obtain necessary sampling and monitoring equipment.
3. Decontaminate or pre-clean equipment, and ensure that it is in working order.
4. Perform a general site survey prior to site entry in accordance with the HASP and facility requirements.
5. If necessary, use stakes, flags, or buoys to identify and mark all sampling locations until positional data has been obtained. If required, the proposed locations may be adjusted based on site access, property boundaries, and surface obstructions.

8.0 Sample Collection – Secondary Parameters

1. Water quality data may be collected in impoundments to determine if stratification is present. Measurements of dissolved oxygen, pH, and temperature can indicate if strata exist which would affect analytical results. Measurements should be collected at 1-meter intervals from the substrate to the surface using an appropriate instrument calibrated in accordance with the instrument manufacturer's instructions.
2. Water quality measurements such as dissolved oxygen, pH, temperature, and conductivity can assist in the interpretation of analytical data and the selection of sampling sites.
3. Generally, the deciding factors in the selection of a sampling device for sampling liquids in streams and rivers are:
 - Will the sample be collected from the shore or from a boat?
 - What is the desired depth at which the sample is to be collected?
 - What is the overall depth and flow direction of the river or stream?

9.0 Sample Collection Method

9.1 Niskin or Kemmerer Bottle

A Niskin or Kemmerer bottle may be used in most situations where site access is from a boat or structure such as a bridge or pier, and where samples at depth are required.

Sampling procedures are as follows:

1. Using a properly decontaminated Niskin or Kemmerer bottle, set the sampling device so that the sampling end pieces are pulled away from the sampling tube, allowing water to be sampled to pass through this tube.
2. Lower the pre-set sampling device to the pre-determined depth. Avoid bottom disturbance.
3. When the Niskin or Kemmerer bottle is at the required depth, send down the messenger closing the sampling device.
4. If only surface water samples are required, a polyethylene bailer can be used to collect a sample.
5. Retrieve the sampler and discharge the first 10 to 20 milliliter (mL) to clear any potential contamination on the valve.
6. Transfer sample aliquots from the sampling port into each sample bottle.

9.2 Peristaltic Pump

Peristaltic pumps will be used for the collection of samples requiring specific sampling depths or for samples requiring high volume of media. The peristaltic pump utilizes a revolving cam to extract the media through a sampling tube, and thereby eliminating potential impact to the media by contact with pump. The steps in using the peristaltic pump are as follows:

1. Setup the pump in an area free of obstruction to allow the tubing to fall freely to the point of media extraction. If a desired depth is required, the tubing may be premeasured to ensure proper sample depth.
2. Lock the tubing into the pump cam assembly.
3. Turn on the pump using a low flow setting so as not to disturb the sampling zone.
4. Once water is received at the discharge point, continue pumping to purge the tubing of at least one sample tube volume.
7. Transfer sample aliquots from the tubing into each sample bottle and cap.
8. Collect the sample in laboratory-prepared containers. Seal, label, and place the containers into a cooler.

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

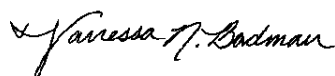
Laboratory Job ID: 410-60714-1

Client Project/Site: GI_Portsmouth Watershed Surface Water

For:

New Hampshire Dept of Environmental Serv
Waste Mgmt Div MtBe Remediation Bureau
29 Hazen Dr
PO BOX 95
Concord, New Hampshire 03302-0095

Attn: Mr. Derek Bennett



Authorized for release by:
11/10/2021 7:48:01 PM

Vanessa Badman, Project Manager
(717)556-9762

vanessa.badman@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

A handwritten signature in black ink that reads "Vanessa N. Badman".

Vanessa Badman
Project Manager
11/10/2021 7:48:01 PM



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Isotope Dilution Summary	14
QC Sample Results	16
QC Association Summary	20
Lab Chronicle	21
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	27

Definitions/Glossary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Job ID: 410-60714-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative 410-60714-1

Receipt

The samples were received on 10/27/2021 11:46 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C

PFAS

Method PFC_IDA: The recovery for the labeled isotope(s) in the following samples: Field Blank (410-60714-4) and Trip Blank (410-60714-5) is outside the QC acceptance limits. Since the recovery is high and the native analyte is not detected in the sample, the data is reported.

Method PFC_IDA: The recovery for the labeled isotope(s) in the laboratory control spike sample (LCS) and laboratory control spike sample duplicate (LCSD) associated with samples: WSHEDTB1 (410-60714-1), WSHEDTB2 (410-60714-2), WSHEDTB3 (410-60714-3), Field Blank (410-60714-4), Trip Blank (410-60714-5) and WSHEDTB2 (410-60714-6) is outside the QC acceptance limits. Since the recovery for the target analytes is within the QC acceptance limits, the data is reported.

Method PFC_IDA: The recovery for the labeled isotope(s) in the following sample: WSHEDTB1 (410-60714-1), WSHEDTB2 (410-60714-2), WSHEDTB3 (410-60714-3) and WSHEDTB2 (410-60714-6) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted outside the required holding time and the recovery for the labeled isotope(s) is again outside the QC acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



Detection Summary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB1

Lab Sample ID: 410-60714-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	5.4		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	3.3		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	8.3		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorononanoic acid	1.1	J	1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorodecanoic acid	0.44	J	1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanesulfonic acid	3.3		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	1.9		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	7.1		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	4.7		4.4	1.8	ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	5.9		1.8	0.44	ng/L	1		537 IDA	Total/NA

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	1.7	J	1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	1.5	J	1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	4.0		1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluorobutanesulfonic acid	2.4		1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	0.94	J	1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	3.0		1.8	0.45	ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	2.2	J	4.5	1.8	ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	1.7	J	1.8	0.45	ng/L	1		537 IDA	Total/NA

Client Sample ID: WSHEDTB3

Lab Sample ID: 410-60714-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	1.5	J	1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	1.3	J	1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	4.1		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanesulfonic acid	3.6		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	1.8		1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	5.4	I	1.8	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	1.8	J	4.4	1.8	ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	1.5	J	1.8	0.44	ng/L	1		537 IDA	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 410-60714-4

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 410-60714-5

No Detections.

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	1.8		1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluoroheptanoic acid	1.4	J	1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid	4.0		1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanesulfonic acid	2.4		1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluorohexanesulfonic acid	0.92	J	1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid	2.8		1.7	0.44	ng/L	1		537 IDA	Total/NA
Perfluorobutanoic acid	2.1	J	4.4	1.7	ng/L	1		537 IDA	Total/NA
Perfluoropentanoic acid	1.6	J	1.7	0.44	ng/L	1		537 IDA	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB1

Lab Sample ID: 410-60714-1

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	5.4		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
11Cl-PF3OUdS	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluoroheptanoic acid	3.3		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorooctanoic acid	8.3		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorononanoic acid	1.1	J	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorodecanoic acid	0.44	J	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
9Cl-PF3ONS	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorotridecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorotetradecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
DONA	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorobutanesulfonic acid	3.3		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
HFPODA	ND		2.7	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorohexanesulfonic acid	1.9		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorooctanesulfonic acid	7.1		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
NEtFOSAA	ND		2.7	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
NMeFOSAA	ND		1.8	0.53	ng/L		11/03/21 16:07	11/05/21 22:40	1
NMeFOSA	ND		2.7	0.89	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluoropentanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluoroheptanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorononanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorodecanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorooctanesulfonamide	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorobutanoic acid	4.7		4.4	1.8	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluoropentanoic acid	5.9		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluoroundecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
6:2 Fluorotelomer sulfonic acid	ND		4.4	1.8	ng/L		11/03/21 16:07	11/05/21 22:40	1
Perfluorododecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1
8:2 Fluorotelomer sulfonic acid	ND		2.7	0.89	ng/L		11/03/21 16:07	11/05/21 22:40	1
4:2 Fluorotelomer sulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 22:40	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	384	*5+	20 - 187	11/03/21 16:07	11/05/21 22:40	1
M2-8:2 FTS	196	*5+	34 - 182	11/03/21 16:07	11/05/21 22:40	1
M2-6:2 FTS	270	*5+	29 - 189	11/03/21 16:07	11/05/21 22:40	1
13C5 PFHxA	115		31 - 142	11/03/21 16:07	11/05/21 22:40	1
13C4 PFHpA	128		30 - 144	11/03/21 16:07	11/05/21 22:40	1
13C8 PFOA	128	*5+	49 - 127	11/03/21 16:07	11/05/21 22:40	1
13C9 PFNA	139	*5+	47 - 136	11/03/21 16:07	11/05/21 22:40	1
13C6 PFDA	133	*5+	47 - 128	11/03/21 16:07	11/05/21 22:40	1
13C7 PFUnA	130		40 - 135	11/03/21 16:07	11/05/21 22:40	1
13C2-PFDoDA	116		28 - 136	11/03/21 16:07	11/05/21 22:40	1
13C2 PFTeDA	103		10 - 144	11/03/21 16:07	11/05/21 22:40	1
13C3 PFBS	205	*5+	19 - 178	11/03/21 16:07	11/05/21 22:40	1
13C3 PFHxS	134		32 - 145	11/03/21 16:07	11/05/21 22:40	1
13C8 PFOS	133	*5+	49 - 126	11/03/21 16:07	11/05/21 22:40	1
d3-NMeFOSAA	132		32 - 151	11/03/21 16:07	11/05/21 22:40	1
d5-NEtFOSAA	143		37 - 164	11/03/21 16:07	11/05/21 22:40	1
13C8 FOSA	68		10 - 143	11/03/21 16:07	11/05/21 22:40	1
13C4 PFBA	132		41 - 132	11/03/21 16:07	11/05/21 22:40	1
13C5 PFPeA	166	*5+	33 - 155	11/03/21 16:07	11/05/21 22:40	1

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB1

Lab Sample ID: 410-60714-1

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		20 - 153	11/03/21 16:07	11/05/21 22:40	1
d3-NMePFOSA	6	*5-	10 - 107	11/03/21 16:07	11/05/21 22:40	1

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-2

Date Collected: 10/21/21 12:05

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	1.7	J	1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
11Cl-PF3OUdS	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluoroheptanoic acid	1.5	J	1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorooctanoic acid	4.0		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorononanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorodecanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
9Cl-PF3ONS	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorotridecanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorotetradecanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
DONA	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorobutanesulfonic acid	2.4		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
HFPODA	ND		2.7	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorohexanesulfonic acid	0.94	J	1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorooctanesulfonic acid	3.0		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
NEtFOSAA	ND		2.7	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
NMeFOSAA	ND		1.8	0.53	ng/L		11/03/21 16:07	11/05/21 22:51	1
NMeFOSA	ND		2.7	0.89	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluoropentanesulfonic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluoroheptanesulfonic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorononanesulfonic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorodecanesulfonic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorooctanesulfonamide	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorobutanoic acid	2.2	J	4.5	1.8	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluoropentanoic acid	1.7	J	1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluoroundecanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
6:2 Fluorotelomer sulfonic acid	ND		4.5	1.8	ng/L		11/03/21 16:07	11/05/21 22:51	1
Perfluorododecanoic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
8:2 Fluorotelomer sulfonic acid	ND		2.7	0.89	ng/L		11/03/21 16:07	11/05/21 22:51	1
4:2 Fluorotelomer sulfonic acid	ND		1.8	0.45	ng/L		11/03/21 16:07	11/05/21 22:51	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
M2-4:2 FTS	323	*5+	20 - 187	11/03/21 16:07	11/05/21 22:51	1			
M2-8:2 FTS	173		34 - 182	11/03/21 16:07	11/05/21 22:51	1			
M2-6:2 FTS	215	*5+	29 - 189	11/03/21 16:07	11/05/21 22:51	1			
13C5 PFHxA	116		31 - 142	11/03/21 16:07	11/05/21 22:51	1			
13C4 PFHpA	131		30 - 144	11/03/21 16:07	11/05/21 22:51	1			
13C8 PFOA	121		49 - 127	11/03/21 16:07	11/05/21 22:51	1			
13C9 PFNA	136		47 - 136	11/03/21 16:07	11/05/21 22:51	1			
13C6 PFDA	130	*5+	47 - 128	11/03/21 16:07	11/05/21 22:51	1			
13C7 PFUnA	125		40 - 135	11/03/21 16:07	11/05/21 22:51	1			
13C2-PFDoDA	118		28 - 136	11/03/21 16:07	11/05/21 22:51	1			
13C2 PFTeDA	105		10 - 144	11/03/21 16:07	11/05/21 22:51	1			

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-2

Date Collected: 10/21/21 12:05

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	179	*5+	19 - 178	11/03/21 16:07	11/05/21 22:51	1
13C3 PFHxS	130		32 - 145	11/03/21 16:07	11/05/21 22:51	1
13C8 PFOS	136	*5+	49 - 126	11/03/21 16:07	11/05/21 22:51	1
d3-NMeFOSAA	127		32 - 151	11/03/21 16:07	11/05/21 22:51	1
d5-NEtFOSAA	145		37 - 164	11/03/21 16:07	11/05/21 22:51	1
13C8 FOSA	53		10 - 143	11/03/21 16:07	11/05/21 22:51	1
13C4 PFBA	131		41 - 132	11/03/21 16:07	11/05/21 22:51	1
13C5 PFPeA	157	*5+	33 - 155	11/03/21 16:07	11/05/21 22:51	1
13C3 HFPO-DA	106		20 - 153	11/03/21 16:07	11/05/21 22:51	1
d3-NMePFOSA	0.4	*5-	10 - 107	11/03/21 16:07	11/05/21 22:51	1

Client Sample ID: WSHEDTB3

Lab Sample ID: 410-60714-3

Date Collected: 10/21/21 12:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	1.5	J	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
11Cl-PF3OUdS	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluoroheptanoic acid	1.3	J	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorooctanoic acid	4.1		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorononanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorodecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
9Cl-PF3ONS	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorotridecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorotetradecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
DONA	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorobutanesulfonic acid	3.6		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
HFPODA	ND		2.6	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorohexanesulfonic acid	1.8		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorooctanesulfonic acid	5.4	I	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
NEtFOSAA	ND		2.6	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
NMeFOSAA	ND		1.8	0.53	ng/L		11/03/21 16:07	11/05/21 23:02	1
NMeFOSA	ND		2.6	0.88	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluoropentanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluoroheptanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorononanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorodecanesulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorooctanesulfonamide	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorobutanoic acid	1.8	J	4.4	1.8	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluoropentanoic acid	1.5	J	1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluoroundecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
6:2 Fluorotelomer sulfonic acid	ND		4.4	1.8	ng/L		11/03/21 16:07	11/05/21 23:02	1
Perfluorododecanoic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
8:2 Fluorotelomer sulfonic acid	ND		2.6	0.88	ng/L		11/03/21 16:07	11/05/21 23:02	1
4:2 Fluorotelomer sulfonic acid	ND		1.8	0.44	ng/L		11/03/21 16:07	11/05/21 23:02	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
M2-4:2 FTS	276	*5+	20 - 187	11/03/21 16:07	11/05/21 23:02	1			
M2-8:2 FTS	203	*5+	34 - 182	11/03/21 16:07	11/05/21 23:02	1			
M2-6:2 FTS	178		29 - 189	11/03/21 16:07	11/05/21 23:02	1			

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB3

Lab Sample ID: 410-60714-3

Date Collected: 10/21/21 12:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFHxA	128		31 - 142	11/03/21 16:07	11/05/21 23:02	1
13C4 PFHpA	142		30 - 144	11/03/21 16:07	11/05/21 23:02	1
13C8 PFOA	137	*5+	49 - 127	11/03/21 16:07	11/05/21 23:02	1
13C9 PFNA	137	*5+	47 - 136	11/03/21 16:07	11/05/21 23:02	1
13C6 PFDA	132	*5+	47 - 128	11/03/21 16:07	11/05/21 23:02	1
13C7 PFUnA	131		40 - 135	11/03/21 16:07	11/05/21 23:02	1
13C2-PFDoDA	115		28 - 136	11/03/21 16:07	11/05/21 23:02	1
13C2 PFTeDA	119		10 - 144	11/03/21 16:07	11/05/21 23:02	1
13C3 PFBS	174		19 - 178	11/03/21 16:07	11/05/21 23:02	1
13C3 PFHxS	146	*5+	32 - 145	11/03/21 16:07	11/05/21 23:02	1
13C8 PFOS	130	*5+	49 - 126	11/03/21 16:07	11/05/21 23:02	1
d3-NMeFOSAA	130		32 - 151	11/03/21 16:07	11/05/21 23:02	1
d5-NEtFOSAA	150		37 - 164	11/03/21 16:07	11/05/21 23:02	1
13C8 FOSA	115		10 - 143	11/03/21 16:07	11/05/21 23:02	1
13C4 PFBA	136	*5+	41 - 132	11/03/21 16:07	11/05/21 23:02	1
13C5 PFPeA	154		33 - 155	11/03/21 16:07	11/05/21 23:02	1
13C3 HFPO-DA	145		20 - 153	11/03/21 16:07	11/05/21 23:02	1
d3-NMePFOSA	46		10 - 107	11/03/21 16:07	11/05/21 23:02	1

Client Sample ID: Field Blank

Lab Sample ID: 410-60714-4

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
11Cl-PF3OUdS	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoroheptanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorooctanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorononanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorodecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
9Cl-PF3ONS	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorotridecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorotetradecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
DONA	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorobutanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
HFPODA	ND		2.5	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorohexanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorooctanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
NEtFOSAA	ND		2.5	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
NMeFOSAA	ND		1.7	0.50	ng/L		11/03/21 16:07	11/05/21 23:13	1
NMeFOSA	ND		2.5	0.84	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoropentanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoroheptanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoronanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorodecanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorooctanesulfonamide	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorobutanoic acid	ND		4.2	1.7	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoropentanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluoroundecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: Field Blank

Lab Sample ID: 410-60714-4

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 Fluorotelomer sulfonic acid	ND		4.2	1.7	ng/L		11/03/21 16:07	11/05/21 23:13	1
Perfluorododecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
8:2 Fluorotelomer sulfonic acid	ND		2.5	0.84	ng/L		11/03/21 16:07	11/05/21 23:13	1
4:2 Fluorotelomer sulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
M2-4:2 FTS	147		20 - 187				11/03/21 16:07	11/05/21 23:13	1
M2-8:2 FTS	137		34 - 182				11/03/21 16:07	11/05/21 23:13	1
M2-6:2 FTS	119		29 - 189				11/03/21 16:07	11/05/21 23:13	1
13C5 PFHxA	128		31 - 142				11/03/21 16:07	11/05/21 23:13	1
13C4 PFHpA	130		30 - 144				11/03/21 16:07	11/05/21 23:13	1
13C8 PFOA	119		49 - 127				11/03/21 16:07	11/05/21 23:13	1
13C9 PFNA	135		47 - 136				11/03/21 16:07	11/05/21 23:13	1
13C6 PFDA	134	*5+	47 - 128				11/03/21 16:07	11/05/21 23:13	1
13C7 PFUnA	138	*5+	40 - 135				11/03/21 16:07	11/05/21 23:13	1
13C2-PFDoDA	131		28 - 136				11/03/21 16:07	11/05/21 23:13	1
13C2 PFTeDA	134		10 - 144				11/03/21 16:07	11/05/21 23:13	1
13C3 PFBS	142		19 - 178				11/03/21 16:07	11/05/21 23:13	1
13C3 PFHxS	125		32 - 145				11/03/21 16:07	11/05/21 23:13	1
13C8 PFOS	135	*5+	49 - 126				11/03/21 16:07	11/05/21 23:13	1
d3-NMeFOSAA	129		32 - 151				11/03/21 16:07	11/05/21 23:13	1
d5-NEtFOSAA	145		37 - 164				11/03/21 16:07	11/05/21 23:13	1
13C8 FOSA	117		10 - 143				11/03/21 16:07	11/05/21 23:13	1
13C4 PFBA	133	*5+	41 - 132				11/03/21 16:07	11/05/21 23:13	1
13C5 PFPeA	143		33 - 155				11/03/21 16:07	11/05/21 23:13	1
13C3 HFPO-DA	143		20 - 153				11/03/21 16:07	11/05/21 23:13	1
d3-NMePFOSA	96		10 - 107				11/03/21 16:07	11/05/21 23:13	1

Client Sample ID: Trip Blank

Lab Sample ID: 410-60714-5

Date Collected: 10/21/21 09:00

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
11Cl-PF3OUdS	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluoroheptanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorooctanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorononanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorodecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
9Cl-PF3ONS	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorotridecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorotetradecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
DONA	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorobutanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
HFPODA	ND		2.5	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorohexanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorooctanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
NEtFOSAA	ND		2.5	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
NMeFOSAA	ND		1.7	0.51	ng/L		11/03/21 16:07	11/05/21 23:25	1
NMeFOSA	ND		2.5	0.84	ng/L		11/03/21 16:07	11/05/21 23:25	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: Trip Blank

Lab Sample ID: 410-60714-5

Date Collected: 10/21/21 09:00

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluoroheptanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorononanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorodecanesulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorooctanesulfonamide	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorobutanoic acid	ND		4.2	1.7	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluoropentanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluoroundecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
6:2 Fluorotelomer sulfonic acid	ND		4.2	1.7	ng/L		11/03/21 16:07	11/05/21 23:25	1
Perfluorododecanoic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1
8:2 Fluorotelomer sulfonic acid	ND		2.5	0.84	ng/L		11/03/21 16:07	11/05/21 23:25	1
4:2 Fluorotelomer sulfonic acid	ND		1.7	0.42	ng/L		11/03/21 16:07	11/05/21 23:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	153		20 - 187	11/03/21 16:07	11/05/21 23:25	1
M2-8:2 FTS	134		34 - 182	11/03/21 16:07	11/05/21 23:25	1
M2-6:2 FTS	132		29 - 189	11/03/21 16:07	11/05/21 23:25	1
13C5 PFHxA	140		31 - 142	11/03/21 16:07	11/05/21 23:25	1
13C4 PFHpA	139		30 - 144	11/03/21 16:07	11/05/21 23:25	1
13C8 PFOA	138	*5+	49 - 127	11/03/21 16:07	11/05/21 23:25	1
13C9 PFNA	139	*5+	47 - 136	11/03/21 16:07	11/05/21 23:25	1
13C6 PFDA	135	*5+	47 - 128	11/03/21 16:07	11/05/21 23:25	1
13C7 PFUnA	140	*5+	40 - 135	11/03/21 16:07	11/05/21 23:25	1
13C2-PFDoDA	129		28 - 136	11/03/21 16:07	11/05/21 23:25	1
13C2 PFTeDA	130		10 - 144	11/03/21 16:07	11/05/21 23:25	1
13C3 PFBS	142		19 - 178	11/03/21 16:07	11/05/21 23:25	1
13C3 PFHxS	137		32 - 145	11/03/21 16:07	11/05/21 23:25	1
13C8 PFOS	137	*5+	49 - 126	11/03/21 16:07	11/05/21 23:25	1
d3-NMeFOSAA	133		32 - 151	11/03/21 16:07	11/05/21 23:25	1
d5-NEtFOSAA	152		37 - 164	11/03/21 16:07	11/05/21 23:25	1
13C8 FOSA	120		10 - 143	11/03/21 16:07	11/05/21 23:25	1
13C4 PFBA	133	*5+	41 - 132	11/03/21 16:07	11/05/21 23:25	1
13C5 PFPeA	143		33 - 155	11/03/21 16:07	11/05/21 23:25	1
13C3 HFPO-DA	154	*5+	20 - 153	11/03/21 16:07	11/05/21 23:25	1
d3-NMePFOSA	88		10 - 107	11/03/21 16:07	11/05/21 23:25	1

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-6

Date Collected: 10/21/21 12:06

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	1.8		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
11Cl-PF3OUdS	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluoroheptanoic acid	1.4	J	1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorooctanoic acid	4.0		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorononanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorodecanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
9Cl-PF3ONS	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorotridecanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorotetradecanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-6

Date Collected: 10/21/21 12:06

Matrix: Water

Date Received: 10/27/21 11:46

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DONA	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorobutanesulfonic acid	2.4		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
HFPODA	ND		2.6	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorohexanesulfonic acid	0.92	J	1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorooctanesulfonic acid	2.8		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
NEtFOSAA	ND		2.6	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
NMeFOSAA	ND		1.7	0.52	ng/L		11/03/21 16:07	11/05/21 23:36	1
NMeFOSA	ND		2.6	0.87	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluoropentanesulfonic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluoroheptanesulfonic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorononanesulfonic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorodecanesulfonic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorooctanesulfonamide	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorobutanoic acid	2.1	J	4.4	1.7	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluoropentanoic acid	1.6	J	1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluoroundecanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
6:2 Fluorotelomer sulfonic acid	ND		4.4	1.7	ng/L		11/03/21 16:07	11/05/21 23:36	1
Perfluorododecanoic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1
8:2 Fluorotelomer sulfonic acid	ND		2.6	0.87	ng/L		11/03/21 16:07	11/05/21 23:36	1
4:2 Fluorotelomer sulfonic acid	ND		1.7	0.44	ng/L		11/03/21 16:07	11/05/21 23:36	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	364	*5+	20 - 187	11/03/21 16:07	11/05/21 23:36	1
M2-8:2 FTS	187	*5+	34 - 182	11/03/21 16:07	11/05/21 23:36	1
M2-6:2 FTS	251	*5+	29 - 189	11/03/21 16:07	11/05/21 23:36	1
13C5 PFHxA	126		31 - 142	11/03/21 16:07	11/05/21 23:36	1
13C4 PFHpA	144		30 - 144	11/03/21 16:07	11/05/21 23:36	1
13C8 PFOA	140	*5+	49 - 127	11/03/21 16:07	11/05/21 23:36	1
13C9 PFNA	138	*5+	47 - 136	11/03/21 16:07	11/05/21 23:36	1
13C6 PFDA	137	*5+	47 - 128	11/03/21 16:07	11/05/21 23:36	1
13C7 PFUnA	138	*5+	40 - 135	11/03/21 16:07	11/05/21 23:36	1
13C2-PFDoDA	123		28 - 136	11/03/21 16:07	11/05/21 23:36	1
13C2 PFTeDA	104		10 - 144	11/03/21 16:07	11/05/21 23:36	1
13C3 PFBS	193	*5+	19 - 178	11/03/21 16:07	11/05/21 23:36	1
13C3 PFHxS	148	*5+	32 - 145	11/03/21 16:07	11/05/21 23:36	1
13C8 PFOS	139	*5+	49 - 126	11/03/21 16:07	11/05/21 23:36	1
d3-NMeFOSAA	136		32 - 151	11/03/21 16:07	11/05/21 23:36	1
d5-NEtFOSAA	155		37 - 164	11/03/21 16:07	11/05/21 23:36	1
13C8 FOSA	114		10 - 143	11/03/21 16:07	11/05/21 23:36	1
13C4 PFBA	138	*5+	41 - 132	11/03/21 16:07	11/05/21 23:36	1
13C5 PFPeA	166	*5+	33 - 155	11/03/21 16:07	11/05/21 23:36	1
13C3 HFPO-DA	119		20 - 153	11/03/21 16:07	11/05/21 23:36	1
d3-NMePFOSA	17		10 - 107	11/03/21 16:07	11/05/21 23:36	1

Isotope Dilution Summary

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M242FTS (20-187)	M282FTS (34-182)	M262FTS (29-189)	13C5PHA (31-142)	C4PFHA (30-144)	C8PFOA (49-127)	C9PFNA (47-136)	C6PFDA (47-128)
410-60714-1	WSHEDTB1	384 *5+	196 *5+	270 *5+	115	128	128 *5+	139 *5+	133 *5+
410-60714-2	WSHEDTB2	323 *5+	173	215 *5+	116	131	121	136	130 *5+
410-60714-3	WSHEDTB3	276 *5+	203 *5+	178	128	142	137 *5+	137 *5+	132 *5+
410-60714-4	Field Blank	147	137	119	128	130	119	135	134 *5+
410-60714-5	Trip Blank	153	134	132	140	139	138 *5+	139 *5+	135 *5+
410-60714-6	WSHEDTB2	364 *5+	187 *5+	251 *5+	126	144	140 *5+	138 *5+	137 *5+
LCS 410-190430/2-A	Lab Control Sample	142	130	122	134	136	131 *5+	127	129 *5+
LCS 410-190430/3-A	Lab Control Sample Dup	144	139	120	132	136	131 *5+	143 *5+	136 *5+
MB 410-190430/1-A	Method Blank	130	115	114	117	119	113	119	114

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	13C7PUA (40-135)	PFDODA (28-136)	PFTDA (10-144)	C3PFBS (19-178)	C3PFHS (32-145)	C8PFOS (49-126)	d3NMFOS (32-151)	d5NEFOS (37-164)
410-60714-1	WSHEDTB1	130	116	103	205 *5+	134	133 *5+	132	143
410-60714-2	WSHEDTB2	125	118	105	179 *5+	130	136 *5+	127	145
410-60714-3	WSHEDTB3	131	115	119	174	146 *5+	130 *5+	130	150
410-60714-4	Field Blank	138 *5+	131	134	142	125	135 *5+	129	145
410-60714-5	Trip Blank	140 *5+	129	130	142	137	137 *5+	133	152
410-60714-6	WSHEDTB2	138 *5+	123	104	193 *5+	148 *5+	139 *5+	136	155
LCS 410-190430/2-A	Lab Control Sample	126	118	112	133	131	124	122	137
LCS 410-190430/3-A	Lab Control Sample Dup	154 *5+	129	121	138	133	139 *5+	137	154
MB 410-190430/1-A	Method Blank	116	108	106	125	118	118	108	125

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOSA (10-143)	PFBA (41-132)	PFPeA (33-155)	HFPODA (20-153)	d3NMFSA (10-107)
410-60714-1	WSHEDTB1	68	132	166 *5+	96	6 *5-
410-60714-2	WSHEDTB2	53	131	157 *5+	106	0.4 *5-
410-60714-3	WSHEDTB3	115	136 *5+	154	145	46
410-60714-4	Field Blank	117	133 *5+	143	143	96
410-60714-5	Trip Blank	120	133 *5+	143	154 *5+	88
410-60714-6	WSHEDTB2	114	138 *5+	166 *5+	119	17
LCS 410-190430/2-A	Lab Control Sample	105	127	137	155 *5+	72
LCS 410-190430/3-A	Lab Control Sample Dup	123	134 *5+	147	163 *5+	94
MB 410-190430/1-A	Method Blank	101	115	125	132	78

Surrogate Legend

M242FTS = M2-4:2 FTS
 M282FTS = M2-8:2 FTS
 M262FTS = M2-6:2 FTS
 13C5PHA = 13C5 PFHxA
 C4PFHA = 13C4 PFHpA
 C8PFOA = 13C8 PFOA
 C9PFNA = 13C9 PFNA
 C6PFDA = 13C6 PFDA
 13C7PUA = 13C7 PFUnA
 PFDODA = 13C2-PFDODA
 PFTDA = 13C2 PFTeDA
 C3PFBS = 13C3 PFBS
 C3PFHS = 13C3 PFHxS
 C8PFOS = 13C8 PFOS

Isotope Dilution Summary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
PFOSA = 13C8 FOSA
PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
HFPODA = 13C3 HFPO-DA
d3NMFSA = d3-NMePFOSA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-190430/1-A

Matrix: Water

Analysis Batch: 191250

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 190430

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
11Cl-PF3OUdS	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluoroheptanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorooctanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
9Cl-PF3ONS	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
DONA	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorobutanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
HFPODA	ND		3.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorohexanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
NEtFOSAA	ND		3.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
NMeFOSAA	ND		2.0	0.60	ng/L		11/03/21 16:07	11/05/21 19:31	1
NMeFOSA	ND		3.0	1.0	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluoroheptanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorononanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorobutanoic acid	ND		5.0	2.0	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluoropentanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
6:2 Fluorotelomer sulfonic acid	ND		5.0	2.0	ng/L		11/03/21 16:07	11/05/21 19:31	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1
8:2 Fluorotelomer sulfonic acid	ND		3.0	1.0	ng/L		11/03/21 16:07	11/05/21 19:31	1
4:2 Fluorotelomer sulfonic acid	ND		2.0	0.50	ng/L		11/03/21 16:07	11/05/21 19:31	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-4:2 FTS	130		20 - 187	11/03/21 16:07	11/05/21 19:31	1
M2-8:2 FTS	115		34 - 182	11/03/21 16:07	11/05/21 19:31	1
M2-6:2 FTS	114		29 - 189	11/03/21 16:07	11/05/21 19:31	1
13C5 PFHxA	117		31 - 142	11/03/21 16:07	11/05/21 19:31	1
13C4 PFHpA	119		30 - 144	11/03/21 16:07	11/05/21 19:31	1
13C8 PFOA	113		49 - 127	11/03/21 16:07	11/05/21 19:31	1
13C9 PFNA	119		47 - 136	11/03/21 16:07	11/05/21 19:31	1
13C6 PFDA	114		47 - 128	11/03/21 16:07	11/05/21 19:31	1
13C7 PFUnA	116		40 - 135	11/03/21 16:07	11/05/21 19:31	1
13C2-PFDoDA	108		28 - 136	11/03/21 16:07	11/05/21 19:31	1
13C2 PFTeDA	106		10 - 144	11/03/21 16:07	11/05/21 19:31	1
13C3 PFBS	125		19 - 178	11/03/21 16:07	11/05/21 19:31	1
13C3 PFHxS	118		32 - 145	11/03/21 16:07	11/05/21 19:31	1
13C8 PFOS	118		49 - 126	11/03/21 16:07	11/05/21 19:31	1
d3-NMeFOSAA	108		32 - 151	11/03/21 16:07	11/05/21 19:31	1
d5-NEtFOSAA	125		37 - 164	11/03/21 16:07	11/05/21 19:31	1
13C8 FOSA	101		10 - 143	11/03/21 16:07	11/05/21 19:31	1

QC Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-190430/1-A

Matrix: Water

Analysis Batch: 191250

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 190430

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	115		41 - 132	11/03/21 16:07	11/05/21 19:31	1
13C5 PFPeA	125		33 - 155	11/03/21 16:07	11/05/21 19:31	1
13C3 HFPO-DA	132		20 - 153	11/03/21 16:07	11/05/21 19:31	1
d3-NMePFOSA	78		10 - 107	11/03/21 16:07	11/05/21 19:31	1

Lab Sample ID: LCS 410-190430/2-A

Matrix: Water

Analysis Batch: 191250

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 190430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Perfluorohexanoic acid	25.6	17.9		ng/L		70	66 - 137
11Cl-PF3OUdS	23.8	18.4		ng/L		77	45 - 134
Perfluoroheptanoic acid	25.6	19.9		ng/L		78	66 - 141
Perfluorooctanoic acid	25.6	20.6		ng/L		80	65 - 136
Perfluorononanoic acid	25.6	20.1		ng/L		78	65 - 140
Perfluorodecanoic acid	25.6	18.7		ng/L		73	63 - 137
9Cl-PF3ONS	23.8	19.4		ng/L		81	52 - 135
Perfluorotridecanoic acid	25.6	20.1		ng/L		78	58 - 146
Perfluorotetradecanoic acid	25.6	20.7		ng/L		81	64 - 141
DONA	24.2	19.0		ng/L		79	49 - 158
Perfluorobutanesulfonic acid	22.7	17.0		ng/L		75	65 - 132
HFPODA	25.6	18.9		ng/L		74	37 - 147
Perfluorohexanesulfonic acid	23.3	17.5		ng/L		75	60 - 128
Perfluorooctanesulfonic acid	23.7	18.6		ng/L		78	51 - 126
NEtFOSAA	25.6	18.4		ng/L		72	54 - 134
NMeFOSAA	25.6	19.9		ng/L		78	58 - 143
NMeFOSA	25.6	20.3		ng/L		79	49 - 141
Perfluoropentanesulfonic acid	24.0	19.5		ng/L		81	71 - 136
Perfluoroheptanesulfonic acid	24.4	17.1		ng/L		70	67 - 135
Perfluorononanesulfonic acid	24.6	19.0		ng/L		77	67 - 137
Perfluorodecanesulfonic acid	24.7	19.2		ng/L		78	61 - 134
Perfluorooctanesulfonamide	25.6	20.1		ng/L		78	55 - 130
Perfluorobutanoic acid	25.6	18.6		ng/L		73	62 - 156
Perfluoropentanoic acid	25.6	19.9		ng/L		78	72 - 139
Perfluoroundecanoic acid	25.6	20.2		ng/L		79	62 - 138
6:2 Fluorotelomer sulfonic acid	24.3	17.9		ng/L		74	57 - 137
Perfluorododecanoic acid	25.6	20.9		ng/L		82	63 - 140
8:2 Fluorotelomer sulfonic acid	24.5	17.7		ng/L		72	56 - 140
4:2 Fluorotelomer sulfonic acid	23.9	17.8		ng/L		75	59 - 130

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
M2-4:2 FTS	142		20 - 187
M2-8:2 FTS	130		34 - 182
M2-6:2 FTS	122		29 - 189
13C5 PFHxA	134		31 - 142
13C4 PFHpA	136		30 - 144
13C8 PFOA	131	*5+	49 - 127
13C9 PFNA	127		47 - 136
13C6 PFDA	129	*5+	47 - 128

QC Sample Results

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-190430/2-A

Matrix: Water

Analysis Batch: 191250

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 190430

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C7 PFUnA	126		40 - 135
13C2-PFDoDA	118		28 - 136
13C2 PFTeDA	112		10 - 144
13C3 PFBS	133		19 - 178
13C3 PFHxS	131		32 - 145
13C8 PFOS	124		49 - 126
d3-NMeFOSAA	122		32 - 151
d5-NEtFOSAA	137		37 - 164
13C8 FOSA	105		10 - 143
13C4 PFBA	127		41 - 132
13C5 PFPeA	137		33 - 155
13C3 HFPO-DA	155	*5+	20 - 153
d3-NMePFOSA	72		10 - 107

Lab Sample ID: LCSD 410-190430/3-A

Matrix: Water

Analysis Batch: 191250

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 190430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Perfluorohexanoic acid	25.6	17.3		ng/L		68	66 - 137	4	30
11Cl-PF3OUdS	23.8	17.3		ng/L		73	45 - 134	6	30
Perfluoroheptanoic acid	25.6	20.0		ng/L		78	66 - 141	1	30
Perfluorooctanoic acid	25.6	20.2		ng/L		79	65 - 136	2	30
Perfluorononanoic acid	25.6	20.1		ng/L		78	65 - 140	0	30
Perfluorodecanoic acid	25.6	20.0		ng/L		78	63 - 137	7	30
9Cl-PF3ONS	23.8	18.7		ng/L		78	52 - 135	4	30
Perfluorotridecanoic acid	25.6	20.9		ng/L		82	58 - 146	4	30
Perfluorotetradecanoic acid	25.6	20.1		ng/L		79	64 - 141	3	30
DONA	24.2	18.5		ng/L		77	49 - 158	3	30
Perfluorobutanesulfonic acid	22.7	17.6		ng/L		78	65 - 132	3	30
HFPODA	25.6	17.2		ng/L		67	37 - 147	9	30
Perfluorohexanesulfonic acid	23.3	17.3		ng/L		74	60 - 128	1	30
Perfluorooctanesulfonic acid	23.7	18.3		ng/L		77	51 - 126	1	30
NEtFOSAA	25.6	18.2		ng/L		71	54 - 134	1	30
NMeFOSAA	25.6	20.1		ng/L		79	58 - 143	1	30
NMeFOSA	25.6	20.2		ng/L		79	49 - 141	0	30
Perfluoropentanesulfonic acid	24.0	18.7		ng/L		78	71 - 136	4	30
Perfluoroheptanesulfonic acid	24.4	17.2		ng/L		71	67 - 135	1	30
Perfluorononanesulfonic acid	24.6	18.7		ng/L		76	67 - 137	2	30
Perfluorodecanesulfonic acid	24.7	18.6		ng/L		75	61 - 134	3	30
Perfluorooctanesulfonamide	25.6	20.1		ng/L		79	55 - 130	0	30
Perfluorobutanoic acid	25.6	18.2		ng/L		71	62 - 156	3	30
Perfluoropentanoic acid	25.6	19.0		ng/L		74	72 - 139	5	30
Perfluoroundecanoic acid	25.6	18.5		ng/L		72	62 - 138	8	30
6:2 Fluorotelomer sulfonic acid	24.3	18.5		ng/L		76	57 - 137	3	30
Perfluorododecanoic acid	25.6	20.5		ng/L		80	63 - 140	2	30
8:2 Fluorotelomer sulfonic acid	24.5	18.8		ng/L		77	56 - 140	6	30
4:2 Fluorotelomer sulfonic acid	23.9	17.5		ng/L		73	59 - 130	2	30

QC Sample Results

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>M2-4:2 FTS</i>	144		20 - 187
<i>M2-8:2 FTS</i>	139		34 - 182
<i>M2-6:2 FTS</i>	120		29 - 189
<i>13C5 PFHxA</i>	132		31 - 142
<i>13C4 PFHpA</i>	136		30 - 144
<i>13C8 PFOA</i>	131	*5+	49 - 127
<i>13C9 PFNA</i>	143	*5+	47 - 136
<i>13C6 PFDA</i>	136	*5+	47 - 128
<i>13C7 PFUnA</i>	154	*5+	40 - 135
<i>13C2-PFDoDA</i>	129		28 - 136
<i>13C2 PFTeDA</i>	121		10 - 144
<i>13C3 PFBS</i>	138		19 - 178
<i>13C3 PFHxS</i>	133		32 - 145
<i>13C8 PFOS</i>	139	*5+	49 - 126
<i>d3-NMeFOSAA</i>	137		32 - 151
<i>d5-NEtFOSAA</i>	154		37 - 164
<i>13C8 FOSA</i>	123		10 - 143
<i>13C4 PFBA</i>	134	*5+	41 - 132
<i>13C5 PFPeA</i>	147		33 - 155
<i>13C3 HFPO-DA</i>	163	*5+	20 - 153
<i>d3-NMePFOSA</i>	94		10 - 107

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Association Summary

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

LCMS

Prep Batch: 190430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-60714-1	WSHEDTB1	Total/NA	Water	537 IDA	
410-60714-2	WSHEDTB2	Total/NA	Water	537 IDA	
410-60714-3	WSHEDTB3	Total/NA	Water	537 IDA	
410-60714-4	Field Blank	Total/NA	Water	537 IDA	
410-60714-5	Trip Blank	Total/NA	Water	537 IDA	
410-60714-6	WSHEDTB2	Total/NA	Water	537 IDA	
MB 410-190430/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-190430/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-190430/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 191250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-60714-1	WSHEDTB1	Total/NA	Water	537 IDA	190430
410-60714-2	WSHEDTB2	Total/NA	Water	537 IDA	190430
410-60714-3	WSHEDTB3	Total/NA	Water	537 IDA	190430
410-60714-4	Field Blank	Total/NA	Water	537 IDA	190430
410-60714-5	Trip Blank	Total/NA	Water	537 IDA	190430
410-60714-6	WSHEDTB2	Total/NA	Water	537 IDA	190430
MB 410-190430/1-A	Method Blank	Total/NA	Water	537 IDA	190430
LCS 410-190430/2-A	Lab Control Sample	Total/NA	Water	537 IDA	190430
LCSD 410-190430/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	190430

Prep Batch: 192223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-60714-1 - RE	WSHEDTB1	Total/NA	Water	537 IDA	
410-60714-2 - RE	WSHEDTB2	Total/NA	Water	537 IDA	
410-60714-3 - RE	WSHEDTB3	Total/NA	Water	537 IDA	
410-60714-6 - RE	WSHEDTB2	Total/NA	Water	537 IDA	
MB 410-192223/1-A	Method Blank	Total/NA	Water	537 IDA	
LCS 410-192223/2-A	Lab Control Sample	Total/NA	Water	537 IDA	
LCSD 410-192223/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	

Analysis Batch: 192889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-60714-1 - RE	WSHEDTB1	Total/NA	Water	537 IDA	192223
410-60714-2 - RE	WSHEDTB2	Total/NA	Water	537 IDA	192223
410-60714-3 - RE	WSHEDTB3	Total/NA	Water	537 IDA	192223
410-60714-6 - RE	WSHEDTB2	Total/NA	Water	537 IDA	192223
MB 410-192223/1-A	Method Blank	Total/NA	Water	537 IDA	192223
LCS 410-192223/2-A	Lab Control Sample	Total/NA	Water	537 IDA	192223
LCSD 410-192223/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	192223

Lab Chronicle

Client: New Hampshire Dept of Environmental Serv
 Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB1

Lab Sample ID: 410-60714-1

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 22:40	ZG8V	ELLE
Total/NA	Prep	537 IDA	RE		192223	11/08/21 17:35	ZWK6	ELLE
Total/NA	Analysis	537 IDA	RE	1	192889	11/10/21 09:12	ZG8V	ELLE

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-2

Date Collected: 10/21/21 12:05

Matrix: Water

Date Received: 10/27/21 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 22:51	ZG8V	ELLE
Total/NA	Prep	537 IDA	RE		192223	11/08/21 17:35	ZWK6	ELLE
Total/NA	Analysis	537 IDA	RE	1	192889	11/10/21 09:23	ZG8V	ELLE

Client Sample ID: WSHEDTB3

Lab Sample ID: 410-60714-3

Date Collected: 10/21/21 12:30

Matrix: Water

Date Received: 10/27/21 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 23:02	ZG8V	ELLE
Total/NA	Prep	537 IDA	RE		192223	11/08/21 17:35	ZWK6	ELLE
Total/NA	Analysis	537 IDA	RE	1	192889	11/10/21 09:34	ZG8V	ELLE

Client Sample ID: Field Blank

Lab Sample ID: 410-60714-4

Date Collected: 10/21/21 11:30

Matrix: Water

Date Received: 10/27/21 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 23:13	ZG8V	ELLE

Client Sample ID: Trip Blank

Lab Sample ID: 410-60714-5

Date Collected: 10/21/21 09:00

Matrix: Water

Date Received: 10/27/21 11:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 23:25	ZG8V	ELLE

Lab Chronicle

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Client Sample ID: WSHEDTB2

Lab Sample ID: 410-60714-6

Date Collected: 10/21/21 12:06

Matrix: Water

Date Received: 10/27/21 11:46

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	537 IDA			190430	11/03/21 16:07	ZWK6	ELLE
Total/NA	Analysis	537 IDA		1	191250	11/05/21 23:36	ZG8V	ELLE
Total/NA	Prep	537 IDA	RE		192223	11/08/21 17:35	ZWK6	ELLE
Total/NA	Analysis	537 IDA	RE	1	192889	11/10/21 09:45	ZG8V	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



Accreditation/Certification Summary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Hampshire	NELAP	273019	01-10-22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



Sample Summary

Client: New Hampshire Dept of Environmental Serv
Project/Site: GI_Portsmouth Watershed Surface Water

Job ID: 410-60714-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-60714-1	WSHEDTB1	Water	10/21/21 11:30	10/27/21 11:46
410-60714-2	WSHEDTB2	Water	10/21/21 12:05	10/27/21 11:46
410-60714-3	WSHEDTB3	Water	10/21/21 12:30	10/27/21 11:46
410-60714-4	Field Blank	Water	10/21/21 11:30	10/27/21 11:46
410-60714-5	Trip Blank	Water	10/21/21 09:00	10/27/21 11:46
410-60714-6	WSHEDTB2	Water	10/21/21 12:06	10/27/21 11:46

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Lancaster Laboratories Environmental

8164 8757 9300

Acct. # _____ Group # _____

Environmental Analysis



410-60714 Chain of Custody

Chain of Custody

Cooler 1 of 2
COC 1 of 5

Client: New Hampshire Department of Environmental Services				Matrix			Analyses Requested			For Lab Use Only		
Project Name/ #: GI_Portsmouth Watershed Surface Water				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Preservation Codes			SF #: _____		
Project Manager: Derek Bennett (603)271-8520 Derek.Bennett@des.nh.gov				Sediment	Ground	Surface				SCR #: _____		
NHDES Sampler: Josh Whipple		P.O. #: 8873		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PFAS 537 Modified 28 PFAS list plus DONA			Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other - <i>none</i>		
Phone #: 603-271-7377		Quote #: Contract 8002713		Soil	Potable	NPDES				Remarks		
Town where sample(s) were collected: Portsmouth				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total # of Containers					
State where sample(s) were collected: New Hampshire				Water	Other:							
Sample Identification		Collection		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
	Date	Time	Grab	Composite								
WSHEDTB1	10/21/21	11:30	X			W	2	X				
WSHEDTB2	10/21/21	12:05	X			W	2	X				
WSHEDTB3	10/21/21	12:30	X			W	2	X				
Field Blank	10/21/21	11:30	-			W	2	X				
Trip Blank	10/21/21	9:00	-			W		X				
WSHEDTB2	10/21/21	12:06	X			W	2	X				QC Duplicate Sample
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: <i>[Signature]</i>			Date	Time	Received by:		Date	Time
(Rush TAT is subject to laboratory approval and surcharges.)							10/21/21	12:00	NHDES Cold Storage Temp:		10/21/21	
Date results are needed:				Relinquished by: <i>[Signature]</i>			Date	Time	Received by:		Date	Time
Rush results requested by (please check): E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>							10/26/21	11:00	NHDES Cooler Temp: 4.6		10/26/21	11:00
E-mail Address:				Relinquished by:			Date	Time	Received by:		Date	Time
Phone:												
Data Package Options (please check if required)				Relinquished by:			Date	Time	Received by:		Date	Time
Type I (Validation/non-CLP)	<input type="checkbox"/>	MA MCP	<input type="checkbox"/>									
Type III (Reduced non-CLP)	<input type="checkbox"/>	CT RCP	<input type="checkbox"/>									
Type IV (CLP SOW)	<input type="checkbox"/>	TX TRRP-13	<input type="checkbox"/>									
Type VI (Raw Data Only)	<input type="checkbox"/>											
Relinquished by Commercial Carrier:				Relinquished by:			Date	Time	Received by:		Date	Time
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: NHDES-EMD Format									<i>[Signature]</i>		10/27/21	11:46
UPS <input type="checkbox"/> FedEx <input checked="" type="checkbox"/> Other <input type="checkbox"/>									Temperature upon receipt		0.6	°C

MP

MP

Login Sample Receipt Checklist

Client: New Hampshire Dept of Environmental Serv

Job Number: 410-60714-1

Login Number: 60714

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Reiff, Nicole L

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	