IMMEDIATE RESPONSE ACTION
STATUS REPORT NO. 2
NANTUCKET MEMORIAL AIRPORT
14 AIRPORT ROAD
NANTUCKET, MASSACHUSETTS

RTN 4-28219

Prepared for:

Nantucket Memorial Airport
Nantucket, Massachusetts

Prepared by:

WESTON SOLUTIONS, INC.
43 N. Main Street
Concord, New Hampshire 03301

2 July 2020

Work Order No. 15295.001.008

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LIST OF ACRONYMS

ACK	Nantucket Memorial Airport
AFFF	aqueous film-forming foam
CFR	Code of Federal Regulation
CMR	Code of Massachusetts Regulations
Commission	Nantucket Memorial Airport Commission
Disposal Site or Site	14 Airport Road Nantucket, Massachusetts
ELLE	Eurofins Lancaster Laboratories Environmental
email	electronic mail
EPA	United States Environmental Protection Agency
F3	fluorine-free foam
IRA	Immediate Response Action
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
ng/L	nanograms per liter
PFAS	per- and polyfluoroalkyl substances
POET	point-of-entry treatment
QA	Quality Assurance
QC	Quality Control
RTN	Release Tracking Number
WESTON®	Weston Solutions, Inc.

SECTION 1

INTRODUCTION

1. INTRODUCTION

On behalf of the Nantucket Memorial Airport Commission (the "Commission") and the owner and operator of the Nantucket Memorial Airport (ACK), Weston Solutions, Inc. (WESTON®) has prepared this Immediate Response Action (IRA) Status Report for the Disposal Site associated with Release Tracking Number (RTN) 4-28219. This IRA Status Report was prepared in accordance with the Massachusetts Contingency Plan (MCP), 310 Code of Massachusetts Regulations (CMR) 40.0425, and as required by the Massachusetts Department of Environmental Protection (MassDEP). This report is submitted to MassDEP via the online filing system under Transmittal Form BWSC-105 and covers the period from 2 June 2020 to 1 July 2020.

The person or entity assuming responsibility for conducting the IRA is the current owner of the property:

Nantucket Memorial Airport
c/o Mr. Tom Rafter, Airport Manager
14 Airport Road
Nantucket, MA 02554
(508) 325-5300

For the purposes of this report, the "Site" is defined as the area located within the legal property boundaries of 14 Airport Road in Nantucket, Massachusetts (**Figure 1**). The "Disposal Site" for RTN 4-28219 includes additional properties to the south of the airport property (**Figure 2**) where contaminants potentially related to ACK have been identified in groundwater. The extent of the Disposal Site is estimated and will be further defined through investigations to be conducted as part of the Comprehensive Site Assessment.

SECTION 2

DESCRIPTION OF THE SITE AND RELEASE

2. DESCRIPTION OF THE SITE AND RELEASE

2.1 GENERAL DISPOSAL SITE INFORMATION

The Disposal Site includes multiple parcels of land, the majority of which are in use by ACK while the remainder are commercial or residential in nature. The location of the Site is presented on **Figure 1**, and a detailed site plan is presented as **Figure 2**.

The Site is a cleared area that includes runways, taxiways, a fuel farm, numerous buildings related to airport operations (terminal, hangers, maintenance, administration, etc.) and lots occupied by commercial aviation-related tenants. North and west of ACK are residential and commercial properties, while to the east, the land is largely undeveloped. A line of beachfront homes are located to the south, between ACK and the Atlantic Ocean. Wannacomet Water Company supplies municipal water to ACK and many of the surrounding properties. Wannacomet obtains its water from four groundwater supply wells located within the Sole Source Aquifer that underlies the entire island of Nantucket. One private water supply well was identified on ACK property and serves a hangar located north of the ACK administration buildings.

As many as 22 known private drinking water supply wells are located within 500 feet and downgradient (south) of the airport in a residential area along Madequecham Valley Road. These homes are primarily seasonal vacation homes inhabited by adult and child receptors during the summer months.

A second residential area that may be serviced by private drinking water wells is located crossgradient (west) of the airport along Monohansett Road and Okorwaw Avenue. These homes are within close proximity of known aqueous film-forming foam (AFFF) release areas, Runway 6 Runup and South Ramp at Taxiway J (**Figure 2**). It is not known if these homes are also seasonal, or if they are occupied year-round.

2.2 DESCRIPTION OF THE RELEASE

In February 2020, per- and polyfluoroalkyl substances (PFAS) were detected in the drinking water well at a home located on Medequecham Valley Road, south of the Airport, at a concentration exceeding the RCGW-1 criterion. Subsequent sampling has identified additional homes along Medequecham Valley Road that have PFAS in their water supply wells.

At this time, some of these detections are believed to be associated with AFFF that ACK discharged as part of the Federal Aviation Administration-required testing and training events described in detail in the 2020 IRA Plan (WESTON, 2020a). Per 14 Code of Federal Regulation (CFR) §139.315-319, ACK has used AFFF (1) as part of its storage of readiness and reserve; and (2) during required drills, training, testing, and maintenance activities. Under 14 CFR §139.321 and National Fire Protection Association 407, ACK has also stored AFFF for fire suppression readiness at the airport's fuel farm. Aqueous film-forming foam is not believed to have been used for any emergencies at the Airport since at least 1989, and no accidental releases are known to have occurred. Further, as ACK is in the process of switching to fluorine-free foam (F3), any potential release(s) are believed to be historical. ACK has recently taken delivery of an E-1 AFFF testing system for its aircraft rescue and firefighting vehicles, and is in the process of converting its fuel farm fire suppression systems to an F3 system that is anticipated to be completed by May 2021. At this point, no future AFFF release to the environment is anticipated unless as part of a response to an aircraft emergency before the conversion to F3 is completed. A list of known AFFF release events as well as a general location map are provided below. It should be noted that other potential sources of PFAS in groundwater have not yet been properly investigated and therefore cannot be ruled out. Further investigations will be performed as part of future Comprehensive Response Actions to determine the full nature and extent of the PFAS impacts and to identify the source(s).

AFFF Application Area	Approximate Timeframe of Application	Estimated Volume of AFFF Concentrate Applied
RW6 Run-up	1995–2015	25–50 gallons
South Ramp at J	2015–2018	25–50 gallons
Fuel Farm	1998–2013	~200 gallons
South Ramp at B	1995–2015	25–50 gallons
Sand Pit	1989–1994, 2008	150–300 gallons
RW15/33 Midpoint	1989–2013	~625 gallons
Strojny Lot	2015–2019	600–750 gallons
RW24 Approach	1995–2015	275–550 gallons

As mentioned above, the presence of PFAS in groundwater was first confirmed in February 2020 and subsequently reported to MassDEP. Concentrations of PFAS were observed to exceed Category RCGW-1 Reportable Concentrations of 20 nanograms per liter (ng/L) for the six PFAS compounds (perfluoroheptanoic acid, perfluorohexanesulfonic acid, perfluorooctanoic acid, perfluorooctanesulfonic acid, perfluorononanoic acid, and perfluorodecanoic acid) individually or summed in drinking water and hereafter referred to as "PFAS6." This constituted a 2-hour Reportable Condition pursuant to 310 CMR 40.0311(6); where an oil or hazardous material concentration in a private drinking water supply well is present at concentrations equal or exceeding the RCGW-1 criterion, even though the home was unoccupied at the time of sample collection. In response, MassDEP assigned RTN 4-0028219 to this release. MassDEP verbally approved initial IRA activities, including immediately providing bottled water and subsequent design and installation of a point-of-entry treatment (POET) system for the impacted residence. The detection of PFAS in the drinking water supply represents a Critical Exposure Pathway as defined by the MCP. Additional details and the results of this effort can be found in the 2020 IRA Plan (WESTON, 2020a).

Ongoing investigation efforts at the Disposal Site are focused on identifying other private water supply wells that could be impacted by the presence of PFAS in groundwater related to the use of AFFF at the Airport and mitigating any impacts that are discovered. A complicating factor in this effort is that the homes located downgradient of the Airport are seasonal and are being occupied for the summer season at different times.

SECTION 3

ASSESSMENT AND REMEDIAL ACTION STATUS

3. ASSESSMENT AND REMEDIAL ACTION STATUS

The information provided in this section addresses the requirements of the MCP as detailed in 310 CMR 40.0425(3)(a) through (e). Additional details regarding the actions completed previously are outlined below and can be found in the submitted reports, as cited.

3.1 STATUS OF ASSESSMENT ACTIVITIES

Additional drinking water sampling events were conducted 3–4 June 2020 and 11 June 2020. Installation of POET systems occurred at three residences between 10 and 12 June 2020. The following table lists the status of activities completed during this reporting period.

Location IDs	Initial Sample Date (2020)	PFAS6 >20ng/L	POET System Required	POET System Installation	Receiving Bottled Water
XA	5/6	Yes	Yes	6/10/2020	Yes
DX	5/6	No	No	N/A	Yes
CC	Current contact information unavailable				
FM	6/3	Yes	Yes	Pending	Yes
AW	Owner unresponsive. Access agreement received.				
EV	6/11	Yes	Yes	Pending	Yes
GJ	6/3	No	No	N/A	Yes
JQ	Owner unresponsive				
NU	Owner unresponsive				
BI	Owner unresponsive				
SK	6/3	Non-detect	No	N/A	No
WG	6/3	Non-detect	No	N/A	No
RN	Owner requested later sampling date				
HL	6/3	Non-detect	No	N/A	No
PR	6/3	No	No	N/A	Yes
QO	5/6	Yes	Yes	6/11/2020	Yes
MP	6/11	No	No	N/A	Yes
KH	6/3	Yes	Yes	Pending	Yes[1]
TD	6/11	Yes	Yes	Pending	Yes
VT	Owner unresponsive				
UE	5/6	Yes	Yes	5/6/2020	Yes
IB	5/6	Yes	Yes	6/12/2020	Yes

NOTES AND DEFINITIONS:
[1]Resident initially declined bottled water. Bottled water was delivered on 30 June 2020 at the residents request.
POET = point-of-entry treatment system
N/A = POET system is not required.

Between 10 and 12 June 2020, WESTON oversaw the installation of the POET systems at Properties XA, QO, and IB. The POET systems are comprised of a whole house sediment filter followed by two in-line, 65-inch-tall ion exchange resin absorbers, each containing 4 cubic feet of adsorptive media, a flow totalizer, and a flow restrictor. The resin vessels are located in an interior closet at Property XA, in the crawl space at Property QO, and in the basement at Property IB. Sample ports were installed at locations prior to the first vessel (raw water from the well), between the first and second vessel (partially treated), and after the treatment system (finished water for consumption) to allow for development of a breakthrough curve for each system during the maintenance and monitoring period. Post-installation confirmatory samples will be collected after a minimum of one week of use and is anticipated to occur in July 2020.

WESTON completed sampling of drinking water supplies for PFAS at 10 additional residences during the reporting period as indicated in the table above. The drinking water sampling procedure included purging the water from the supply well via an unfiltered inside tap or exterior water spigot for 15 to 20 minutes to clear the water pipes and confirm multiple pump cycles. The samples were packed in an ice-filled cooler and submitted under standard chain-of-custody procedures to Eurofins Lancaster Laboratories Environmental (ELLE) for analysis of PFAS via United States Environmental Protection Agency (EPA) Method 537 Version 1.1.

In an effort to expedite the potential POET design and installation process and where access to the interior of the home was granted, site evaluations for the purpose of designing and sizing the potential POET systems were also conducted. Site evaluations were completed at nine of the 10 residences sampled. In addition to assessing the specifications of the well (i.e., yield) and potential system location information, a water supply sample was collected in duplicate for analysis of water quality parameters including various metals, bacteria, etc. A site evaluations was not completed at Property KH, at the property owner's request.

During this reporting period, PFAS were detected in drinking water at concentrations exceeding RCGW-1 standards at Properties FM, EV, KH, and TD (**Table 1** and **Figure 3** and **Figure 4)**. Immediately upon identification of drinking water PFAS concentrations, the affected residents were notified via electronic mail (email) of the analytical results and instructed to cease use of the water for consumptive purposes and advised to limit shower duration and frequency, where

applicable. WESTON arranged for free delivery of bottled water to properties not previously receiving bottled water. Subsequently, written letters were emailed to the respective property owners summarizing the analytical results, providing a copy of the laboratory analytical report specific to each residence, and whom to contact with questions.

The next drinking water sampling event has been tentatively scheduled for July 2020 and will include confirmation samples at newly installed POET systems at Properties XA, QO, and IB and at as many of the remaining homes along Madequecham Valley Road as possible based on resident occupancy and receipt of signed Access Agreements.

3.1.1 Field Quality Assurance and Quality Control

Quality assurance (QA) and quality control (QC) sampling was conducted during the sampling event. Field blanks were collected using laboratory-provided sample containers and PFAS-free deionized water. The field blanks were prepared in the field and accompanied the drinking water samples in the same cooler. Trip blanks provided by the laboratory were maintained in the same cooler as the drinking water samples. Per- and polyfluoroalkyl substances were not detected in any field QA/QC sample. Duplicates have been collected at a frequency of one duplicate per 10 samples or one per field event at minimum.

3.2 NOTIFICATION TO RESIDENTS AND ACCESS AGREEMENTS

Since the IRA Status Report No. 1 (WESTON, 2020b), signed access agreements have been received from three (3) additional property owners leaving a total of five (5) access agreements remaining to be obtained. Of these five, updated contact information has been obtained for one and the informational package resent; three have received the information packages (confirmed via certified receipts), but have not returned the access agreement or made contact with WESTON or ACK; and one is amenable to us sampling at a future date, but has not returned the signed agreement.

3.3 SIGNIFICANT NEW SITE INFORMATION

No significant new Site information has been obtained beyond that discussed elsewhere in this document.

3.4 MANAGEMENT OF REMEDIATION WASTE

No remediation waste has been generated at the Site during the period of performance covered by this IRA Status Report.

3.5 CONCLUSIONS AND LICENSED SITE PROFESSIONAL OPINION

This IRA is being conducted in response to the detection of PFAS in groundwater and drinking water representing an Imminent Hazard condition at a Critical Exposure Pathway. Mitigation measures for affected residences with total PFAS6 concentrations above 20 ng/L are being taken; including provision of bottled water and installation of POET systems. Three additional POET systems were installed at Properties XA, QO, and IB during this reporting period. Four (4) additional POET systems are needed based on results obtained during this reporting period and those systems are being designed and scheduled for installation. Bottled water is currently being provided to all residents with detectable concentrations of PFAS6, even if below 20 ng/L unless declined by the resident.

Under the Licensed Site Professional of record (James J. Soukup, #5888), this IRA Plan was prepared in accordance with 310 CMR 40.0411, 40.0414, and 40.0425. His seal and signature are included on the Immediate Response Action Transmittal Form BWSC-105 submitted concurrently with this IRA Plan via the eDEP online filing system.

SECTION 4

REFERENCES

4. REFERENCES

14 C.F.R. §139.315-319 and §139.321

Federal Aviation Administration, 2006. *National Part 139 CertAlert No. 16-05: Update on Mil-Spec Aqueous Film Forming Foam (AFFF).* September 1.

Massachusetts Department of Environmental Protection (MassDEP). 2014. *310 CMR 40: Massachusetts Contingency Plan.* April 25.

MassDEP Bureau of Waste Site Cleanup, Phase I Site Assessment Map. http://maps.massgis.state.ma.us/images/dep/mcp/mcp.htm. Accessed April 13, 2020.

Town and County of Nantucket. *Online GIS Maps*. https://www.nantucket-ma.gov/151/GIS-Maps. Accessed March and April 2020.

Weston Solutions, Inc. (WESTON). 2020a. *Immediate Response Action Plan. Nantucket Memorial Airport, 14 Airport Road, Nantucket, Massachusetts. RTN 4-28219*. April 29.

WESTON. 2020b. *Immediate Response Action Status Report No. 1. Nantucket Memorial Airport, 14 Airport Road, Nantucket, Massachusetts. RTN 4-28219*. June 2.

FIGURES

SCALE:

0 5,000 10,000 20,000

Feet

TITLE:

NANTUCKET MEMORIAL AIRPORT
SITE LOCATION MAP

PROJECT:
NANTUCKET MEMORIAL AIRPORT
14 AIRPORT RD, NANTUCKET, MA 02554

CLIENT NAME:
NANTUCKET MEMORIAL AIRPORT

WESTON SOLUTIONS

DATE:
4/15/2020

FIGURE #:
1

Source:
1. MassGIS Data: USGS Color Ortho Imagery (2013/2014)

Legend

- Drinking Water Well
- Monitoring Well
- Gate
- Site Fence
- Known AFFF Release Areas
- RWY 12 Runway
- A Taxiway
- Estimated Disposal Site Boundary

SCALE: 800 400 0 800 Feet

NANTUCKET MEMORIAL AIRPORT SITE MAP

PROJECT: NANTUCKET MEMORIAL AIRPORT
14 AIRPORT RD, NANTUCKET, MA 02554

CLIENT NAME: NANTUCKET MEMORIAL AIRPORT COMMISSION

WESTON SOLUTIONS SM

DATE: 4/20/2020

FIGURE #: 2

Path: P:\Nantucket_Airport\mxd\25288_NMA_Site_Map.mxd

Property UE	6/4/2020
PFHpA	65
PFOA	11
PFNA	5.3
PFDA	2.2
PFHxS	39
PFOS	49
∑PFAS6	172

ACK-01	2/18/2020
PFHpA	1.4J
PFOA	1.3J
PFNA	<0.42
PFDA	<0.42
PFHxS	57
PFOS	1.9
∑PFAS6	62

ACK-11	2/17/2020
PFHpA	3.2
PFOA	5.6
PFNA	0.96J
PFDA	0.47J
PFHxS	54
PFOS	36
∑PFAS6	100.2

Property TD	6/11/2020
PFHpA	90
PFOA	69
PFNA	22
PFDA	<1.8
PFHxS	700
PFOS	230
∑PFAS6	1,111

Property IB	5/6/2020
PFHpA	88
PFOA	20
PFNA	15
PFDA	2.0
PFHxS	26
PFOS	81
∑PFAS6	232

Property MP	6/11/2020
PFHpA	<1.8
PFOA	<1.8
PFNA	<1.8
PFDA	<1.8
PFHxS	5.0
PFOS	<1.8
∑PFAS6	5

Property KH	6/3/2020
PFHpA	41
PFOA	32
PFNA	3.7
PFDA	<1.8
PFHxS	410
PFOS	600
∑PFAS6	1,087

Property PR	6/4/2020
PFHpA	<1.8
PFOA	<1.8
PFNA	<1.8
PFDA	<1.8
PFHxS	5.3
PFOS	4.7
∑PFAS6	10

Property QO	5/6/2020
PFHpA	42
PFOA	300
PFNA	0.53J
PFDA	<0.43
PFHxS	400
PFOS	8.5
∑PFAS6	751

Property HL	6/4/2020
PFHpA	<1.8
PFOA	<1.8
PFNA	<1.8
PFDA	<1.8
PFHxS	<1.8
PFOS	<1.8
∑PFAS6	ND

Property WG	6/3/2020
PFHpA	<1.7
PFOA	<1.7
PFNA	<1.7
PFDA	<1.7
PFHxS	<1.7
PFOS	<1.7
∑PFAS6	ND

Property SK	6/3/2020
PFHpA	<1.8
PFOA	<1.8
PFNA	<1.8
PFDA	<1.8
PFHxS	<1.8
PFOS	<1.8
∑PFAS6	ND

Property GJ	6/4/2020
PFHpA	2.0
PFOA	2.3
PFNA	<1.7
PFDA	<1.7
PFHxS	6.5
PFOS	4.8
∑PFAS6	16

Property EV	6/11/2020
PFHpA	6.2
PFOA	2.7
PFNA	<1.8
PFDA	<1.8
PFHxS	12
PFOS	7.6
∑PFAS6	29

Property XA	5/6/2020
PFHpA	3.7
PFOA	7.5
PFNA	<0.43
PFDA	<0.43
PFHxS	87
PFOS	530
∑PFAS6	628

Property DX	5/6/2020
PFHpA	<0.43
PFOA	<0.43
PFNA	<0.43
PFDA	<0.43
PFHxS	4.8
PFOS	6.2
∑PFAS6	11

Property FM	6/3/2020
PFHpA	2.4
PFOA	<1.8
PFNA	<1.8
PFDA	<1.8
PFHxS	5.8
PFOS	14
∑PFAS6	22

ACK-09	2/17/2020
PFHpA	<0.43
PFOA	<0.43
PFNA	<0.43
PFDA	<0.43
PFHxS	5.6
PFOS	2.9
∑PFAS6	8.5

ACK-08	2/17/2020
PFHpA	<0.43
PFOA	<0.43
PFNA	<0.43
PFDA	<0.43
PFHxS	<0.43
PFOS	<0.43
∑PFAS6	ND

ACK-06	2/18/2020
Well dry. No sample.	

Source:
MassGIS Data: USGS Color Ortho Imagery (2013/2014)

Notes and definitions:
Results are reported in parts per trillion (ppt).
PFAS6 = Massachusetts Department of Environmental Protection (MassDEP) regulates a total of six PFAS compounds whose acronyms are defined below.
MassDEP DW/GW-1 criteria are 20 ppt for the individual compound or sum of the six.
PFHpA = Perfluoroheptanoic Acid (CAS No. 375-85-0)
PFOA = Perfluorooctanoic Acid (CAS No. 335-67-1)
PFNA = Perfluorononanoic Acid (CAS No. 375-95-1)
PFDA = Perfluorodecanoic Acid (CAS No. 335-76-2)
PFHxS = Perfluorohexanesulfonic Acid (CAS No. 355-46-4)
PFOS = Perfluorooctanesulfonic Acid (CAS No. 1763-23-1)
<1.8 = Compound not detected.
Bold font indicates detection.
Gray shading indicates PFAS compound exceeds its individual standard.
Duplicates are not depicted on this figure.

Legend

- Drinking Water Well
- Monitoring Well
- Gate
- Site Fence
- Known AFFF Release Areas
- RWY 12 Runway
- A Taxiway

Location ID	DW/GW-1
PFHpA	20
PFOA	20
PFNA	20
PFDA	20
PFHxS	20
PFOS	20
∑PFAS6	20

∑PFAS6 Results
ND
>ND & <20
>20 & <200
>200

SCALE: 1,000 500 0 1,000 Feet

PROJECT: NANTUCKET MEMORIAL AIRPORT
14 AIRPORT RD, NANTUCKET, MA 02554

CLIENT NAME: NANTUCKET MEMORIAL AIRPORT

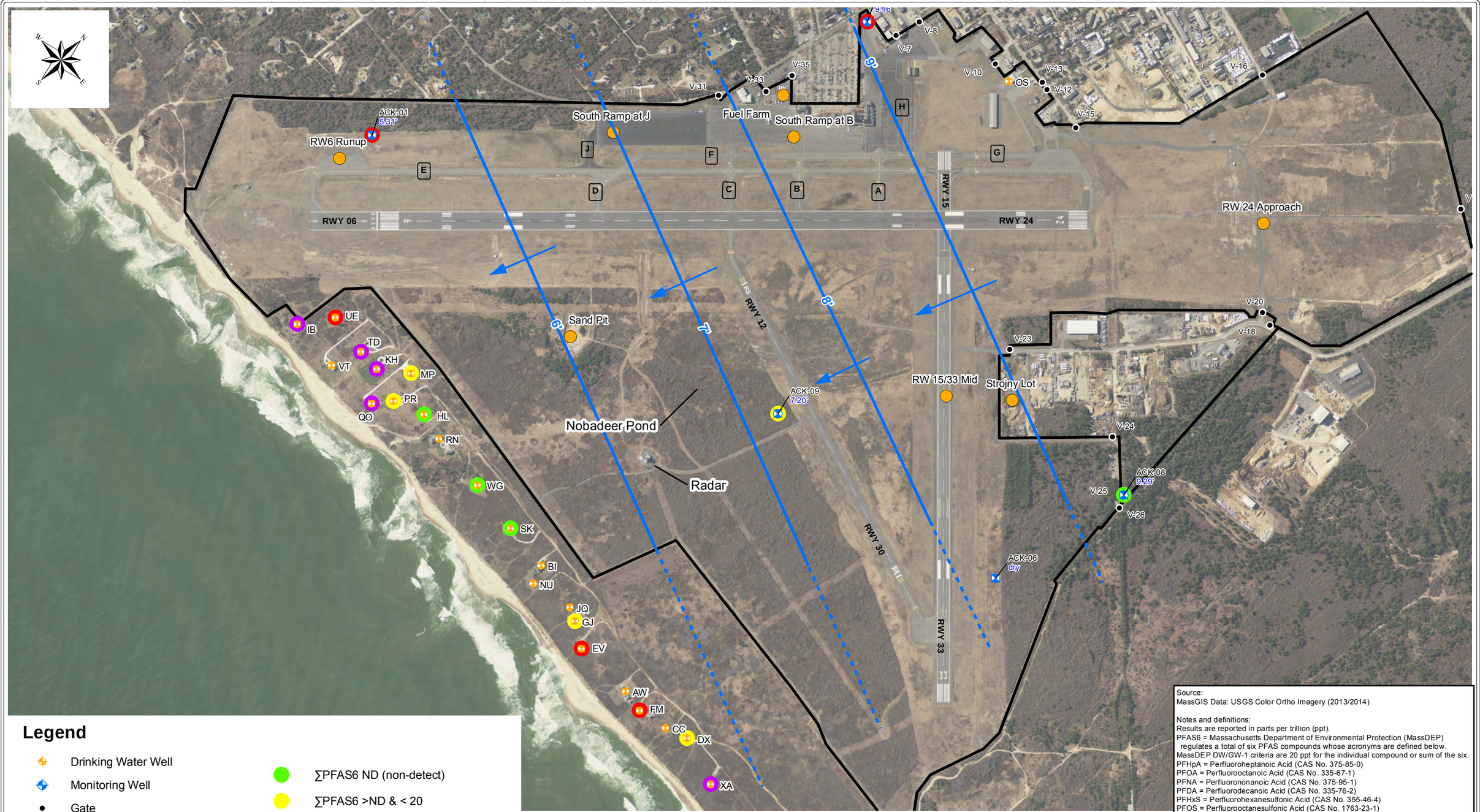
TITLE: PER- AND POLYFLUOROALKYL SUBSTANCES IN GROUNDWATER AND DRINKING WATER

WESTON SOLUTIONS SM

DATE: July 2020

FIGURE #: 3

Path: P:\Nantucket_Airport\mxd\25717_NMA_Results_Map.mxd



Legend

- Drinking Water Well
- Monitoring Well
- Gate
- Site Fence
- Known AFFF Release Areas
- **RWY 12** Runway
- A Taxiway
- 7.20' February 2020 Groundwater Elevation (feet)
- ∑PFAS6 ND (non-detect)
- ∑PFAS6 >ND & < 20
- ∑PFAS6 >20 & <200
- ∑PFAS6 > 200
- February 2020 Groundwater Elevation Contour (dashed where inferred)
- Groundwater Flow Direction

Source:
MassGIS Data: USGS Color Ortho Imagery (2013/2014)

Notes and definitions:
Results are reported in parts per trillion (ppt).
PFAS6 = Massachusetts Department of Environmental Protection (MassDEP) regulates a total of six PFAS compounds whose acronyms are defined below.
MassDEP DW/GW-1 criteria are 20 ppt for the individual compound or sum of the six.
PFHpA = Perfluoroheptanoic Acid (CAS No. 375-85-0)
PFOA = Perfluorooctanoic Acid (CAS No. 335-67-1)
PFNA = Perfluorononanoic Acid (CAS No. 375-95-1)
PFDA = Perfluorodecanoic Acid (CAS No. 335-76-2)
PFHxS = Perfluorohexanesulfonic Acid (CAS No. 355-46-4)
PFOS = Perfluorooctanesulfonic Acid (CAS No. 1763-23-1)

SCALE: 1,000 500 0 1,000 Feet

PROJECT: NANTUCKET MEMORIAL AIRPORT
14 AIRPORT RD, NANTUCKET, MA 02554

CLIENT NAME: NANTUCKET MEMORIAL AIRPORT

GROUNDWATER POTENTIOMETRIC SURFACE AND PFAS CONCENTRATIONS IN GROUNDWATER AND DRINKING WATER

WESTON SOLUTIONS SM

DATE: July 2020

FIGURE #: 4

Path: P:\Nantucket_Airport\mxd\25718_NMA_PFAS_Potentiometric.mxd

TABLES

Table 1
Summary of Per- and Polyfluoroalkyl Substances Detections in Drinking Water
Nantucket Memorial Airport
14 Airport Road, Nantucket, MA 02554
Release Tracking Number 4-28219

			Sample Location ID		Property XA (12 MVR)	Property DX (16 MVR)	Property FM (20 MVR)	Property EV (26 MVR)	Property GJ (28 MVR)	Property SK (40 MVR)	Property WG (44 MVR)	Property HL (48 MVR)	Property PR (50 MVR)	Property QO (50R MVR)	Property MP (51 MVR)	Property KH (52 MVR)
	Sample Date	CAS No.	DW (ng/L)	GW-1 (ng/L)	5/6/2020	5/6/2020	6/3/2020	6/11/2020	6/4/2020	6/3/2020	6/3/2020	6/4/2020	6/4/2020	5/6/2020	6/11/2020	6/3/2020
Carboxylic Acids (ng/L)	**Perfluorohexanoic Acid (PFHxA) [6]**	307-24-4	na	na	**9.5**	<0.43	**7.9**	**47**	**5.7**	<1.8	<1.7	<1.8	<1.8	**410**	<1.8	**94**
	Perfluoroheptanoic Acid (PFHpA) [7]	375-85-9	20	20	**3.7**	<0.43	**2.4**	**6.2**	**2.0**	<1.8	<1.7	<1.8	<1.8	**42**	<1.8	**41**
	Perfluoro-Octanoic Acid (PFOA) [8]	335-67-1	20	20	**7.5**	<0.43	<1.8	**2.7**	**2.3**	<1.8	<1.7	<1.8	<1.8	**300**	<1.8	**32**
	Perfluorononanoic Acid (PFNA) [9]	375-95-1	20	20	<0.43	<0.43	<1.8	<1.8	<1.7	<1.8	<1.7	<1.8	<1.8	**0.53J**	<1.8	**3.7**
	Perfluorodecanoic Acid (PFDA) [10]	335-76-2	20	20	<0.43	<0.43	<1.8	<1.8	<1.7	<1.8	<1.7	<1.8	<1.8	<0.43	<1.8	<1.8
Sulfonates / Sulfonic Acids (ng/L)	**Perfluorobutanesulfonic Acid (PFBS) [4S]**	375-73-5	na	na	**11**	<0.43	<1.8	**3.1**	<1.7	<1.8	<1.7	<1.8	<1.8	**140**	<1.8	**38**
	Perfluorohexanesulfonic Acid (PFHxS) [6S]	355-46-4	20	20	**87**	**4.8**	**5.8**	**12**	**6.5**	<1.8	<1.7	<1.8	**5.3**	**400**	**5.0**	**410**
	Perfluorooctanesulfonic Acid (PFOS) [8S]	1763-23-1	20	20	**530**	**6.2**	**14**	**7.6**	**4.8**	<1.8	<1.7	<1.8	**4.7**	**8.5**	<1.8	**600**
Parameter Calculations	**Total of PFAS6 Compounds**	na	20	20	**628**	**11**	**22**	**29**	**16**	ND	ND	ND	**10**	**751**	**5**	**1087**
	Total Measured PFAS	na	na	na	**649**	**11**	**30**	**79**	**19**	ND	ND	ND	**10**	**1301**	**5**	**1219**
	% PFAS6 Compounds vs. Total PFAS	na	na	na	96.8%	100.0%	73.8%	36.3%	82.1%	na	na	na	100.0%	57.7%	100.0%	89.2%

Definitions:

[4] = Number of fluorinated carbon chains for perfluorinated carboxylic acids

[4S] = Number of fluorinated carbon chains for perfluorinated sulfonates

ng/L = nanogram per liter, equivalent to parts per trillion

CAS No. = Chemical Abstract Service registry number

na = not applicable/standard has not been established

-- = Analysis not conducted

MVR = Madequecham Valley Road

PFAS = per- and polyfluoroalkyl substances

ND = Not detected

J = Estimated value is greater than or equal to the Method Detection Limit and less than the Limit of Quantitation

DUP = duplicate sample

PFAS6 = Massachusetts Department of Environmental Protection regulates six PFAS compounds including PFHpA, PFOA, PFNA, PFDA, PFHxS, and PFOS.

Notes:

Bold font indicates compound detected above the laboratory reporting limit.

Gray shading indicates detected concentration meets or exceeds GW-1.

Table 1
Summary of Per- and Polyfluoroalkyl Substances Detections in Drinking Water
Nantucket Memorial Airport
14 Airport Road, Nantucket, MA 02554
Release Tracking Number 4-28219

				Sample Location ID	Property TD (54 MVR)	Property UE (60 MVR)					Property IB (100 MVR)	*Field Quality Control Samples*	BLIND DUPLICATES		
						2/18/2020	2/18/2020 (DUP)	Pre POET	Mid POET	Post POET			QA-01	QA-02	QA-03
	Sample Date	CAS No.	DW (ng/L)	GW-1 (ng/L)	6/11/2020			6/4/2020	6/4/2020	6/4/2020	5/6/2020		5/6/2020	6/4/2020	6/11/2020
Carboxylic Acids (ng/L)	**Perfluorohexanoic Acid (PFHxA) [6]**	307-24-4	na	na	**230**	**160**	**170**	**200**	<2.1	<2.0	**99**		**430**	<1.8	<1.8
	Perfluoroheptanoic Acid (PFHpA) [7]	375-85-9	20	20	**90**	**56**	**55**	**65**	<2.1	<2.0	**88**		**45**	<1.8	<1.8
	Perfluoro-Octanoic Acid (PFOA) [8]	335-67-1	20	20	**69**	**11**	**11**	**11**	<2.1	<2.0	**20**		**300**	<1.8	<1.8
	Perfluorononanoic Acid (PFNA) [9]	375-95-1	20	20	**22**	**5.6**	**5.5**	**5.3**	<2.1	<2.0	**15**		**0.57J**	<1.8	<1.8
	Perfluorodecanoic Acid (PFDA) [10]	335-76-2	20	20	<1.8	**2.3**	**2.4**	**2.2**	<2.1	<2.0	**2.0**		<0.43	<1.8	<1.8
Sulfonates / Sulfonic Acids (ng/L)	**Perfluorobutanesulfonic Acid (PFBS) [4S]**	375-73-5	na	na	**48**	**2.3**	**2.4**	**2.3**	<2.1	<2.0	**1.6J**		**140**	<1.8	<1.8
	Perfluorohexanesulfonic Acid (PFHxS) [6S]	355-46-4	20	20	**700**	**37**	**39**	**39**	<2.1	<2.0	**26**		**410**	**5.2**	**5.1**
	Perfluorooctanesulfonic Acid (PFOS) [8S]	1763-23-1	20	20	**230**	**48**	**50**	**49**	<2.1	<2.0	**81**		**9.1**	**4.9**	<1.8
Parameter Calculations	**Total of PFAS6 Compounds**	na	20	20	**1111**	**160**	**163**	**172**	ND	ND	**232**		**765**	**10**	**5**
	Total Measured PFAS	na	na	na	**1389**	**322**	**335**	**374**	ND	ND	**333**		**1335**	**10**	**5**
	% PFAS6 Compounds vs. Total PFAS	na	na	na	80.0%	49.6%	48.6%	45.9%	na	na	69.8%		57.3%	100.0%	100.0%

Definitions:

[4] = Number of fluorinated carbon chains for perfluorinated carboxylic acids

[4S] = Number of fluorinated carbon chains for perfluorinated sulfonates

ng/L = nanogram per liter, equivalent to parts per trillion

CAS No. = Chemical Abstract Service registry number

na = not applicable/standard has not been established

-- = Analysis not conducted

MVR = Madequecham Valley Road

PFAS = per- and polyfluoroalkyl substances

ND = Not detected

J = Estimated value is greater than or equal to the Method Detection Limit and less than the Limit of Quantitation

DUP = duplicate sample

PFAS6 = Massachusetts Department of Environmental Protection regulates six PFAS compounds including PFHpA, PFOA, PFNA, PFDA, PFHxS, and PFOS.

Notes:

Bold font indicates compound detected above the laboratory reporting limit.

Gray shading indicates detected concentration meets or exceeds GW-1.

Table 1
Summary of Per- and Polyfluoroalkyl Substances Detections in Drinking Water
Nantucket Memorial Airport
14 Airport Road, Nantucket, MA 02554
Release Tracking Number 4-28219

				Sample Location ID		FIELD BLANK				TRIP BLANK			
	Sample Date	CAS No.	DW (ng/L)	GW-1 (ng/L)		2/17/2020 (Kanarek)	5/6/2020 (Woodman)	6/3/2020 (Kanarek)	6/11/2020 (Kenney)	2/11/2020	5/6/2020	6/4/2020	6/11/2020
Carboxylic Acids (ng/L)	**Perfluorohexanoic Acid (PFHxA) [6]**	307-24-4	na	na	***Field Quality Control Samples (concluded)***	<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluoroheptanoic Acid (PFHpA) [7]	375-85-9	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluoro-Octanoic Acid (PFOA) [8]	335-67-1	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluorononanoic Acid (PFNA) [9]	375-95-1	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluorodecanoic Acid (PFDA) [10]	335-76-2	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
Sulfonates / Sulfonic Acids (ng/L)	**Perfluorobutanesulfonic Acid (PFBS) [4S]**	375-73-5	na	na		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluorohexanesulfonic Acid (PFHxS) [6S]	355-46-4	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
	Perfluorooctanesulfonic Acid (PFOS) [8S]	1763-23-1	20	20		<0.42	<0.45	<1.8	<1.9	<0.46	<0.46	<1.9	<1.9
Parameter Calculations	**Total of PFAS6 Compounds**	na	20	20		ND	ND	ND	ND	ND	ND	ND	ND
	Total Measured PFAS	na	na	na		ND	ND	ND	ND	ND	ND	ND	ND
	% PFAS6 Compounds vs. Total PFAS	na	na	na		na	na	na	na	na	na	na	na

Definitions:

[4] = Number of fluorinated carbon chains for perfluorinated carboxylic acids

[4S] = Number of fluorinated carbon chains for perfluorinated sulfonates

ng/L = nanogram per liter, equivalent to parts per trillion

CAS No. = Chemical Abstract Service registry number

na = not applicable/standard has not been established

-- = Analysis not conducted

MVR = Madequecham Valley Road

PFAS = per- and polyfluoroalkyl substances

ND = Not detected

J = Estimated value is greater than or equal to the Method Detection Limit and less than the Limit of Quantitation

DUP = duplicate sample

PFAS6 = Massachusetts Department of Environmental Protection regulates six PFAS compounds including PFHpA, PFOA, PFNA, PFDA, PFHxS, and PFOS.

Notes:

Bold font indicates compound detected above the laboratory reporting limit.

Gray shading indicates detected concentration meets or exceeds GW-1.

APPENDIX A

LABORATORY ANALYTICAL DATA

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 410-3640-1
Client Project/Site: Nantucket
Revision: 1

For:
Weston Solutions, Inc.
43 North Main Street
Concord, New Hampshire 03301

Attn: Ms. Lisa Kammer

Elizabeth M. Zanar

Authorized for release by:
6/23/2020 5:12:10 PM

Elizabeth Zanar, Project Manager
(717)556-7290
elizabethmzanar@eurofinsus.com

LINKS

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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 recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. 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.

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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. 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 LANACASTER 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. 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.

Elizabeth Zanar
Project Manager
6/23/2020 5:12:10 PM

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Definitions/Glossary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Job ID: 410-3640-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-3640-1

REVISION

The report being provided is a revision of the original report sent on 6/8/2020. The report (revision 1) is being revised due to a change in Formatter.

Receipt
The samples were received on 6/6/2020 9:36 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 3.0°C

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

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: SK-BFCT-060320 — Lab Sample ID: 410-3640-1

No Detections.

Client Sample ID: FB-060320 — Lab Sample ID: 410-3640-2

No Detections.

Client Sample ID: FM-SPGT-060320 — Lab Sample ID: 410-3640-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	7.9		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid	2.4		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid	5.8		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	14		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: KH-SPGT-060320 — Lab Sample ID: 410-3640-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	94		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid	41		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanoic acid	32		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorononanoic acid	3.7		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorobutanesulfonic acid	38		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid	410		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	600		18		ng/L	10		EPA 537 Ver 1.1	Total/NA

Client Sample ID: WG-SPGT-060320 — Lab Sample ID: 410-3640-5

No Detections.

Client Sample ID: HL-PT-060420 — Lab Sample ID: 410-3640-6

No Detections.

Client Sample ID: GJ-SPGT-060420 — Lab Sample ID: 410-3640-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	5.7		1.7		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid	2.0		1.7		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanoic acid	2.3		1.7		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid	6.5		1.7		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	4.8		1.7		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: UE-0620-EFF — Lab Sample ID: 410-3640-8

No Detections.

Client Sample ID: UE-0620-MID — Lab Sample ID: 410-3640-9

No Detections.

Client Sample ID: UE-0620-INF — Lab Sample ID: 410-3640-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	200		20		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid	65		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanoic acid	11		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorononanoic acid	5.3		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorodecanoic acid	2.2		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: UE-0620-INF (Continued) — Lab Sample ID: 410-3640-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid	2.3		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid	39		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	49		2.0		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: PR-SPGT-060420 — Lab Sample ID: 410-3640-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid	5.3		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	4.7		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: QA02-0620 — Lab Sample ID: 410-3640-12

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid	5.2		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	4.9		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 410-3640-13

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: SK-BFCT-060320

Lab Sample ID: 410-3640-1

Date Collected: 06/03/20 11:40

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorohexanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorooctanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*90*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:13*	*1*
13C2 PFDA	*92*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:13*	*1*
13C2 PFHxA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:13*	*1*

Client Sample ID: FB-060320

Lab Sample ID: 410-3640-2

Date Collected: 06/03/20 11:30

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorohexanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorooctanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*99*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:24*	*1*
13C2 PFDA	*91*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:24*	*1*
13C2 PFHxA	*95*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:24*	*1*

Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: FM-SPGT-060320

Date Collected: 06/03/20 13:55
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-3

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**7.9**		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluoroheptanoic acid	**2.4**		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorohexanesulfonic acid	**5.8**		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorooctanesulfonic acid	**14**		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:36*	*1*
13C2 PFDA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:36*	*1*
13C2 PFHxA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:36*	*1*

Client Sample ID: KH-SPGT-060320

Date Collected: 06/03/20 14:50
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-4

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**94**		18		ng/L		06/09/20 16:40	06/15/20 13:48	10
Perfluoroheptanoic acid	**41**		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorooctanoic acid	**32**		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorononanoic acid	**3.7**		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorobutanesulfonic acid	**38**		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorohexanesulfonic acid	**410**		18		ng/L		06/09/20 16:40	06/15/20 13:48	10
Perfluorooctanesulfonic acid	**600**		18		ng/L		06/09/20 16:40	06/15/20 13:48	10
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:47*	*1*
d5-NEtFOSAA	*93*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:48*	*10*
13C2 PFDA	*89*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:47*	*1*
13C2 PFDA	*96*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:48*	*10*
13C2 PFHxA	*92*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:47*	*1*
13C2 PFHxA	*89*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:48*	*10*

Client Sample ID: WG-SPGT-060320

Lab Sample ID: 410-3640-5

Date Collected: 06/03/20 16:05

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluoroheptanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorooctanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorononanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorodecanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorotridecanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorotetradecanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorobutanesulfonic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorohexanesulfonic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorooctanesulfonic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
NEtFOSAA	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
NMeFOSAA	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluoroundecanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1
Perfluorododecanoic acid	<1.7		1.7		ng/L		06/09/20 16:40	06/11/20 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*92*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:59*	*1*
13C2 PFDA	*91*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:59*	*1*
13C2 PFHxA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 02:59*	*1*

Client Sample ID: HL-PT-060420

Lab Sample ID: 410-3640-6

Date Collected: 06/04/20 08:35

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorohexanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorooctanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*91*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:10*	*1*
13C2 PFDA	*96*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:10*	*1*
13C2 PFHxA	*95*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:10*	*1*

Client Sample ID: GJ-SPGT-060420

Lab Sample ID: 410-3640-7

Date Collected: 06/04/20 10:00

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**5.7**		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluoroheptanoic acid	**2.0**		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorooctanoic acid	**2.3**		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorononanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorodecanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorotridecanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorotetradecanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorobutanesulfonic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorohexanesulfonic acid	**6.5**		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorooctanesulfonic acid	**4.8**		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
NEtFOSAA	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
NMeFOSAA	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluoroundecanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1
Perfluorododecanoic acid	<1.7		1.7	ng/L		06/09/20 16:40	06/11/20 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*88*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:22*	*1*
13C2 PFDA	*88*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:22*	*1*
13C2 PFHxA	*91*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:22*	*1*

Client Sample ID: UE-0620-EFF

Lab Sample ID: 410-3640-8

Date Collected: 06/04/20 11:55

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluoroheptanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorooctanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorononanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorodecanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorotridecanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorotetradecanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorobutanesulfonic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorohexanesulfonic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorooctanesulfonic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
NEtFOSAA	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
NMeFOSAA	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluoroundecanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1
Perfluorododecanoic acid	<2.0		2.0	ng/L		06/09/20 16:40	06/11/20 03:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*95*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:33*	*1*
13C2 PFDA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:33*	*1*
13C2 PFHxA	*99*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:33*	*1*

Client Sample ID: UE-0620-MID

Lab Sample ID: 410-3640-9

Date Collected: 06/04/20 11:57

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluoroheptanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorooctanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorononanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorodecanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorotridecanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorotetradecanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorobutanesulfonic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorohexanesulfonic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorooctanesulfonic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
NEtFOSAA	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
NMeFOSAA	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluoroundecanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1
Perfluorododecanoic acid	<2.1		2.1		ng/L		06/09/20 16:40	06/11/20 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:45*	*1*
13C2 PFDA	*88*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:45*	*1*
13C2 PFHxA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:45*	*1*

Client Sample ID: UE-0620-INF

Lab Sample ID: 410-3640-10

Date Collected: 06/04/20 11:59

Matrix: Water

Date Received: 06/06/20 09:36

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**200**		20		ng/L		06/09/20 16:40	06/15/20 13:57	10
Perfluoroheptanoic acid	**65**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorooctanoic acid	**11**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorononanoic acid	**5.3**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorodecanoic acid	**2.2**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorotridecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorotetradecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorobutanesulfonic acid	**2.3**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorohexanesulfonic acid	**39**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorooctanesulfonic acid	**49**		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
NEtFOSAA	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
NMeFOSAA	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluoroundecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1
Perfluorododecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*100*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:56*	*1*
d5-NEtFOSAA	*94*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:57*	*10*
13C2 PFDA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:56*	*1*
13C2 PFDA	*98*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:57*	*10*
13C2 PFHxA	*92*		*70 - 130*	*06/09/20 16:40*	*06/11/20 03:56*	*1*
13C2 PFHxA	*89*		*70 - 130*	*06/09/20 16:40*	*06/15/20 13:57*	*10*

Client Sample ID: PR-SPGT-060420

Date Collected: 06/04/20 12:50
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-11

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorohexanesulfonic acid	**5.3**		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorooctanesulfonic acid	**4.7**		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*90*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:19*	*1*
13C2 PFDA	*100*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:19*	*1*
13C2 PFHxA	*96*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:19*	*1*

Client Sample ID: QA02-0620

Date Collected: 06/04/20 12:55
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-12

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorohexanesulfonic acid	**5.2**		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorooctanesulfonic acid	**4.9**		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
NEtFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
NMeFOSAA	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/09/20 16:40	06/11/20 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:31*	*1*
13C2 PFDA	*92*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:31*	*1*
13C2 PFHxA	*97*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:31*	*1*

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: TRIP BLANK

Date Collected: 06/04/20 00:00
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-13

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluoroheptanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorooctanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorononanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorodecanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorotridecanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorotetradecanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorobutanesulfonic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorohexanesulfonic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorooctanesulfonic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
NEtFOSAA	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
NMeFOSAA	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluoroundecanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1
Perfluorododecanoic acid	<1.9		1.9		ng/L		06/09/20 16:40	06/11/20 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*97*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:43*	*1*
13C2 PFDA	*99*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:43*	*1*
13C2 PFHxA	*95*		*70 - 130*	*06/09/20 16:40*	*06/11/20 04:43*	*1*

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	d5NEFOS (70-130)	PFDA (70-130)	PFHxA (70-130)						
410-3640-1	SK-BFCT-060320	90	92	94						
410-3640-2	FB-060320	99	91	95						
410-3640-3	FM-SPGT-060320	94	93	93						
410-3640-4	KH-SPGT-060320	93	89	92						
410-3640-4	KH-SPGT-060320	93	96	89						
410-3640-5	WG-SPGT-060320	92	91	94						
410-3640-6	HL-PT-060420	91	96	95						
410-3640-7	GJ-SPGT-060420	88	88	91						
410-3640-8	UE-0620-EFF	95	93	99						
410-3640-9	UE-0620-MID	94	88	94						
410-3640-10	UE-0620-INF	100	93	92						
410-3640-10	UE-0620-INF	94	98	89						
410-3640-11	PR-SPGT-060420	90	100	96						
410-3640-12	QA02-0620	93	92	97						
410-3640-13	TRIP BLANK	97	99	95						
LCS 410-11570/2-A	Lab Control Sample	93	97	95						
LCSD 410-11570/3-A	Lab Control Sample Dup	98	97	96						
MB 410-11570/1-A	Method Blank	93	101	94						

Surrogate Legend

d5NEFOS = d5-NEtFOSAA
PFDA = 13C2 PFDA
PFHxA = 13C2 PFHxA

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Lab Sample ID: MB 410-11570/1-A
Matrix: Water
Analysis Batch: 11962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11570

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluoroheptanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorooctanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorononanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorodecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorotridecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorotetradecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorobutanesulfonic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorohexanesulfonic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorooctanesulfonic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
NEtFOSAA	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
NMeFOSAA	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluoroundecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1
Perfluorododecanoic acid	<2.0		2.0		ng/L		06/09/20 16:40	06/11/20 01:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*93*		*70 - 130*	*06/09/20 16:40*	*06/11/20 01:38*	*1*
13C2 PFDA	*101*		*70 - 130*	*06/09/20 16:40*	*06/11/20 01:38*	*1*
13C2 PFHxA	*94*		*70 - 130*	*06/09/20 16:40*	*06/11/20 01:38*	*1*

Lab Sample ID: LCS 410-11570/2-A
Matrix: Water
Analysis Batch: 11962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorohexanoic acid			80.0	73.2		ng/L		91	70 - 130		
Perfluoroheptanoic acid			80.0	71.7		ng/L		90	70 - 130		
Perfluorooctanoic acid			80.0	74.8		ng/L		94	70 - 130		
Perfluorononanoic acid			80.0	72.9		ng/L		91	70 - 130		
Perfluorodecanoic acid			80.0	70.6		ng/L		88	70 - 130		
Perfluorotridecanoic acid			80.0	71.6		ng/L		90	70 - 130		
Perfluorotetradecanoic acid			80.0	72.3		ng/L		90	70 - 130		
Perfluorobutanesulfonic acid			70.8	63.3		ng/L		89	70 - 130		
Perfluorohexanesulfonic acid			73.0	67.6		ng/L		93	70 - 130		
Perfluorooctanesulfonic acid			74.0	64.9		ng/L		88	70 - 130		
NEtFOSAA			80.0	71.1		ng/L		89	70 - 130		
NMeFOSAA			80.0	71.9		ng/L		90	70 - 130		
Perfluoroundecanoic acid			80.0	73.4		ng/L		92	70 - 130		
Perfluorododecanoic acid			80.0	71.4		ng/L		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
d5-NEtFOSAA	*93*		*70 - 130*
13C2 PFDA	*97*		*70 - 130*
13C2 PFHxA	*95*		*70 - 130*

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 (Continued)

Lab Sample ID: LCSD 410-11570/3-A
Matrix: Water
Analysis Batch: 11962

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid			80.0	73.1		ng/L		91	70 - 130	0	30
Perfluoroheptanoic acid			80.0	73.6		ng/L		92	70 - 130	3	30
Perfluorooctanoic acid			80.0	76.7		ng/L		96	70 - 130	2	30
Perfluorononanoic acid			80.0	71.5		ng/L		89	70 - 130	2	30
Perfluorodecanoic acid			80.0	71.6		ng/L		90	70 - 130	1	30
Perfluorotridecanoic acid			80.0	74.5		ng/L		93	70 - 130	4	30
Perfluorotetradecanoic acid			80.0	77.9		ng/L		97	70 - 130	7	30
Perfluorobutanesulfonic acid			70.8	70.0		ng/L		99	70 - 130	10	30
Perfluorohexanesulfonic acid			73.0	71.8		ng/L		98	70 - 130	6	30
Perfluorooctanesulfonic acid			74.0	70.9		ng/L		96	70 - 130	9	30
NEtFOSAA			80.0	76.4		ng/L		95	70 - 130	7	30
NMeFOSAA			80.0	73.4		ng/L		92	70 - 130	2	30
Perfluoroundecanoic acid			80.0	73.7		ng/L		92	70 - 130	0	30
Perfluorododecanoic acid			80.0	74.4		ng/L		93	70 - 130	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
d5-NEtFOSAA	*98*		*70 - 130*
13C2 PFDA	*97*		*70 - 130*
13C2 PFHxA	*96*		*70 - 130*

QC Association Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

LCMS

Prep Batch: 11570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3640-1	SK-BFCT-060320	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-2	FB-060320	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-3	FM-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-4	KH-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-5	WG-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-6	HL-PT-060420	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-7	GJ-SPGT-060420	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-8	UE-0620-EFF	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-9	UE-0620-MID	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-10	UE-0620-INF	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-11	PR-SPGT-060420	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-12	QA02-0620	Total/NA	Water	EPA 537 Ver 1.1	
410-3640-13	TRIP BLANK	Total/NA	Water	EPA 537 Ver 1.1	
MB 410-11570/1-A	Method Blank	Total/NA	Water	EPA 537 Ver 1.1	
LCS 410-11570/2-A	Lab Control Sample	Total/NA	Water	EPA 537 Ver 1.1	
LCSD 410-11570/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 Ver 1.1	

Analysis Batch: 11962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3640-1	SK-BFCT-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-2	FB-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-3	FM-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-4	KH-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-5	WG-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-6	HL-PT-060420	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-7	GJ-SPGT-060420	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-8	UE-0620-EFF	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-9	UE-0620-MID	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-10	UE-0620-INF	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-11	PR-SPGT-060420	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-12	QA02-0620	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-13	TRIP BLANK	Total/NA	Water	EPA 537 Ver 1.1	11570
MB 410-11570/1-A	Method Blank	Total/NA	Water	EPA 537 Ver 1.1	11570
LCS 410-11570/2-A	Lab Control Sample	Total/NA	Water	EPA 537 Ver 1.1	11570
LCSD 410-11570/3-A	Lab Control Sample Dup	Total/NA	Water	EPA 537 Ver 1.1	11570

Analysis Batch: 13105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3640-4	KH-SPGT-060320	Total/NA	Water	EPA 537 Ver 1.1	11570
410-3640-10	UE-0620-INF	Total/NA	Water	EPA 537 Ver 1.1	11570

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: SK-BFCT-060320
Date Collected: 06/03/20 11:40
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 02:13	Y6ZN	ELLE

Client Sample ID: FB-060320
Date Collected: 06/03/20 11:30
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 02:24	Y6ZN	ELLE

Client Sample ID: FM-SPGT-060320
Date Collected: 06/03/20 13:55
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 02:36	Y6ZN	ELLE

Client Sample ID: KH-SPGT-060320
Date Collected: 06/03/20 14:50
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 02:47	Y6ZN	ELLE
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		10	13105	06/15/20 13:48	AC	ELLE

Client Sample ID: WG-SPGT-060320
Date Collected: 06/03/20 16:05
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 02:59	Y6ZN	ELLE

Client Sample ID: HL-PT-060420
Date Collected: 06/04/20 08:35
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 03:10	Y6ZN	ELLE

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: GJ-SPGT-060420
Lab Sample ID: 410-3640-7
Date Collected: 06/04/20 10:00
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 03:22	Y6ZN	ELLE

Client Sample ID: UE-0620-EFF
Lab Sample ID: 410-3640-8
Date Collected: 06/04/20 11:55
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 03:33	Y6ZN	ELLE

Client Sample ID: UE-0620-MID
Lab Sample ID: 410-3640-9
Date Collected: 06/04/20 11:57
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 03:45	Y6ZN	ELLE

Client Sample ID: UE-0620-INF
Lab Sample ID: 410-3640-10
Date Collected: 06/04/20 11:59
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 03:56	Y6ZN	ELLE
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		10	13105	06/15/20 13:57	AC	ELLE

Client Sample ID: PR-SPGT-060420
Lab Sample ID: 410-3640-11
Date Collected: 06/04/20 12:50
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 04:19	Y6ZN	ELLE

Client Sample ID: QA02-0620
Lab Sample ID: 410-3640-12
Date Collected: 06/04/20 12:55
Matrix: Water
Date Received: 06/06/20 09:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 04:31	Y6ZN	ELLE

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Client Sample ID: TRIP BLANK

Date Collected: 06/04/20 00:00
Date Received: 06/06/20 09:36

Lab Sample ID: 410-3640-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			11570	06/09/20 16:40	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	11962	06/11/20 04:43	Y6ZN	ELLE

Laboratory References:

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

Accreditation/Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-PA009	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	NEtFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	NMeFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorobutanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorodecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorododecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluoroheptanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorohexanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorohexanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorononanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorooctanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorooctanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorotetradecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorotridecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluoroundecanoic acid

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Method	Method Description	Protocol	Laboratory
EPA 537 Ver 1.1	EPA 537 Version 1.1	EPA	ELLE
EPA 537 Ver 1.1	EPA 537 Version 1.1	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: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-3640-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-3640-1	SK-BFCT-060320	Water	06/03/20 11:40	06/06/20 09:36	
410-3640-2	FB-060320	Water	06/03/20 11:30	06/06/20 09:36	
410-3640-3	FM-SPGT-060320	Water	06/03/20 13:55	06/06/20 09:36	
410-3640-4	KH-SPGT-060320	Water	06/03/20 14:50	06/06/20 09:36	
410-3640-5	WG-SPGT-060320	Water	06/03/20 16:05	06/06/20 09:36	
410-3640-6	HL-PT-060420	Water	06/04/20 08:35	06/06/20 09:36	
410-3640-7	GJ-SPGT-060420	Water	06/04/20 10:00	06/06/20 09:36	
410-3640-8	UE-0620-EFF	Water	06/04/20 11:55	06/06/20 09:36	
410-3640-9	UE-0620-MID	Water	06/04/20 11:57	06/06/20 09:36	
410-3640-10	UE-0620-INF	Water	06/04/20 11:59	06/06/20 09:36	
410-3640-11	PR-SPGT-060420	Water	06/04/20 12:50	06/06/20 09:36	
410-3640-12	QA02-0620	Water	06/04/20 12:55	06/06/20 09:36	
410-3640-13	TRIP BLANK	Water	06/04/20 00:00	06/06/20 09:36	

Environmental Analysis Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____

410-3640 Chain of Custody

mental use only

COC #603773

Client Information

Client: WESTON SOLUTIONS INC.	Acct. #: 31222
Project Name/#: NANTUCKET	PWSID #: NA
Project Manager: LISA KAMMER	P.O. #: 0102971
Sampler: CHEYENNE HAVERFIELD	Quote #: 221624A
State where samples were collected: MASSACHUSETTS	For Compliance: Yes ☒ No ☐

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other:	Total # of Containers	Analysis Requested: PFAS in drinking water
SK-BFCT-060320	6/3/20	1140	X					X					2	X
FB-060320	"	1130	X					X					2	X
FM-SPGT-060320	"	1355	X					X					2	X
KH-SPGT-060320	"	1450	X					X					2	X
WG-SPGT-060320	"	1605	X					X					2	X
HL-PT-060420	6/4/20	0835	X					X					2	X
GJ-SPGT-060420	"	1000	X					X					2	X
UE-0620-EFF	"	1155	X					X					2	X
UE-0620-MID	"	1157	X					X					2	X
UE-0620-INF	"	1159	X					X					2	X

Preservation and Filtration Codes: 0

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks
NON CHLORINATED POTABLE WATER

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: LISA.KAMMER@WESTONSOLUTIONS.COM

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature] / Cenny	6/5/20	1315	SEALED COOLER	6/5/20	1315
SEALED COOLER					
			[signature]	6/6/20	9:36

EDD Required? Yes No
If yes, format: EXCEL

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx X Other _____

Temperature upon receipt 3.0 °C

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7044 0919

INM

Environmental Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories Environmental use only

Acct. # _____ Group # _____ Sample # _____

COC #603775

Client Information

Client: WESTON SOLUTIONS INC.	Acct. #: 31222
Project Name/#: NANTUCKET	PWSID #: NA
Project Manager: LISA KAMMER	P.O. #: 0102971
Sampler: CHEYENNE HAVERFIELD	Quote #: 221624A
State where samples were collected: MASSACHUSETTS	For Compliance: Yes ☒ No ☐

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other:	Total # of Containers	Analysis Requested: PFAS in drinking water (Preservation and Filtration Code 0)
PR-SPGT-060420	6/4/20	1250	X					X					2	X
QA02-0620	6/4/20	1255	X					X					2	X
TRIP BLANK	6/4/20	—	X					X					1	X

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes

H=HCl	T=Thiosulfate
N=HNO_3	B=NaOH
S=H_2SO_4	P=H_3PO_4
F=Field Filtered	O=Other

Remarks
NON CHLORINATED POTABLE WATER

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: LISA.KAMMER@WESTONSOLUTIONS.COM

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only)
Type III (Reduced non-CLP) | NJ DKQP | TX TRRP-13
NYSDEC Category A or B | (MA MCP) | CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature]	6/5/20	1315	SEALED COOLER	6/5/20	1315
SEALED COOLER					
			[signature]	6/6/20	9:36

EDD Required? (Yes) No
If yes, format: EXCEL

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx X Other _____

Temperature upon receipt 3.0 °C

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INDM

Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 410-3640-1

Login Number: 3640
List Number: 1
Creator: Mathers, William

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, 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	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

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

Laboratory Job ID: 410-4374-1
Client Project/Site: Nantucket

For:
Weston Solutions, Inc.
43 North Main Street
Concord, New Hampshire 03301

Attn: Ms. Lisa Kammer

Elizabeth M. Zanar

Authorized for release by:
6/30/2020 8:49:12 AM

Elizabeth Zanar, Project Manager
(717)556-7290
elizabethmzanar@eurofinsus.com

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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 data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. 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.

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Elizabeth Zanar
Project Manager
6/30/2020 8:49:12 AM

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Definitions/Glossary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Job ID: 410-4374-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-4374-1

Receipt
The samples were received on 6/13/2020 9:30 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 6.0°C

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

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Client Sample ID: TB-061120 — Lab Sample ID: 410-4374-1

No Detections.

Client Sample ID: FB-061120 — Lab Sample ID: 410-4374-2

No Detections.

Client Sample ID: EV-SPGT-061120 — Lab Sample ID: 410-4374-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid	47		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid	6.2		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanoic acid	2.7		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorobutanesulfonic acid	3.1		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid	12		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid	7.6		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: TD-BFCT-061120 — Lab Sample ID: 410-4374-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid	22		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorobutanesulfonic acid	48		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA
Perfluorohexanoic acid - DL	230		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluoroheptanoic acid - DL	90		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluorooctanoic acid - DL	69		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluorooctanesulfonic acid - DL	230		18		ng/L	10		EPA 537 Ver 1.1	Total/NA
Perfluorohexanesulfonic acid - DL2	700		180		ng/L	100		EPA 537 Ver 1.1	Total/NA

Client Sample ID: MP-SPGT-061120 — Lab Sample ID: 410-4374-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid	5.0		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

Client Sample ID: QA03-0620 — Lab Sample ID: 410-4374-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid	5.1		1.8		ng/L	1		EPA 537 Ver 1.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-061120

Date Collected: 06/11/20 00:00
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-1

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluoroheptanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorooctanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorononanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorodecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorotridecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorotetradecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorobutanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorohexanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorooctanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
NEtFOSAA	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
NMeFOSAA	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluoroundecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1
Perfluorododecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*95*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:41*	*1*
13C2 PFDA	*93*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:41*	*1*
13C2 PFHxA	*98*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:41*	*1*

Client Sample ID: FB-061120

Date Collected: 06/11/20 10:35
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-2

Matrix: Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluoroheptanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorooctanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorononanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorodecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorotridecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorotetradecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorobutanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorohexanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorooctanesulfonic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
NEtFOSAA	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
NMeFOSAA	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluoroundecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1
Perfluorododecanoic acid	<1.9		1.9		ng/L		06/16/20 15:51	06/19/20 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*93*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:50*	*1*
13C2 PFDA	*95*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:50*	*1*
13C2 PFHxA	*102*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:50*	*1*

Client Sample ID: EV-SPGT-061120

Date Collected: 06/11/20 10:40
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-3

Matrix: Drinking Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**47**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluoroheptanoic acid	**6.2**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorooctanoic acid	**2.7**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorobutanesulfonic acid	**3.1**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorohexanesulfonic acid	**12**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorooctanesulfonic acid	**7.6**		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
NEtFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
NMeFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*98*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:59*	*1*
13C2 PFDA	*98*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:59*	*1*
13C2 PFHxA	*103*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:59*	*1*

Client Sample ID: TD-BFCT-061120

Date Collected: 06/11/20 13:25
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-5

Matrix: Drinking Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid	**22**		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluorobutanesulfonic acid	**48**		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
NEtFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
NMeFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*91*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:17*	*1*
13C2 PFDA	*99*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:17*	*1*
13C2 PFHxA	*94*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:17*	*1*

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	**230**		18		ng/L		06/16/20 15:51	06/24/20 00:34	10
Perfluoroheptanoic acid	**90**		18		ng/L		06/16/20 15:51	06/24/20 00:34	10
Perfluorooctanoic acid	**69**		18		ng/L		06/16/20 15:51	06/24/20 00:34	10
Perfluorooctanesulfonic acid	**230**		18		ng/L		06/16/20 15:51	06/24/20 00:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*94*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:34*	*10*
13C2 PFDA	*92*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:34*	*10*

Client Sample ID: TD-BFCT-061120

Lab Sample ID: 410-4374-5

Date Collected: 06/11/20 13:25

Matrix: Drinking Water

Date Received: 06/13/20 09:30

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2 PFHxA	*91*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:34*	*10*

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	**700**		180		ng/L		06/16/20 15:51	06/24/20 00:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*80*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:43*	*100*
13C2 PFDA	*79*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:43*	*100*
13C2 PFHxA	*81*		*70 - 130*	*06/16/20 15:51*	*06/24/20 00:43*	*100*

Client Sample ID: MP-SPGT-061120

Lab Sample ID: 410-4374-6

Date Collected: 06/11/20 14:20

Matrix: Drinking Water

Date Received: 06/13/20 09:30

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorohexanesulfonic acid	**5.0**		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorooctanesulfonic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
NEtFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
NMeFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*91*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:26*	*1*
13C2 PFDA	*97*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:26*	*1*
13C2 PFHxA	*103*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:26*	*1*

Client Sample ID: QA03-0620

Lab Sample ID: 410-4374-7

Date Collected: 06/11/20 14:25

Matrix: Drinking Water

Date Received: 06/13/20 09:30

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluoroheptanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorooctanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorononanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorodecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorotridecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorotetradecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorobutanesulfonic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Client Sample ID: QA03-0620
Date Collected: 06/11/20 14:25
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-7
Matrix: Drinking Water

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid	**5.1**		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorooctanesulfonic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
NEtFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
NMeFOSAA	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluoroundecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1
Perfluorododecanoic acid	<1.8		1.8		ng/L		06/16/20 15:51	06/19/20 06:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*93*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:35*	*1*
13C2 PFDA	*99*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:35*	*1*
13C2 PFHxA	*103*		*70 - 130*	*06/16/20 15:51*	*06/19/20 06:35*	*1*

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		d5NEFOS	PFDA	PFHxA
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
410-4374-3	EV-SPGT-061120	98	98	103
410-4374-5	TD-BFCT-061120	91	99	94
410-4374-5 - DL	TD-BFCT-061120	94	92	91
410-4374-5 - DL2	TD-BFCT-061120	80	79	81
410-4374-6	MP-SPGT-061120	91	97	103
410-4374-7	QA03-0620	93	99	103
LLCS 410-13599/2-A	Lab Control Sample	96	97	103
LLCSD 410-13599/3-A	Lab Control Sample Dup	95	96	102
MB 410-13599/1-A	Method Blank	96	103	106

Surrogate Legend

d5NEFOS = d5-NEtFOSAA
PFDA = 13C2 PFDA
PFHxA = 13C2 PFHxA

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		d5NEFOS	PFDA	PFHxA
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
410-4374-1	TB-061120	95	93	98
410-4374-2	FB-061120	93	95	102

Surrogate Legend

d5NEFOS = d5-NEtFOSAA
PFDA = 13C2 PFDA
PFHxA = 13C2 PFHxA

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1

Lab Sample ID: MB 410-13599/1-A
Matrix: Drinking Water
Analysis Batch: 14618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluoroheptanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorooctanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorononanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorodecanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorotridecanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorotetradecanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorobutanesulfonic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorohexanesulfonic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorooctanesulfonic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
NEtFOSAA	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
NMeFOSAA	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluoroundecanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1
Perfluorododecanoic acid	<2.0		2.0		ng/L		06/16/20 15:51	06/19/20 05:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*96*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:13*	*1*
13C2 PFDA	*103*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:13*	*1*
13C2 PFHxA	*106*		*70 - 130*	*06/16/20 15:51*	*06/19/20 05:13*	*1*

Lab Sample ID: LLCS 410-13599/2-A
Matrix: Drinking Water
Analysis Batch: 14618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13599

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanoic acid	3.84	3.53		ng/L		92	50 - 150
Perfluoroheptanoic acid	3.84	3.91		ng/L		102	50 - 150
Perfluorooctanoic acid	3.84	3.42		ng/L		89	50 - 150
Perfluorononanoic acid	3.84	3.58		ng/L		93	50 - 150
Perfluorodecanoic acid	3.84	3.50		ng/L		91	50 - 150
Perfluorotridecanoic acid	3.84	3.45		ng/L		90	50 - 150
Perfluorotetradecanoic acid	3.84	3.66		ng/L		95	50 - 150
Perfluorobutanesulfonic acid	3.40	3.17		ng/L		93	50 - 150
Perfluorohexanesulfonic acid	3.50	3.03		ng/L		86	50 - 150
Perfluorooctanesulfonic acid	3.55	3.25		ng/L		91	50 - 150
NEtFOSAA	3.84	3.42		ng/L		89	50 - 150
NMeFOSAA	3.84	3.52		ng/L		92	50 - 150
Perfluoroundecanoic acid	3.84	3.38		ng/L		88	50 - 150
Perfluorododecanoic acid	3.84	3.30		ng/L		86	50 - 150

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
d5-NEtFOSAA	*96*		*70 - 130*
13C2 PFDA	*97*		*70 - 130*
13C2 PFHxA	*103*		*70 - 130*

Method: EPA 537 Ver 1.1 - EPA 537 Version 1.1 (Continued)

Lab Sample ID: LLCSD 410-13599/3-A
Matrix: Drinking Water
Analysis Batch: 14618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13599

Analyte			Spike Added	LLCSD Result	LLCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid			3.84	3.72		ng/L		97	50 - 150	5	30
Perfluoroheptanoic acid			3.84	4.02		ng/L		105	50 - 150	3	30
Perfluorooctanoic acid			3.84	3.53		ng/L		92	50 - 150	3	30
Perfluorononanoic acid			3.84	3.87		ng/L		101	50 - 150	8	30
Perfluorodecanoic acid			3.84	3.62		ng/L		94	50 - 150	3	30
Perfluorotridecanoic acid			3.84	3.70		ng/L		96	50 - 150	7	30
Perfluorotetradecanoic acid			3.84	3.87		ng/L		101	50 - 150	5	30
Perfluorobutanesulfonic acid			3.40	3.30		ng/L		97	50 - 150	4	30
Perfluorohexanesulfonic acid			3.50	3.29		ng/L		94	50 - 150	8	30
Perfluorooctanesulfonic acid			3.55	3.42		ng/L		96	50 - 150	5	30
NEtFOSAA			3.84	3.55		ng/L		92	50 - 150	4	30
NMeFOSAA			3.84	3.51		ng/L		91	50 - 150	0.4	30
Perfluoroundecanoic acid			3.84	3.43		ng/L		89	50 - 150	2	30
Perfluorododecanoic acid			3.84	3.45		ng/L		90	50 - 150	4	30

Surrogate	*LLCSD %Recovery*	*LLCSD Qualifier*	*Limits*
d5-NEtFOSAA	*95*		*70 - 130*
13C2 PFDA	*96*		*70 - 130*
13C2 PFHxA	*102*		*70 - 130*

QC Association Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

LCMS

Prep Batch: 13599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4374-1	TB-061120	Total/NA	Water	EPA 537 Ver 1.1	
410-4374-2	FB-061120	Total/NA	Water	EPA 537 Ver 1.1	
410-4374-3	EV-SPGT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	
410-4374-5	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	
410-4374-5 - DL	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	
410-4374-5 - DL2	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	
410-4374-6	MP-SPGT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	
410-4374-7	QA03-0620	Total/NA	Drinking Water	EPA 537 Ver 1.1	
MB 410-13599/1-A	Method Blank	Total/NA	Drinking Water	EPA 537 Ver 1.1	
LLCS 410-13599/2-A	Lab Control Sample	Total/NA	Drinking Water	EPA 537 Ver 1.1	
LLCSD 410-13599/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	EPA 537 Ver 1.1	

Analysis Batch: 14618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4374-1	TB-061120	Total/NA	Water	EPA 537 Ver 1.1	13599
410-4374-2	FB-061120	Total/NA	Water	EPA 537 Ver 1.1	13599
410-4374-3	EV-SPGT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
410-4374-5	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
410-4374-6	MP-SPGT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
410-4374-7	QA03-0620	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
MB 410-13599/1-A	Method Blank	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
LLCS 410-13599/2-A	Lab Control Sample	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
LLCSD 410-13599/3-A	Lab Control Sample Dup	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599

Analysis Batch: 16023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-4374-5 - DL	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599
410-4374-5 - DL2	TD-BFCT-061120	Total/NA	Drinking Water	EPA 537 Ver 1.1	13599

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Client Sample ID: TB-061120
Date Collected: 06/11/20 00:00
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 05:41	AC	ELLE

Client Sample ID: FB-061120
Date Collected: 06/11/20 10:35
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 05:50	AC	ELLE

Client Sample ID: EV-SPGT-061120
Date Collected: 06/11/20 10:40
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-3
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 05:59	AC	ELLE

Client Sample ID: TD-BFCT-061120
Date Collected: 06/11/20 13:25
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-5
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 06:17	AC	ELLE
Total/NA	Prep	EPA 537 Ver 1.1	DL		13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1	DL	10	16023	06/24/20 00:34	Y6ZN	ELLE
Total/NA	Prep	EPA 537 Ver 1.1	DL2		13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1	DL2	100	16023	06/24/20 00:43	Y6ZN	ELLE

Client Sample ID: MP-SPGT-061120
Date Collected: 06/11/20 14:20
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-6
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 06:26	AC	ELLE

Client Sample ID: QA03-0620
Date Collected: 06/11/20 14:25
Date Received: 06/13/20 09:30

Lab Sample ID: 410-4374-7
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	EPA 537 Ver 1.1			13599	06/16/20 15:51	Z5TV	ELLE
Total/NA	Analysis	EPA 537 Ver 1.1		1	14618	06/19/20 06:35	AC	ELLE

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Massachusetts	State	M-PA009	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	NEtFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	NMeFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorobutanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorodecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorododecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluoroheptanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorohexanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorohexanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorononanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorooctanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorooctanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorotetradecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluorotridecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Drinking Water	Perfluoroundecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	NEtFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	NMeFOSAA
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorobutanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorodecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorododecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluoroheptanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorohexanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorohexanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorononanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorooctanesulfonic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorooctanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorotetradecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluorotridecanoic acid
EPA 537 Ver 1.1	EPA 537 Ver 1.1	Water	Perfluoroundecanoic acid

Method Summary

Client: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Method	Method Description	Protocol	Laboratory
EPA 537 Ver 1.1	EPA 537 Version 1.1	EPA	ELLE
EPA 537 Ver 1.1	EPA 537 Version 1.1	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: Weston Solutions, Inc.
Project/Site: Nantucket

Job ID: 410-4374-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-4374-1	TB-061120	Water	06/11/20 00:00	06/13/20 09:30	
410-4374-2	FB-061120	Water	06/11/20 10:35	06/13/20 09:30	
410-4374-3	EV-SPGT-061120	Drinking Water	06/11/20 10:40	06/13/20 09:30	
410-4374-5	TD-BFCT-061120	Drinking Water	06/11/20 13:25	06/13/20 09:30	
410-4374-6	MP-SPGT-061120	Drinking Water	06/11/20 14:20	06/13/20 09:30	
410-4374-7	QA03-0620	Drinking Water	06/11/20 14:25	06/13/20 09:30	

Environmental Analysis of Custody

eurofins | Lancaster Laboratories Environmental

Acct. #

410-4374 Chain of Custody

Environmental use only

ıple #

COC #607818

Client Information

Client: WESTON SOLUTIONS INC	Acct. #: 31222
Project Name/#: NANTUCKET	PWSID #: NA
Project Manager: LISA KAMMER	P.O. #: 0102971
Sampler: CHEYENNE HAVERFIELD	Quote #: 221624A
State where samples were collected: MASSACHUSETTS	For Compliance: Yes ☒ No ☐

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Potable Water	Ground	NPDES	Surface	Other:	Total # of Containers	PFAS IN DRINKING WATER	Remarks
TB-061120	6/11/20	—	X					X					2	X	
FB-061120		1035	X					X					2	X	
EV-SPGT-061120		1040	X					X					2	X	
7H-SPGT-061120		1205	X					X					2	X	HOLD
TD-BFCT-061120		1325	X					X					2	X	
MP-SPGT-061120		1420	X					X					2	X	
QA03-0620		1425	X					X					2	X	

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks: NON CHLORINATED POTABLE WATER.

For Lab Use Only
FSC:
SCR#:

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days:

E-mail address: LISA.KAMMER@WESTONSOLUTIONS.COM

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature]	6/12/20	1115	SEALED COOLER	6/12/20	1115
SEALED COOLER					
			[signature]	6/13/20	930

EDD Required? Yes No
If yes, format: EXCEL

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS FedEx X Other

Temperature upon receipt 6.0 °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • FOR HELP COMPLETING FORM CHECK OUT https://www.eurofinsus.com/coc

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0919

Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 410-4374-1

Login Number: 4374
List Number: 1
Creator: Colon Martinez, Jessenia C

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, 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	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	