Electronic Transmittal Form for DEEP Remediation and LUST Secure File Transfer (SFT)

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
REMEDIATION DIVISION
LEAKING UNDERGROUND STORAGE TANK COORDINATION PROGRAM
www.ct.gov/deep

This Electronic Transmittal Form is to be used when submitting a document to the Connecticut SFT website. This form must be completed and included as the cover sheet of your electronic document.

Requirements for Transmittals through the SFT website:

- Only document types identified in the dropdown lists in Part III below may be submitted through the SFT website.
- Documents submitted through the SFT website must include all applicable figures, tables and laboratory data.
- Files must be formatted as PDF/A and use the appropriate naming convention:
  - For Remediation Filings: **REM_RemID_DocumentType_DateofDocument**
    Example: REM_1234_MonitoringReport_01-01-2001
  - For LUST Filings: **LUST_SiteAddress_Town_AbbreviationForDocumentType_DateofDocument**
    Example: LUST_1MainStreet_Hartford_ESA_01-01-2001
    Note: For AbbreviationForDocumentType" use appropriate abbreviation at Transmittal of Documents

Part I: Program Type (Select either Remediation or LUST as your Primary Program Type)

☒ Remediation	☐ LUST
Primary Program: Significant Environmental Hazard Program	UST Facility ID: (if applicable)
*Rem ID: (required)	Spill Case Number: (if known)

Part II: Site Information

Site Name: Mystic Oral School

Site Address: 0 Oral School Road

City/Town: Mystic State: CT Zip Code: 06355

Secondary Programs (complete as many as applicable for this document):

Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:
Program: Select Secondary Program	Project ID:

Provide Project ID for each secondary program if it is known.
Each program has a unique ID (i.e. Rem ID, Spill Case #, UST Facility ID, PCB File #, etc.)

Part III: Document Information

Remediation: SEH Notification LUST: LUST Document Type

Date of Document: 6/24/2020 Final

Part IV: Submitter Information

Name: John A. Bondos Jr. E-mail: jabondos@loureiro.com

Name of company/business this document is being submitted on behalf of: State of Connecticut Department of Administrative Services

Connecticut Department of Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Remediation Division

Significant Environmental Hazard Notification

Notification under CGS 22a-6u

Please print or type to complete this form in accordance with the instructions (DEEP-REM-SEH-INS-500).

If fully completed in accord with the instructions, the information in Parts III and V of this form, with supplemental information as indicated, may meet the statutory requirement to submit a plan or report along with the notification.

Send completed form to:

SIGNIFICANT ENVIRONMENTAL HAZARD PROGRAM
REMEDIATION DIVISION
BUREAU OF WATER PROTECTION AND LAND REUSE
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

DEEP USE ONLY		
RemGIS	RemID	SEH#

* Part I - Hazard and Site Identification:

[Connecticut General Statutes (CGS) Section 22a-6u]

Pollution in or threatening a drinking water well:		☐	Surface soil contamination poses potential direct exposure risk [6u(d)]
☐	Contamination is detected in supply well and is above groundwater protection criteria [6u(b)]	☐	Volatile Organic Chemicals in groundwater threaten interior air quality [6u(e)]
☒	Contamination is detected in supply well but is below groundwater protection criteria [6u(c)]	☐	Surface water quality threatened by groundwater contamination [6u(f)]
☐	Supply well is threatened by a groundwater contamination plume above groundwater protection criteria [6u(g)]	☐	Migrating vapors pose an explosion hazard for structures or utility conduits [6u(h)]

*1. Site identification for parcel with pollution on or emanating from the parcel, causing a significant environmental hazard:

Name of Site	Mystic Oral School				
Address or Location	0 Oral School Road				
City/Town	Mystic	State	CT	Zip Code	06355

2. Attach a copy of a topographic map with the site located thereon. MAP ATTACHED ☒

3. Date Hazard condition(s) discovered: 4/7/2020

4. If due to a recent spill, was spill notification made? YES ☐ NO ☐ / NOT A SPILL ☒

Date		DEEP contact	
Remarks			

5. If due to a UST system release, was DEEP notified? YES ☐ NO ☐ / NOT A UST RELEASE ☒

Date		DEEP contact	
Remarks			

6. For certain conditions only (see instructions):

Was oral notification to DEEP made [CGS 22a-6u(b), (h), & (f)(2)(A)]? N/A ☒ YES ☐ NO ☐ (Drinking water supply well above criteria, explosion hazard, free product breaking out to surface water)			
Date		DEEP contact	
Remarks:			
Was verification to TEP client made [CGS 22a-2u(b) & (h)]? N/A ☒ YES ☐ NO ☐ (Drinking water supply well above criteria, explosion hazard)			
Date		Contact	
Remarks:			

Part II – Party Identification and Contact Information

*1. Business/person submitting form: *Is this entity/person the site's owner?* YES ☒ NO ☐

Name	State of Connecticut Department of Administrative Services				
Mailing Address	450 Columbus Boulevard				
City/Town	Hartford	State	CT	Zip Code	06103
Business Phone		Ext.		Fax	
Authorized Rep.		Title			
Contact Person		Title			
Contact e-mail^					

2. Owner if not listed above:

Name					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

3. Additional Party for site (see instructions) NOT APPLICABLE ☒

Name/Firm					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

4. Technical Environmental Professional (TEP) who identified hazard: CHECK IF NONE ☐

Firm	Loureiro Engineering Associates, Inc.				
Mailing Address	100 Northwest Drive				
City/Town	Plainville	State	CT	Zip Code	06062
Business Phone	860-747-6181	Ext.		Fax	
Contact Person	John Bondos	Title	Senior Project Manager		
Contact e-mail^	jabondos@loureiro.com				

5. Environmental consultant for mitigation or abatement, if not above TEP:

Firm					
Mailing Address					
City/Town		State		Zip Code	
Business Phone		Ext.		Fax	
Contact Person		Title			
Contact e-mail^					

6. Supplemental Information. *If the person submitting this form is not the site owner, describe that person's relationship to the site and its owner. If an entity who is not the site owner will be acting on behalf of the owner to mitigate or abate the hazard condition provide details of this agreement and identify which party will be acting.*

Loureiro was retained by the State of Connecticut Department of Adminsitrative Services and the Department of Economic and Community Development.

Part III - Hazard Information

*

The law [CGS 22a-6u(j)] requires the significant environmental hazard notification include a description of the nature of the contamination or condition, the location of such contamination or condition, and any steps being taken to abate, remediate or monitor such contamination or condition.

1. How was the pollutant released?

☐ unknown	☐ landfill/wastepile	☐ septic system	☐ Tank leak: UST ☐ AST ☐
☐ spill/dumping	☐ burial	☐ dry well	☐ drums
☐ agricultural activity	☐ pit	☐ lagoon	☐ discharge

2. *What is the general nature of the contamination?

☐ petroleum/oils	☐ non-aqueous phase liquid (free product)		☐ metals	☐ sodium/salt
☐ gasoline	☐ volatile organic	☐ semivolatile organic	☐ cyanide	☐ leachate
☐ fuel oil/diesel	☐ nonchlorinated	☐ polyaromatic	☐ acid/base	☐ asbestos
☐ nitrate/fertilizer	☐ chlorinated	☐ pesticide/herbicide	☐ PCB	☐ radiation

3. **Threats to Supply Wells**

If neither impact [CGS 22a-6u(b) nor (c)] or threat [CGS 22a-6u(g)] to a drinking water supply well is identified, skip to question 4. CHECK IF NONE ☐

a. **SUPPLY WELL DATA:**

For threats to supply wells, provide detail on the following, if applicable:

- contamination above groundwater protection criteria in a supply well [CGS 22a-6u(b)]:
  - *supply well test results that identify the hazard (submit within 7 days of discovery.)
  - wells polluted with non-aqueous phase liquid (free product)
- contamination in a supply well below groundwater protection criteria [CGS 22a-6u(c)]:
  - *supply well test results that identify the hazard
  - required 30-day retest results
- groundwater contamination in a monitoring well above groundwater protection criteria [CGS 22a-6u(g)]:
  - supply well test results for abutters tested in initial 30-day response

Identify affected *and/or* sampled *drinking water supply wells*. CHECK IF NONE ☐

Address/Town	Contact Name/Phone	Supply Well Analyses (if any) [List Pollutant, Concentration, and Units]	Sample Reason: Discovery	Resample	Abutter test
155 Oral School Road, Mystic, CT	James and Nancy Csisar	PFHxA (2.3 ng/L), PFOA (5.5 ng/L), PFOS (3.8 ng/L)	☐	☐	☒
195 Oral School Road, Mystic, CT	Christopher Kluck	PFOA (2.1 ng/L)	☐	☐	☒
366 Cow Hill Road, Mystic, CT	Lloyd and Kelly Morales	PFOA (2.3 ng/L)	☐	☐	☒
			☐	☐	☐
			☐	☐	☐
See Attached Sheet			☐	☐	☒

Attach additional sheets as needed.

b. **MONITORING WELL DATA:**
*For a groundwater plume that poses a threat to drinking water wells [CGS 22a-6u(g)], list *monitoring well* analytical data for substances with concentrations at or above the Groundwater Protection Criteria of the RSRs. CHECK IF NONE ☒

Monitoring Well ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

c. For a groundwater plume [CGS 22a-6u(g)], are hydrogeologic data/maps supporting the hazard identification included? YES ☐ NO ☐

d. Include Well Receptor Survey [CGS 22a-6u(g)(3)] (also include for [CGS 22a-6u-(b)] if available at time of notification):

i. Attach a site map/ parcel map indicating the location of the drinking water supply well(s) within 500 feet. MAP ATTACHED ☐

ii. Attach an inventory of drinking water wells within 500 feet. INVENTORY ATTACHED ☐

e. Describe any actions already taken, if any, to inform well users and ensure an alternate supply of safe water to affected receptors. CHECK IF NONE ☐

Attach additional sheets as needed.

f. Attach a report [CGS 22a-6u(c)(3) and (g)(3)] that, based on any additional testing results that includes proposals, as necessary, for any further action to identify and eliminate exposure to contaminants on an ongoing basis. PLAN ATTACHED ☐

4. For **surficial soil direct exposure risk** [CGS 22a-6u(d)]:
If none, skip to question 5. CHECK IF NONE ☒

a. *List analytical data that are the basis for determining that a hazard condition exists. (Please list only the highest concentration for each pollutant above hazard criteria.)

Soil Sample Location ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

b. Delineation of hazard extent:

i. Attach a site map indicating the specific location and extent [CGS 22a-6u(d)(3)] of the soil contamination that exceeds significant environmental hazard notification thresholds and applicable sampling locations. SITE MAP ATTACHED ☐

ii. Attach a table or show on the map the sampling data used to determine the extent of the soil that exceed the notification criteria [CGS 22a-6u(d)(3)]. TABLE ATTACHED ☐

iii. ☐ Extent not yet fully delineated

c. Distance from release area to nearest property currently used as a residence, school, park, playground, or day care: _____ feet

d. Area that exceeds SEH notification thresholds is:

i. Covered by maintained pavement N/A ☐ YES ☐ NO ☐

ii. Fenced off from general public N/A ☐ YES ☐ NO ☐

iii. ☐ No longer exempt from notification because the above conditions previously present are no longer met [CGS 22a-6u(d)(1)(C)], thus notification is required.

e. Identify notification evaluation criterion used ["DEC" means Direct Exposure Criteria]:

☐ 30x Industrial/Commercial DEC (for industrial commercial use, i.e. non-residential)

☐ 15x Industrial/Commercial DEC (for metals or PCBs at industrial or commercial properties that are within 300 feet of a current residential use)

☐ 15x Residential DEC (for current residential use)

f. Describe interim control actions taken to prevent exposure to the contaminated soil exceeding the SEH notification threshold. CHECK IF NONE ☐

Attach additional sheets as needed.

g. Attach a report [CGS 22a-6u(d)(3)] with recommendations for further action, including a plan, with an implementation schedule, for maintenance and monitoring of interim controls (including pavement or fences) and submittal of annual reports until the significant environmental hazard is certified abated. REPORT ATTACHED ☐

h. Voluntary notification for DEEP approval of abatement report (optional).

☐ This significant environmental hazard condition is exempt from notification under the provisions of CGS 22a-6u(e)(2)(A), (B), or (C) because abatement was completed within 90 days. However, this notification is being voluntarily submitted for approval of the abatement report and certification of hazard abatement.

Date of completion of abatement _____

Abatement achieved by:

☐ removal of soil above notification threshold

☐ rendering the soil inaccessible as defined in the RSRs

☐ remediation of the release in accordance with the RSRs

Describe actions taken to remove hazard condition REPORT ATTACHED ☐

5. For **volatilization risk** [CGS 22a-6u(e)]:
If none, skip to question 6. CHECK IF NONE ☒

a. *List analytical data that are the basis for determining that a hazard condition exists. (Please list only the highest concentration for each pollutant causing a hazard condition.)

Monitoring Well/ Soil Vapor ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

b. Site Map:

i. *Attach a site map/ parcel map indicating the location of samples identifying a hazard condition exists, please include buildings within 50 feet of the hazard condition with their use identified. SITE MAP ATTACHED ☐

ii. If available, include on the maps hydrogeologic data or additional sampling that may be available to provide better delineation of the hazard condition. Attach data tables as appropriate. DATA ATTACHED ☐

c. Identify any reason for delay (pursuant to the law) in submittal of this notification:

☐ An indoor air monitoring program was implemented [CGS 22a-6u(e)(3)] and this notification is due to a subsequently identified significant environmental hazard as a result of indoor air monitoring data or is due to a failure to complete the full extent of such monitoring.

☐ A previously vacant building was reoccupied and the significant environmental hazard is still present.

☐ The pollutant for which a significant environmental hazard was identified had been in an OSHA-regulated industrial/commercial use that has now been discontinued.

d. Describe any interim measures already implemented. CHECK IF NONE ☐
(Note: If trichloroethylene was detected DEEP recommends consulting the 2015 Guidance on Trichloroethylene Developmental Risks in evaluating the site.)

Attach additional sheets as needed.

e. Attach a plan [CGS 22a-6u(e)(4)] that describes further actions that may be necessary to fully delineate potential at-risk receptors and to identify and eliminate any exposure to contaminants. PLAN ATTACHED ☐

6. For **threats to surface water** [CGS 22a-6u(f)]:
If none, skip to next part. CHECK IF NONE ☒

a. *Is this notification for the presence of non aqueous phase liquid? YES ☐ NO ☐

b. *List analytical data establishing that the condition exists. CHECK IF NO DATA ☐

Monitoring Well ID	Pollutant	Concentration (units)	Notes

Attach additional sheets as needed.

c. *Attach a table and site map showing the specific monitoring locations, analytical data, available hydrogeologic data, and their relationship and distance to the threatened surface water body. MAP ATTACHED ☐

d. Was a site specific dilution calculation made? YES ☐ NO ☐
If yes, attach the calculation on a separate sheet. ATTACHED ☐

e. Attach a plan [CGS 22a-6u(f)(3)] that describes further actions that may be necessary to fully delineate potential at-risk receptors and to identify and eliminate any exposure to contaminants. PLAN ATTACHED ☐

Part IV – Additional Information (optional, except #7 which is required by the law)

1. Voluntary Remediation/ECAF/Property Transfer filings: CHECK IF NONE ☒

Form	Date	Certifying/Verifying/Filing Party	DEEP Determination

2. DEEP staff involved with assessment or remediation of the site: CHECK IF NONE ☒

Time Period	DEEP Section	Name

3. Reports to DEEP Emergency Response and Spill Prevention Division: CHECK IF NONE ☒

Date	UST Release or other spill?	Material Released	Quantity

4. Describe other relevant DEEP permitting or enforcement involvement: CHECK IF NONE ☒

EPA ID#: CT	DEEP-WPC #:	DEEP Inventory #:
RCRA Notifier Status:	RCRA Permit Status:	
Remarks:		

5. What environmental reports exist for the site and are available to DEEP? CHECK IF NONE ☐

Report Type	Date (mo/yr)	Preparer (Firm)	Attached? (Y/N)	Previously submitted?	DEEP Unit to which sent
Phase 1	6/2013	Loureiro Engineering	N	N	
Phase 2	6/2013	Loureiro Engineering	N	N	
Phase 3	5/2014	Loureiro Engineering	N	N	

Do not list routine monitoring reports in this section. Attach additional sheets as needed.

6. Recurring periodic monitoring:

   a. Is this notification the result of data obtained through a periodic, recurring groundwater monitoring program being conducted at the site? YES ☐ NO ☒

   b. If yes, please identify the reason for this monitoring and the DEEP unit to which reports are made, if any.

      i. Reason: _____

      ii. DEEP Unit: _____

   c. DEEP requests that a tabular summary for the location and constituent triggering a hazard notification of historic monitoring data from the past three years is provided to better evaluate future actions that DEEP may prescribe or no action, related to this notification. DATA TABLE ATTACHED ☐

*7. Identify any *other* affected properties: CHECK IF NONE AFFECTED ☐

Address/Town	Contact Name/Phone	How is Property Affected?
155 Oral School Road	James and Nancy Csisar	Well Supply
195 Oral School Road	Christopher Kluck	Well Supply
366 Cow Hill Road	Lloyd and Kelly Morales	Well Supply

Attach additional sheets as needed.

8. Describe the land use of the site and surrounding area, and identify any sensitive land uses within 1/4 mile of the site (i.e., schools, day care, public water supply wells, wetlands, etc.):

9. Additional comments regarding the hazard condition(s):

Attach additional sheets as needed.

Part V – Reports, Plans, and Implementation Schedule for Proposed Actions

*

The law [CGS 22a-6u(j)] requires the significant environmental hazard notification include a description of any steps being taken to mitigate abate, remediate or monitor the contamination or condition. In addition the law provides for submittal (contemporaneously with the notification except for supply wells polluted above criteria) of a report of initial actions taken, as specified by law, and a plan of recommended actions. Completion of this form, accompanied by attachments as necessary for specific hazard conditions, can meet this requirement

CHECK IF PLAN OR REPORT ATTACHED ☐

Provide an implementation schedule for additional evaluation, mitigation or abatement actions:

Action or Step	Completion Date
Samples were originally collected on March 30, 2020 and resampled on May 27, 2020 with results pending.	Ongoing

Attach additional sheets as needed.

Describe the implementation frequency for proposed monitoring and maintenance activity:

Monitoring/Maintenance program	Frequency

Attach additional sheets as needed.

*

Part VI – Signature of Notifying Party

"I have personally examined and am familiar with the information submitted in this document and all attachments, and certify that based on reasonable investigation the submitted information is true and accurate to the best of my knowledge and belief. I certify that this form is complete and accurate as prescribed by the Commissioner without alteration of the text."

Name (print or type)	Shane P. Mallory	Title (if applicable)	Administrator, Statewide Leasing & Property Transfer, CT DAS
Signature	Shane P. Mallory	Date	6/24/2020

Email: Shane.Mallory@ct.gov

* Signifies information required by CGS Section 22a-6u.

^By providing this e-mail address you are agreeing to receive, when permissible under law, official correspondence from the DEEP, at this electronic address, concerning the subject significant hazard. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Please notify DEEP if your e-mail address changes.

SUPPLY WELL DATA

Additional Supply Well Data

Address/Town	Contact Name/Phone	Supply Well Analyses (if any) [List Pollutant, Concentration, and Units]	Sample Reason:		
			Discovery	Resample	Abutter test
155 Oral School Road, Mystic, CT	James and Nancy Csisar	PFHxA (2.3 ng/L), PFOA (5.5 ng/L), PFOS (3.8 ng/L), Nitrate as N (2.1 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
195 Oral School Road, Mystic, CT	Christopher Kluck	PFOA (2.1 ng/L), Nitrate as N (1.0 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
366 Cow Hill Road, Mystic, CT	Lloyd and Kelly Morales	PFOA (2.3 ng/L), Nitrate as N (3.4 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
340 Cow Hill Road, Mystic, CT	Mark and Paula Waller	PFAS by 537.1 (ND ng/L), Nitrate as N (2.1 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
390 Cow Hill Road, Mystic, CT	Jeffrey Respler	PFAS by 537.1 (ND ng/L), Nitrate as N (0.16 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
221 Oral School Road, Mystic, CT	Margaret Trakas	PFAS by 537.1 (ND ng/L), Nitrate as N (0.20 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
382 Oral School Road, Mystic, CT	Robert F. Manley Jr.	PFAS by 537.1 (ND ng/L), Nitrate as N (0.31 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒
402 Oral School Road, Mystic, CT	Randy Chester	PFAS by 537.1 (ND ng/L), Nitrate as N (0.38 mg/L), Nitrite as N (ND mg/L), BOD (ND mg/L)	☐	☐	☒

FIGURES

SITE LOCATION

MAP REFERENCE:

SECTION OF THE USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP FOR OLD MYSTIC & MYSTIC, CT, DATED 1983, 1984 & PHOTOREVISED 1989 & 1996. MAP CREATED WITH TOPO! ©2008 NATIONAL GEOGRAPHIC & ©2007 TELE ATLAS, NORTH AMERICA, INC., RELEASE 01/2007.

1000 0 1000 2000 3000

APPROXIMATE SCALE IN FEET

Loureiro
Engineering • Construction • EH&S • Energy
Waste • Facility Services • Laboratory

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com

SIGNIFICANT ENVIRONMENTAL HAZARD NOTIFICATION
0 ORAL SCHOOL ROAD

SCALE
1" = 2000'

USGS SITE LOCATION MAP
0 ORAL SCHOOL ROAD, GROTON, CT

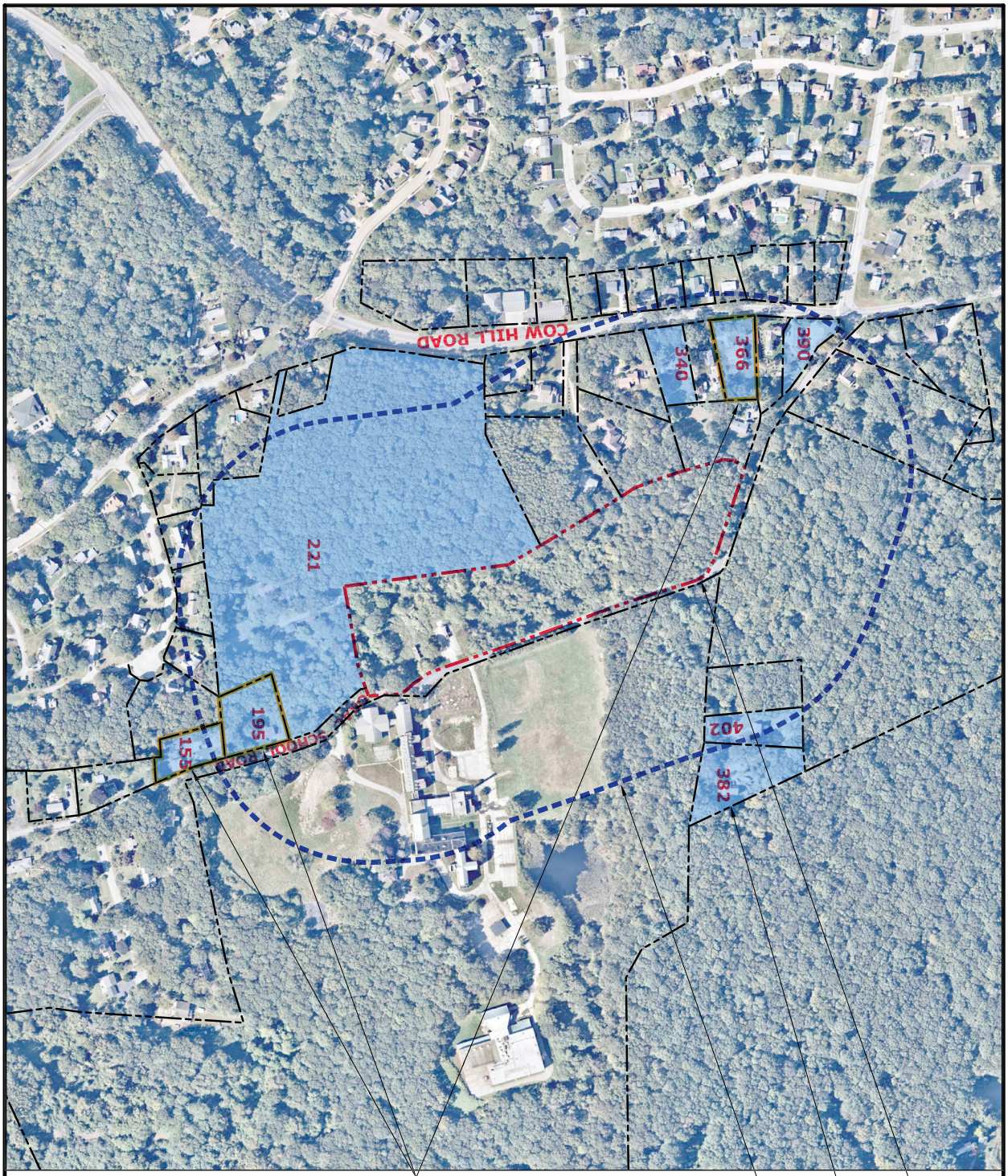
PREPARED FOR:
CONNECTICUT DEPARTMENT OF
ECONOMIC AND COMMUNITY DEVELOPEMENT
450 CONSITUTION BOULEVARD, SUITE 5, HARTFORD, CONNECTICUT

COMM. NO.
18HG001

DATE
06/15/2020

Figure 1

V:\CT\GROTON\ORAL RD-01\CT WATER SUPPLY WELL RECEPT SURVEY_18HG001\DWGS\18HG001-USGS -F2.DWG Tab: O Saved: 6/8/2020 12:33 PM Plotted: 6/15/2020 3:34 PM



SCALE IN FEET (1"=300')

150 0 150 300 450

N

SAMPLES WERE ORIGINALLY COLLECTED ON MARCH 30, 2020 AND RESAMPLED ON MAY 27, 2020 WITH RESULTS PENDING

500 FT. RADIUS

BLUE HIGHLIGHT INDICATES ONSITE WELLS

MYSTIC ORAL SCHOOL
0 ORAL SCHOOL ROAD
PROPERTY LINE PER GROTON GIS

FIGURE 2

SIGNIFICANT ENVIRONMENTAL HAZARD NOTIFICATION

PROPERTIES WITHIN 500' RADIUS OF THE SITE AND PROPERTIES OF INTREST

PREPARED FOR:

CONNECTICUT DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPEMENT

450 CONSTITURION BOULEVARD, SUITE 5, HARTFORD, CONNECTICUT 06103-1843

SCALE
1" = 300'

COMM. NO.
18HG001

DATE
06/15/2020

Loureiro
Engineering • Construction • EH&S • Energy
Waste • Facility Services • Laboratory

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com

V:\CT\GROTON\ORAL RD-0\CT WATER SUPPLY WELL RECEPT SURVEY_18HG001\DWGS\18HG001-SITE-F1.DWG Tab: SITE Saved: 6/8/2020 3:40 PM Plotted: 6/15/2020 3:14 PM

ANALYTICAL DATA

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 7, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: Oral School Rd, Groton, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1375

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/7/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1375

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Oral School Rd, Groton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401670	20C1375-01	Drinking Water		EPA 300.0	
				EPA 537.1	
1401675	20C1375-02	Drinking Water		EPA 537.1	
1401670	20C1375-03	Drinking Water		SM 21-22 5210B	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Oral School Rd, Groton, CT Sample Description: Work Order: 20C1375

Date Received: 3/31/2020

Field Sample #: 1401670 Sampled: 3/30/2020 09:15

Sample ID: 20C1375-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorohexanoic acid (PFHxA)	2.3	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorooctanoic acid (PFOA)	5.5	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorooctanesulfonic acid (PFOS)	3.8	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:08	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	86.7	70-130		4/3/20 13:08
M3HFPO-DA	84.8	70-130		4/3/20 13:08
13C-PFDA	81.7	70-130		4/3/20 13:08
d5-NEtFOSAA	92.3	70-130		4/3/20 13:08

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Oral School Rd, Groton, CT Sample Description: Work Order: 20C1375

Date Received: 3/31/2020

Field Sample #: 1401670 Sampled: 3/30/2020 09:15

Sample ID: 20C1375-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	2.1	0.10	10	mg/L	1		EPA 300.0	3/31/20	3/31/20 15:40	IS
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	3/31/20	3/31/20 15:40	IS

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Project Location: Oral School Rd, Groton, CT Sample Description: Work Order: 20C1375

Date Received: 3/31/2020

Field Sample #: 1401675 Sampled: 3/30/2020 09:15

Sample ID: 20C1375-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:33	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	95.1	70-130		4/2/20 19:33
M3HFPO-DA	89.8	70-130		4/2/20 19:33
13C-PFDA	91.5	70-130		4/2/20 19:33
d5-NEtFOSAA	103	70-130		4/2/20 19:33

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Oral School Rd, Groton, CT Sample Description: Work Order: 20C1375

Date Received: 3/31/2020

Field Sample #: 1401670 Sampled: 3/30/2020 09:15

Sample ID: 20C1375-03

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	3/31/20	3/31/20 18:55	EC

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1375-01 [1401670]	B255389	10.0	10.0	03/31/20

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1375-01 [1401670]	B255419	250	1.00	04/01/20
20C1375-02 [1401675]	B255419	250	1.00	04/01/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20C1375-03 [1401670]	B255413	150	03/31/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255389 - EPA 300.0										
Blank (B255389-BLK1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	ND	0.10	mg/L							
Nitrite as N	ND	0.100	mg/L							
LCS (B255389-BS1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110			
Nitrite as N	0.980		mg/L	1.00		98.0	90-110			
LCS Dup (B255389-BSD1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110	0.0297	20	
Nitrite as N	0.981		mg/L	1.00		98.1	90-110	0.102	20	
Batch B255413 - SM 21-22 5210B										
Blank (B255413-BLK1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (B255413-BS1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	180	2.0	mg/L	198		92.0	85-115			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

20C1375

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 2_06262019

Page 1 of 1

Company Name: Loureiro
Address: 100 Northwest Drive
Phone: 860 747 6181
Project Name: Oral School Road
Project Location: 155 Oral School Rd.
Project Number: 18HG001.001
Project Manager: John Bondos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time: 7-Day ☐ 10-Day ☐ PFAS 10-Day (std) ☐ Due Date:
Rush-Approval Required: 1-Day ☐ 2-Day ☐ 3-Day ☐ 4-Day ☐ — 5 Day

Dissolved Metals Samples: ○ Field Filtered ○ Lab to Filter
Orthophosphate Samples: ○ Field Filtered ○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 File Format
CLP Like Data Pkg Required: ☐
Email To: drdabrowski@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	¹Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1) [O]	BOD (SM21-22 5210B) [I]	Nitrate-N (300) [I]	Nitrite-N (300) [I]
1	1401670	3/30/20	415	GRAB	DW				4			X	X	X	X
2	1401675	3/30/20	415	GRAB	DW				2			X			

² Preservation Code

Courier Use Only
Total Number Of:
VIALS___
GLASS___
PLASTIC___
BACTERIA___
ENCORE___

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

¹ **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

² **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature) [signature]	Date/Time: 3/30/20 1500
Received by: (signature) FED EX	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature) [signature] 3.1 / 4.1	Date/Time: 3/31 925
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: CT RCP, LEA Equis 4 File format, 5 Day TAT, PFAS preserved with Trizma

Detection Limit Requirements
MA
CT
Other

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☒ Federal ☐ City ☐
Municipality ☐ 21 J ☐ Brownfield ☐
MWRA ☐ School ☐ MBTA ☐
WRTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By RAP Date 3/31/20 Time 925

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? T Who was notified? Irma

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? f

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? f

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

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April 7, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 366 Cow Hill Rd
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1379

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/7/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1379

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 366 Cow Hill Rd

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401676	20C1379-01	Drinking Water		EPA 300.0	
				EPA 537.1	
1401677	20C1379-02	Drinking Water		EPA 537.1	
1401676	20C1379-03	Drinking Water		SM 21-22 5210B	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 366 Cow Hill Rd | Sample Description: | Work Order: 20C1379

Date Received: 3/31/2020

Field Sample #: 1401676 | Sampled: 3/30/2020 12:15

Sample ID: 20C1379-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorooctanoic acid (PFOA)	2.3	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:21	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	93.5	70-130		4/2/20 21:21
M3HFPO-DA	86.4	70-130		4/2/20 21:21
13C-PFDA	78.2	70-130		4/2/20 21:21
d5-NEtFOSAA	88.7	70-130		4/2/20 21:21

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Project Location: 366 Cow Hill Rd Sample Description: Work Order: 20C1379

Date Received: 3/31/2020

Field Sample #: 1401676 Sampled: 3/30/2020 12:15

Sample ID: 20C1379-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	3.4	0.10	10	mg/L	1		EPA 300.0	3/31/20	3/31/20 17:32	IS
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	3/31/20	3/31/20 17:32	IS

con-test® ANALYTICAL LABORATORY
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Project Location: 366 Cow Hill Rd | Sample Description: | Work Order: 20C1379

Date Received: 3/31/2020

Field Sample #: 1401677 | Sampled: 3/30/2020 12:15

Sample ID: 20C1379-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:43	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	96.6	70-130		4/2/20 21:43
M3HFPO-DA	88.5	70-130		4/2/20 21:43
13C-PFDA	92.7	70-130		4/2/20 21:43
d5-NEtFOSAA	105	70-130		4/2/20 21:43

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Project Location: 366 Cow Hill Rd Sample Description: Work Order: 20C1379

Date Received: 3/31/2020

Field Sample #: 1401676 Sampled: 3/30/2020 12:15

Sample ID: 20C1379-03

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	3/31/20	3/31/20 18:55	EC

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1379-01 [1401676]	B255389	10.0	10.0	03/31/20

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1379-01 [1401676]	B255419	250	1.00	04/01/20
20C1379-02 [1401677]	B255419	250	1.00	04/01/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20C1379-03 [1401676]	B255413	150	03/31/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255389 - EPA 300.0										
Blank (B255389-BLK1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	ND	0.10	mg/L							
Nitrite as N	ND	0.100	mg/L							
LCS (B255389-BS1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110			
Nitrite as N	0.980		mg/L	1.00		98.0	90-110			
LCS Dup (B255389-BSD1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110	0.0297	20	
Nitrite as N	0.981		mg/L	1.00		98.1	90-110	0.102	20	
Batch B255413 - SM 21-22 5210B										
Blank (B255413-BLK1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (B255413-BS1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	180	2.0	mg/L	198		92.0	85-115			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY
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http://www.contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

Doc # 381 Rev 2_06262019

KAF 20C1379

Company Name: Lourciro
Address: 100 Northwest drive
Phone: 860 747 6181
Project Name: Oral School Rd
Project Location: 366 Cow Hill Rd.
Project Number: 18HG001.001
Project Manager: John Bundos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 5 Day 3-Day ☐
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 File
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	BOD (SM 21-22 5210B)	Nitrate-N (300.0)	Nitrite-N (300.0)
												O	H	I	I
1	1401676	3/30/20	12:15	GRAB	DW				4			X	X	X	X
2	1401677	3/30/20	12:15	GRAB	DW				2			X			

[2] Preservation Code

Courier Use Only
Total Number Of:
VIALS____
GLASS____
PLASTIC____
BACTERIA____
ENCORE____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature) [signature]	Date/Time: 3/30 15:00
Received by: (signature) FED EX	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature) [signature] 3.1 / 4.1	Date/Time: 3/31 9:25
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: CT RCP, LEA Equis 4 file format, 5 Day TAT, PFAS preserved with Trizma

Detection Limit Requirements
MA
CT
Other

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☒ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

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IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By RAP Date 3/31/22 Time 925

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____ Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Project T Analysis T ID's T Sampler Name T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? T Who was notified? Irma

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 7, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 195 Oral School Rd, Groton, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1378

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/7/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1378

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 195 Oral School Rd, Groton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401673	20C1378-01	Drinking Water		EPA 300.0	
				EPA 537.1	
1401674	20C1378-02	Drinking Water		EPA 537.1	
1401673	20C1378-03	Drinking Water		SM 21-22 5210B	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA 537.1

Qualifications:

MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)

B255419-MSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 195 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1378

Date Received: 3/31/2020

Field Sample #: 1401673 Sampled: 3/30/2020 10:30

Sample ID: 20C1378-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorooctanoic acid (PFOA)	2.1	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 20:38	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	89.1	70-130		4/2/20 20:38
M3HFPO-DA	85.5	70-130		4/2/20 20:38
13C-PFDA	75.7	70-130		4/2/20 20:38
d5-NEtFOSAA	82.5	70-130		4/2/20 20:38

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Project Location: 195 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1378

Date Received: 3/31/2020

Field Sample #: 1401673 Sampled: 3/30/2020 10:30

Sample ID: 20C1378-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	1.0	0.10	10	mg/L	1		EPA 300.0	3/31/20	3/31/20 16:25	IS
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	3/31/20	3/31/20 16:25	IS

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Project Location: 195 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1378

Date Received: 3/31/2020

Field Sample #: 1401674 Sampled: 3/30/2020 10:30

Sample ID: 20C1378-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 21:00	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	90.7	70-130		4/2/20 21:00
M3HFPO-DA	84.8	70-130		4/2/20 21:00
13C-PFDA	87.9	70-130		4/2/20 21:00
d5-NEtFOSAA	96.9	70-130		4/2/20 21:00

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 195 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1378

Date Received: 3/31/2020

Field Sample #: 1401673 Sampled: 3/30/2020 10:30

Sample ID: 20C1378-03

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	3/31/20	3/31/20 18:55	EC

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1378-01 [1401673]	B255389	10.0	10.0	03/31/20

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1378-01 [1401673]	B255419	250	1.00	04/01/20
20C1378-02 [1401674]	B255419	250	1.00	04/01/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20C1378-03 [1401673]	B255413	150	03/31/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1											
Matrix Spike (B255419-MS1)	**Source: 20C1378-01**			Prepared: 04/01/20 Analyzed: 04/02/20							
Perfluorobutanesulfonic acid (PFBS)	7.92	2.0	ng/L	8.85	ND	89.5		70-130			
Perfluorohexanoic acid (PFHxA)	10.4	2.0	ng/L	10.0	ND	104		70-130			
Perfluorohexanesulfonic acid (PFHxS)	9.74	2.0	ng/L	9.10	ND	107		70-130			
Perfluoroheptanoic acid (PFHpA)	10.0	2.0	ng/L	10.0	ND	100		70-130			
Perfluorooctanoic acid (PFOA)	11.0	2.0	ng/L	10.0	2.11	89.4		70-130			
Perfluorooctanesulfonic acid (PFOS)	9.56	2.0	ng/L	9.25	ND	103		70-130			
Perfluorononanoic acid (PFNA)	10.3	2.0	ng/L	10.0	ND	103		70-130			
Perfluorodecanoic acid (PFDA)	8.56	2.0	ng/L	10.0	ND	85.6		70-130			
N-EtFOSAA	10.2	2.0	ng/L	10.0	ND	102		70-130			
Perfluoroundecanoic acid (PFUnA)	7.63	2.0	ng/L	10.0	ND	76.3		70-130			
N-MeFOSAA	10.3	2.0	ng/L	10.0	ND	103		70-130			
Perfluorododecanoic acid (PFDoA)	8.61	2.0	ng/L	10.0	ND	86.1		70-130			
Perfluorotridecanoic acid (PFTrDA)	8.82	2.0	ng/L	10.0	ND	88.2		70-130			
Perfluorotetradecanoic acid (PFTA)	8.24	2.0	ng/L	10.0	ND	82.4		70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.10	2.0	ng/L	10.0	ND	71.0		70-130			
11Cl-PF3OUdS (F53B Major)	6.97	2.0	ng/L	9.40	ND	74.2		70-130			
9Cl-PF3ONS (F53B Minor)	8.48	2.0	ng/L	9.30	ND	91.2		70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.85	2.0	ng/L	10.0	ND	88.5		70-130			
Surrogate: 13C-PFHxA	*36.5*		ng/L	40.0		91.3		70-130			
Surrogate: M3HFPO-DA	*35.9*		ng/L	40.0		89.9		70-130			
Surrogate: 13C-PFDA	*32.6*		ng/L	40.0		81.5		70-130			
Surrogate: d5-NEtFOSAA	*142*		ng/L	160		89.0		70-130			
Matrix Spike Dup (B255419-MSD1)	**Source: 20C1378-01**			Prepared: 04/01/20 Analyzed: 04/02/20							
Perfluorobutanesulfonic acid (PFBS)	7.62	2.0	ng/L	8.85	ND	86.1		70-130	3.97	30	
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0	ND	102		70-130	2.04	30	
Perfluorohexanesulfonic acid (PFHxS)	9.44	2.0	ng/L	9.10	ND	104		70-130	3.07	30	
Perfluoroheptanoic acid (PFHpA)	9.77	2.0	ng/L	10.0	ND	97.7		70-130	2.34	30	
Perfluorooctanoic acid (PFOA)	11.0	2.0	ng/L	10.0	2.11	88.8		70-130	0.498	30	
Perfluorooctanesulfonic acid (PFOS)	8.59	2.0	ng/L	9.25	ND	92.9		70-130	10.7	30	
Perfluorononanoic acid (PFNA)	10.1	2.0	ng/L	10.0	ND	101		70-130	2.10	30	
Perfluorodecanoic acid (PFDA)	7.96	2.0	ng/L	10.0	ND	79.6		70-130	7.21	30	
N-EtFOSAA	9.81	2.0	ng/L	10.0	ND	98.1		70-130	4.34	30	
Perfluoroundecanoic acid (PFUnA)	7.29	2.0	ng/L	10.0	ND	72.9		70-130	4.57	30	
N-MeFOSAA	9.08	2.0	ng/L	10.0	ND	90.8		70-130	12.8	30	
Perfluorododecanoic acid (PFDoA)	7.73	2.0	ng/L	10.0	ND	77.3		70-130	10.7	30	
Perfluorotridecanoic acid (PFTrDA)	8.27	2.0	ng/L	10.0	ND	82.7		70-130	6.43	30	
Perfluorotetradecanoic acid (PFTA)	7.85	2.0	ng/L	10.0	ND	78.5		70-130	4.74	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.46	2.0	ng/L	10.0	ND	74.6		70-130	4.88	30	
11Cl-PF3OUdS (F53B Major)	6.29	2.0	ng/L	9.40	ND	**66.9**	*	70-130	10.3	30	MS-07
9Cl-PF3ONS (F53B Minor)	7.68	2.0	ng/L	9.30	ND	82.6		70-130	9.92	30	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	8.53	2.0	ng/L	10.0	ND	85.3		70-130	3.59	30	
Surrogate: 13C-PFHxA	*36.9*		ng/L	40.0		92.1		70-130			
Surrogate: M3HFPO-DA	*34.4*		ng/L	40.0		86.0		70-130			
Surrogate: 13C-PFDA	*31.1*		ng/L	40.0		77.8		70-130			
Surrogate: d5-NEtFOSAA	*141*		ng/L	160		88.3		70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255389 - EPA 300.0										
Blank (B255389-BLK1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	ND	0.10	mg/L							
Nitrite as N	ND	0.100	mg/L							
LCS (B255389-BS1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110			
Nitrite as N	0.980		mg/L	1.00		98.0	90-110			
LCS Dup (B255389-BSD1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110	0.0297	20	
Nitrite as N	0.981		mg/L	1.00		98.1	90-110	0.102	20	
Matrix Spike (B255389-MS1)	**Source: 20C1378-01**			Prepared & Analyzed: 03/31/20						
Nitrate as N	1.9		mg/L	1.00	1.0	86.2	80-120			
Nitrite as N	0.895		mg/L	1.00	0.00	89.5	80-120			
Matrix Spike Dup (B255389-MSD1)	**Source: 20C1378-01**			Prepared & Analyzed: 03/31/20						
Nitrate as N	2.0		mg/L	1.00	1.0	96.8	80-120	5.45	20	
Nitrite as N	1.01		mg/L	1.00	0.00	101	80-120	11.9	20	
Batch B255413 - SM 21-22 5210B										
Blank (B255413-BLK1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (B255413-BS1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	180	2.0	mg/L	198		92.0	85-115			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

MS-07 Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

20C1378

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 2_06262019

Page 1 of 1

Company Name: Loureiro
Address: 100 Northwest Dr.
Phone: 860 747 6181
Project Name: Oral School Rd.
Project Location: 195 Oral School Rd.
Project Number: 18HG001.001
Project Manager: John Bundos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐ 5 Day
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: LEA Equis 4 File ☐ PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: drdabrowski@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	O PFAS (532.1)	I BOD (SM21-22 5210B)	I Nitrate-N (300)	I Nitrite-N (300)	MS/MSD
1	1401673	3/30/20	10:30	Grab	DW				12			X	X	X	X	X
2	1401674	3/30/20	10:30	Grab	DW				2			X				

[2] Preservation Code

Courier Use Only
Total Number Of:
VIALS ___
GLASS ___
PLASTIC ___
BACTERIA ___
ENCORE ___

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Signature	Date/Time
Relinquished by: (signature) [signature]	3/30 15:00
Received by: (signature) FED EX	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature) [signature] 3/31/20	3/31 9:25
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: CT RCP, LEA Equis 4 File format, 5 day TAT, PFAS preserved with Trizma

Detection Limit Requirements
MA
CT
Other

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☒ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:
BOD not having MS/MSD run KF 4/1/2020

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

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Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By NAP Date 3/31/22 Time 925

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____ Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1 By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? No

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? T Who was notified? VMA

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? T

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	3	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	3	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	8	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 20, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 221 Oral School Rd
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0454

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/20/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0454

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 221 Oral School Rd

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401680	20D0454-01	Drinking Water		EPA 537.1	
1401681	20D0454-02	Drinking Water		EPA 537.1	

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 221 Oral School Rd | Sample Description: | Work Order: 20D0454

Date Received: 4/10/2020

Field Sample #: 1401680 | Sampled: 4/9/2020 09:20

Sample ID: 20D0454-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:33	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	85.7	70-130		4/15/20 12:33
M3HFPO-DA	83.7	70-130		4/15/20 12:33
13C-PFDA	86.0	70-130		4/15/20 12:33
d5-NEtFOSAA	89.5	70-130		4/15/20 12:33

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 221 Oral School Rd | Sample Description: | Work Order: 20D0454

Date Received: 4/10/2020

Field Sample #: 1401681 | Sampled: 4/9/2020 09:20

Sample ID: 20D0454-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 12:55	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	103	70-130		4/15/20 12:55
M3HFPO-DA	99.0	70-130		4/15/20 12:55
13C-PFDA	103	70-130		4/15/20 12:55
d5-NEtFOSAA	116	70-130		4/15/20 12:55

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Sample Extraction Data

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0454-01 [1401680]	B256145	250	1.00	04/13/20
20D0454-02 [1401681]	B256145	250	1.00	04/13/20

con-test® ANALYTICAL LABORATORY
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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B256145 - EPA 537.1										
Blank (B256145-BLK1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*36.3*		ng/L	40.0		90.8	70-130			
Surrogate: M3HFPO-DA	*35.5*		ng/L	40.0		88.9	70-130			
Surrogate: 13C-PFDA	*36.8*		ng/L	40.0		91.9	70-130			
Surrogate: d5-NEtFOSAA	*173*		ng/L	160		108	70-130			
LCS (B256145-BS1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	7.80	2.0	ng/L	8.85		88.2	70-130			
Perfluorohexanoic acid (PFHxA)	8.65	2.0	ng/L	10.0		86.5	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.45	2.0	ng/L	9.10		92.8	70-130			
Perfluoroheptanoic acid (PFHpA)	9.09	2.0	ng/L	10.0		90.9	70-130			
Perfluorooctanoic acid (PFOA)	9.28	2.0	ng/L	10.0		92.8	70-130			
Perfluorooctanesulfonic acid (PFOS)	8.20	2.0	ng/L	9.25		88.6	70-130			
Perfluorononanoic acid (PFNA)	9.35	2.0	ng/L	10.0		93.5	70-130			
Perfluorodecanoic acid (PFDA)	9.44	2.0	ng/L	10.0		94.4	70-130			
N-EtFOSAA	12.4	2.0	ng/L	10.0		124	70-130			
Perfluoroundecanoic acid (PFUnA)	9.34	2.0	ng/L	10.0		93.4	70-130			
N-MeFOSAA	10.7	2.0	ng/L	10.0		107	70-130			
Perfluorododecanoic acid (PFDoA)	9.46	2.0	ng/L	10.0		94.6	70-130			
Perfluorotridecanoic acid (PFTrDA)	9.36	2.0	ng/L	10.0		93.6	70-130			
Perfluorotetradecanoic acid (PFTA)	8.67	2.0	ng/L	10.0		86.7	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.62	2.0	ng/L	10.0		76.2	70-130			
11Cl-PF3OUdS (F53B Major)	6.87	2.0	ng/L	9.40		73.1	70-130			
9Cl-PF3ONS (F53B Minor)	8.38	2.0	ng/L	9.30		90.1	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	7.82	2.0	ng/L	10.0		78.2	70-130			
Surrogate: 13C-PFHxA	*31.4*		ng/L	40.0		78.4	70-130			
Surrogate: M3HFPO-DA	*30.4*		ng/L	40.0		76.0	70-130			
Surrogate: 13C-PFDA	*32.8*		ng/L	40.0		82.1	70-130			
Surrogate: d5-NEtFOSAA	*148*		ng/L	160		92.6	70-130			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

KAF 20D0454

Company Name: Loureiro
Address: ~~2210~~ 100 NORTHWEST DRIVE
Phone: 860 747 6181
Project Name: DECD Drinking Water
Project Location: 221 Oral School Rd
Project Number: 18HG0001
Project Manager: John Bondas
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 file EDD
CLP Like Data Pkg Required: ☐
Email To: jabondas@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1] Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	BOD (SM 21-22 5210B)	Nitrate-N (300)	Nitrite-N (300)	[2] Preservation Code
1	1401680	4/9/20	920	Grab	DW				4			X	X	X	X	
~~1~~ X2	1401681	4/9/20	920	Grab	DW			(8)	~~1~~ 2			X				

Courier Use Only
Total Number Of:
VIALS_____
GLASS_____
PLASTIC_____
BACTERIA_____
ENCORE_____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature) Date/Time:
Received by: (signature) 932 Date/Time: 4-10-2020
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Client Comments: PFAS Preserved with Trizma

Detection Limit Requirements
MA
CT
Other:

Special Requirements:
☐ MA MCP Required
MCP Certification Form Required
☒ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine wha analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Cor Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx®

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Courier

Received By JR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? ~~F~~ F

Is there Headspace where applicable? NA MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

Limited volume for smpl 1401681

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 16, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 221 Oral School Rd
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0455

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/16/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0455

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 221 Oral School Rd

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401680	20D0455-01	Drinking Water		EPA 300.0	
1401680	20D0455-02	Drinking Water		SM 21-22 5210B	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM 21-22 5210B

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Biochemical Oxygen Demand

B256077-BS1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 221 Oral School Rd Sample Description: Work Order: 20D0455

Date Received: 4/10/2020

Field Sample #: 1401680 Sampled: 4/9/2020 09:20

Sample ID: 20D0455-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.20	0.10	10	mg/L	1		EPA 300.0	4/10/20	4/10/20 21:54	KMV
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	4/10/20	4/10/20 21:54	KMV

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 221 Oral School Rd Sample Description: Work Order: 20D0455

Date Received: 4/10/2020

Field Sample #: 1401680 Sampled: 4/9/2020 09:20

Sample ID: 20D0455-02

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	4/10/20	4/10/20 19:30	DJM

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0455-01 [1401680]	B256083	10.0	10.0	04/10/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20D0455-02 [1401680]	B256077	150	04/10/20

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B256077 - SM 21-22 5210B											
Blank (B256077-BLK1)				Prepared & Analyzed: 04/10/20							
Biochemical Oxygen Demand	ND	2.0	mg/L								
LCS (B256077-BS1)				Prepared & Analyzed: 04/10/20							
Biochemical Oxygen Demand	130	2.0	mg/L	198		**66.9**	*	85-115			L-04
Batch B256083 - EPA 300.0											
Blank (B256083-BLK1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	ND	0.10	mg/L								
Nitrite as N	ND	0.100	mg/L								
LCS (B256083-BS1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	1.0		mg/L	1.00		103		90-110			
Nitrite as N	1.02		mg/L	1.00		102		90-110			
LCS Dup (B256083-BSD1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	1.0		mg/L	1.00		103		90-110	0.234	20	
Nitrite as N	1.01		mg/L	1.00		101		90-110	0.384	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY

http://www.contestlabs.com

Doc # 381 Rev 2_06262019

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

2D0455

Company Name: Lourciro
Address: ~~221~~ 100 NORTHWEST DRIVE
Phone: 860 747 6181
Project Name: DECD Drinking Water
Project Location: 221 Oral School Rd
Project Number: 18HG0001
Project Manager: John Bondos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Ortho-Phosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 file EDD
CLP Like Data Pkg Required: ☐
Email To: jabondos@lourciro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	BOD (SM 21-22 5210B)	Nitrate-N (300)	Nitrite-N (300)	[2] Preservation Code
1	1401680	4/9/20	920	Grab	DW				4			X	X	X	X	
	1401681	4/9/20	920	Grab	DW				~~4~~ 1			X				

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

Relinquished by: (signature) Date/Time:
Received by: (signature) 5.1 | 2.6 C132 Date/Time: 4-10-2020

Client Comments: DFAS Preserved with Trizma

Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Detection Limit Requirements
MA
CT
Other:

Special Requirements
MA MCP Required ☐
MCP Certification Form Required
CT RCP Required ☒
RCP Certification Form Required
MA State DW Required ☐
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_______________

con-test ®
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By UR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler ___ On Ice T No Ice ___
Direct from Sampling ___ Ambient ___ Melted Ice ___

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6
By Blank # ___ Actual Temp - ___

Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished ? T Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? T
Are there Lab to Filters? F Who was notified? ___
Are there Rushes? T Who was notified? Lucy
Are there Short Holds? T Who was notified? Lucy
Is there enough Volume? T
Is there Headspace where applicable? NA MS/MSD? F
Proper Media/Containers Used? T Is splitting samples required? F
Were trip blanks received? F On COC? F
Do all samples have the proper pH? NA Acid ___ Base ___

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

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April 7, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 340 Cow Hill Rd, Groton, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1383

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/7/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1383

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 340 Cow Hill Rd, Groton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401678	20C1383-01	Drinking Water		EPA 300.0	
				EPA 537.1	
1401679	20C1383-02	Drinking Water		EPA 537.1	
1401678	20C1383-03	Drinking Water		SM 21-22 5210B	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 340 Cow Hill Rd, Groton, CT Sample Description: Work Order: 20C1383

Date Received: 3/31/2020

Field Sample #: 1401678 Sampled: 3/30/2020 12:45

Sample ID: 20C1383-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:04	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	92.4	70-130		4/2/20 22:04
M3HFPO-DA	86.9	70-130		4/2/20 22:04
13C-PFDA	88.0	70-130		4/2/20 22:04
d5-NEtFOSAA	99.3	70-130		4/2/20 22:04

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 340 Cow Hill Rd, Groton, CT Sample Description: Work Order: 20C1383

Date Received: 3/31/2020

Field Sample #: 1401678 Sampled: 3/30/2020 12:45

Sample ID: 20C1383-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	2.1	0.10	10	mg/L	1		EPA 300.0	3/31/20	3/31/20 17:54	IS
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	3/31/20	3/31/20 17:54	IS

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Project Location: 340 Cow Hill Rd, Groton, CT Sample Description: Work Order: 20C1383

Date Received: 3/31/2020

Field Sample #: 1401679 Sampled: 3/30/2020 12:45

Sample ID: 20C1383-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 22:26	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	91.3	70-130		4/2/20 22:26
M3HFPO-DA	85.5	70-130		4/2/20 22:26
13C-PFDA	87.5	70-130		4/2/20 22:26
d5-NEtFOSAA	97.7	70-130		4/2/20 22:26

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Project Location: 340 Cow Hill Rd, Groton, CT Sample Description: Work Order: 20C1383

Date Received: 3/31/2020

Field Sample #: 1401678 Sampled: 3/30/2020 12:45

Sample ID: 20C1383-03

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	3/31/20	3/31/20 18:55	EC

con-test® ANALYTICAL LABORATORY
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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1383-01 [1401678]	B255389	10.0	10.0	03/31/20

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1383-01 [1401678]	B255419	250	1.00	04/01/20
20C1383-02 [1401679]	B255419	250	1.00	04/01/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20C1383-03 [1401678]	B255413	150	03/31/20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255389 - EPA 300.0										
Blank (B255389-BLK1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	ND	0.10	mg/L							
Nitrite as N	ND	0.100	mg/L							
LCS (B255389-BS1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110			
Nitrite as N	0.980		mg/L	1.00		98.0	90-110			
LCS Dup (B255389-BSD1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110	0.0297	20	
Nitrite as N	0.981		mg/L	1.00		98.1	90-110	0.102	20	
Batch B255413 - SM 21-22 5210B										
Blank (B255413-BLK1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (B255413-BS1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	180	2.0	mg/L	198		92.0	85-115			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

ICAF 20C1383

Company Name: Lauren
Address: 100 Northwest Drive
Phone: 800 742, 6181
Project Name: Coal School Road
Project Location: 340 Cow Hill Rd,
Project Number: 181Gogl.001
Project Manager: John Bardos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time:
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐
5 Day

Dissolved Metals Samples:
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples:
○ Field Filtered
○ Lab to Filter

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other: LEA Equis & file format
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	O	PFAS (537.1)	BOD (SM 21-22 5210)	Nitrate-N (300)	Nitrite-N (300)
1	1401678	3/30/20	12[illegible]	GRAB	DW				4			X	X	X	X	
2	1401679	3/30/20	1243	GRAB	DW				2			X				

[2] Preservation Code

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Relinquished by: (signature) — Date/Time: 3/30 1500
Received by: (signature) — Date/Time: 3/31 925

Client Comments: CT RCP, LEA EQUIS & FILE FORMAT, 5 DAY TAT, PFAS PRESERVED WITH TRIZMA

Detection Limit Requirements:
MA
CT
Other:

Special Requirements:
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☒ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine wha analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Cor Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By RAP Date 3/31/20 Time 935

How were the samples received? In Cooler T No Cooler ____ On Ice T No Ice ____ Direct from Sampling ____ Ambient ____ Melted Ice ____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1 By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? ____

Are there Rushes? F Who was notified? ____

Are there Short Holds? T Who was notified? Irma

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid ____ Base ____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

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April 7, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 382 Oral School Rd, Groton, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1376

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

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Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/7/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1376

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 382 Oral School Rd, Groton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401671	20C1376-01	Drinking Water		EPA 300.0	
				EPA 537.1	
1401672	20C1376-02	Drinking Water		EPA 537.1	
1401671	20C1376-03	Drinking Water		SM 21-22 5210B	

con-test® ANALYTICAL LABORATORY
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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 382 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1376

Date Received: 3/31/2020

Field Sample #: 1401671 Sampled: 3/30/2020 10:00

Sample ID: 20C1376-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 19:55	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	92.7	70-130		4/2/20 19:55
M3HFPO-DA	85.4	70-130		4/2/20 19:55
13C-PFDA	83.5	70-130		4/2/20 19:55
d5-NEtFOSAA	95.7	70-130		4/2/20 19:55

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 382 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1376

Date Received: 3/31/2020

Field Sample #: 1401671 Sampled: 3/30/2020 10:00

Sample ID: 20C1376-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.31	0.10	10	mg/L	1		EPA 300.0	3/31/20	3/31/20 16:03	IS
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	3/31/20	3/31/20 16:03	IS

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Project Location: 382 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1376

Date Received: 3/31/2020

Field Sample #: 1401672 Sampled: 3/30/2020 10:00

Sample ID: 20C1376-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/3/20 13:30	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	89.9	70-130		4/3/20 13:30
M3HFPO-DA	84.8	70-130		4/3/20 13:30
13C-PFDA	83.7	70-130		4/3/20 13:30
d5-NEtFOSAA	96.6	70-130		4/3/20 13:30

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 382 Oral School Rd, Groton, CT Sample Description: Work Order: 20C1376

Date Received: 3/31/2020

Field Sample #: 1401671 Sampled: 3/30/2020 10:00

Sample ID: 20C1376-03

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	3/31/20	3/31/20 18:55	EC

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1376-01 [1401671]	B255389	10.0	10.0	03/31/20

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1376-01 [1401671]	B255419	250	1.00	04/01/20
20C1376-02 [1401672]	B255419	250	1.00	04/01/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20C1376-03 [1401671]	B255413	150	03/31/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255389 - EPA 300.0										
Blank (B255389-BLK1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	ND	0.10	mg/L							
Nitrite as N	ND	0.100	mg/L							
LCS (B255389-BS1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110			
Nitrite as N	0.980		mg/L	1.00		98.0	90-110			
LCS Dup (B255389-BSD1)				Prepared & Analyzed: 03/31/20						
Nitrate as N	1.0		mg/L	1.00		101	90-110	0.0297	20	
Nitrite as N	0.981		mg/L	1.00		98.1	90-110	0.102	20	
Batch B255413 - SM 21-22 5210B										
Blank (B255413-BLK1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (B255413-BS1)				Prepared & Analyzed: 03/31/20						
Biochemical Oxygen Demand	180	2.0	mg/L	198		92.0	85-115			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

20C1376

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
http://www.contestlabs.com
39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

Doc # 381 Rev 2_06262019

Page 1 of 1

Company Name: Lourero
Address: 100 Northwest Dr.
Phone: 860 747 6181
Project Name: Oral School Rd.
Project Location: 362 Oral School Rd.
Project Number: 18HG001.001
Project Manager: John Bondos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time: 7-Day ☐ 10-Day ☐ PFAS 10-Day (std) ☐ Due Date:
Rush-Approval Required: 1-Day ☐ 5 Day 3-Day ☐ 2-Day ☐ 4-Day ☐
Data Delivery: Format: Equis 4 file PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Dissolved Metals Samples: ○ Field Filtered ○ Lab to Filter
Orthophosphate Samples: ○ Field Filtered ○ Lab to Filter

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	¹Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1) (O)	BOD (SM 21-22 5210B) (I)	Nitrate-N (300) (I)	Nitrite-N (300) (I)
1	1401671	3/30/20	10⁰⁰	GRAB	DW				4			X	X	X	X
2	1401672	3/30/20	10⁰⁰	GRAB	DW				2			X			

² Preservation Code

Counter Use Only
Total Number Of:
VIALS ____
GLASS ____
PLASTIC ____
BACTERIA ____
ENCORE ____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

¹ **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

² **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature) [signature] Date/Time: 3/30/20 15⁰⁰
Received by: (signature) FED EX Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) [signature] 3.1/4.1 Date/Time: 3/31 925
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Client Comments: CTRCP, LEA Equis 4-file format, 5 Day TAT, PFAS preserved with Trizma

Detection Limit Requirements: MA / CT / Other
Special Requirements: ☐ MA MCP Required; MCP Certification Form Required; ☐ CT RCP Required; RCP Certification Form Required; ☐ MA State DW Required; PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above: H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity: Government ☒ Federal ☐ City ☐ Municipality ☐ 21 J ☐ Brownfield ☐ MWRA ☐ School ☐ MBTA ☐ WRTA ☐

Other: ☐ Chromatogram ☐ AIHA-LAP,LLC

PCB ONLY: ☐ Soxhlet ☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By RAP Date 3/31/22 Time 925

How were the samples received? In Cooler T No Cooler ____ On Ice T No Ice ____ Direct from Sampling ____ Ambient ____ Melted Ice ____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1 By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? ____

Are there Rushes? F Who was notified? ____

Are there Short Holds? T Who was notified? Irma

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid ____ Base ____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	4	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
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April 16, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: Mystic
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0456

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/16/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0456

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Mystic

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401682	20D0456-01	Drinking Water		EPA 300.0	
1401682	20D0456-02	Drinking Water		SM 21-22 5210B	

con-test® ANALYTICAL LABORATORY

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM 21-22 5210B

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Biochemical Oxygen Demand

B256077-BS1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Mystic | Sample Description: | Work Order: 20D0456

Date Received: 4/10/2020

Field Sample #: 1401682 | Sampled: 4/9/2020 10:20

Sample ID: 20D0456-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.16	0.10	10	mg/L	1		EPA 300.0	4/10/20	4/10/20 22:16	KMV
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	4/10/20	4/10/20 22:16	KMV

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Mystic | Sample Description: | Work Order: 20D0456

Date Received: 4/10/2020

Field Sample #: 1401682 | Sampled: 4/9/2020 10:20

Sample ID: 20D0456-02

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1		SM 21-22 5210B	4/10/20	4/10/20 19:30	DJM

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Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0456-01 [1401682]	B256083	10.0	10.0	04/10/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20D0456-02 [1401682]	B256077	150	04/10/20

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B256077 - SM 21-22 5210B											
Blank (B256077-BLK1)				Prepared & Analyzed: 04/10/20							
Biochemical Oxygen Demand	ND	2.0	mg/L								
LCS (B256077-BS1)				Prepared & Analyzed: 04/10/20							
Biochemical Oxygen Demand	130	2.0	mg/L	198		**66.9**	*	85-115			L-04
Batch B256083 - EPA 300.0											
Blank (B256083-BLK1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	ND	0.10	mg/L								
Nitrite as N	ND	0.100	mg/L								
LCS (B256083-BS1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	1.0		mg/L	1.00		103		90-110			
Nitrite as N	1.02		mg/L	1.00		102		90-110			
LCS Dup (B256083-BSD1)				Prepared & Analyzed: 04/10/20							
Nitrate as N	1.0		mg/L	1.00		103		90-110	0.234	20	
Nitrite as N	1.01		mg/L	1.00		101		90-110	0.384	20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

20D0456

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 2_06262019

Page 1 of 1

Company Name: Lourciro
Address: 100 Northwest Drive
Phone: 860 747 6181
Project Name: DELD Drinking Water
Project Location: ~~331 Great School Rd~~ Mystic
Project Number: 18HG001
Project Manager: John Bundus
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Required Turnaround Time: 7-Day ☐ 10-Day ☐ PFAS 10-Day (std) ☐ Due Date:
Rush Approval Required: 1-Day ☐ 3-Day ☒ 2-Day ☐ 4-Day ☐
Data Delivery: Format: PDF ☐ EXCEL ☐ Other: Equis 4 file format CLP Like Data Pkg Required: ☐ Email To: jabundus@lourciro.com Fax To #:
Dissolved Metals Samples: ○ Field Filtered ○ Lab to Filter
Orthophosphate Samples: ○ Field Filtered ○ Lab to Filter

ANALYSIS REQUESTED

Con-Test Work Order#	#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	Q PFAS (537.1)	I BOD (SM 21-22 5210B)	I Nitrate-N (300)	I Nitrite-N (300)	[2] Preservation Code
	1	1401682	4/9/20	10:20	Grab			2		4							
	2	1401683	4/9/20	10:20	Grab				(B)	2L							

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time:
Received by: (signature) SH 5.4 | 26 932	Date/Time: 4-10-2020
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: PFAS preserved with Trizma

Detection Limit Requirements: MA: ; GW1: ; Other: ;
Special Requirements: ☐ MA MCP Required; ☐ MCP Certification Form Required; ☒ CT RCP Required; ☐ RCP Certification Form Required; ☐ MA State DW Required; PWSID #:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity: Government ☐ Municipality ☐ MWRA ☐ WRTA ☐ Federal ☐ 21 J ☐ School ☐ City ☐ Brownfield ☐ MBTA ☐

Other: ☐ Chromatogram ☐ AIHA-LAP,LLC

PCB ONLY: ☐ Soxhlet ☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10.30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples______

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By R Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler ___ On Ice T No Ice ___
Direct from Sampling ___ Ambient ___ Melted Ice ___

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6
By Blank # ___ Actual Temp - ___

Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished ? T Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? T
Are there Lab to Filters? F Who was notified? ___
Are there Rushes? T Who was notified? Lucy
Are there Short Holds? T Who was notified? Lucy
Is there enough Volume? T
Is there Headspace where applicable? NA MS/MSD? F
Proper Media/Containers Used? T Is splitting samples required? F
Were trip blanks received? F On COC? F
Do all samples have the proper pH? NA Acid ___ Base ___

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	1	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
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April 20, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: Mystic
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0459

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/20/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0459

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Mystic

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401682	20D0459-01	Drinking Water		EPA 537.1	
1401683	20D0459-02	Drinking Water		EPA 537.1	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Mystic | Sample Description: | Work Order: 20D0459

Date Received: 4/10/2020

Field Sample #: 1401682 | Sampled: 4/9/2020 10:20

Sample ID: 20D0459-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:16	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	85.8	70-130		4/15/20 13:16
M3HFPO-DA	81.2	70-130		4/15/20 13:16
13C-PFDA	87.4	70-130		4/15/20 13:16
d5-NEtFOSAA	102	70-130		4/15/20 13:16

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Mystic | Sample Description: | Work Order: 20D0459

Date Received: 4/10/2020

Field Sample #: 1401683 | Sampled: 4/9/2020 10:20

Sample ID: 20D0459-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 13:38	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	96.9	70-130		4/15/20 13:38
M3HFPO-DA	92.5	70-130		4/15/20 13:38
13C-PFDA	98.3	70-130		4/15/20 13:38
d5-NEtFOSAA	111	70-130		4/15/20 13:38

con-test® ANALYTICAL LABORATORY
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Sample Extraction Data

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0459-01 [1401682]	B256145	250	1.00	04/13/20
20D0459-02 [1401683]	B256145	250	1.00	04/13/20

con-test® ANALYTICAL LABORATORY
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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B256145 - EPA 537.1										
Blank (B256145-BLK1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*36.3*		ng/L	40.0		90.8	70-130			
Surrogate: M3HFPO-DA	*35.5*		ng/L	40.0		88.9	70-130			
Surrogate: 13C-PFDA	*36.8*		ng/L	40.0		91.9	70-130			
Surrogate: d5-NEtFOSAA	*173*		ng/L	160		108	70-130			
LCS (B256145-BS1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	7.80	2.0	ng/L	8.85		88.2	70-130			
Perfluorohexanoic acid (PFHxA)	8.65	2.0	ng/L	10.0		86.5	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.45	2.0	ng/L	9.10		92.8	70-130			
Perfluoroheptanoic acid (PFHpA)	9.09	2.0	ng/L	10.0		90.9	70-130			
Perfluorooctanoic acid (PFOA)	9.28	2.0	ng/L	10.0		92.8	70-130			
Perfluorooctanesulfonic acid (PFOS)	8.20	2.0	ng/L	9.25		88.6	70-130			
Perfluorononanoic acid (PFNA)	9.35	2.0	ng/L	10.0		93.5	70-130			
Perfluorodecanoic acid (PFDA)	9.44	2.0	ng/L	10.0		94.4	70-130			
N-EtFOSAA	12.4	2.0	ng/L	10.0		124	70-130			
Perfluoroundecanoic acid (PFUnA)	9.34	2.0	ng/L	10.0		93.4	70-130			
N-MeFOSAA	10.7	2.0	ng/L	10.0		107	70-130			
Perfluorododecanoic acid (PFDoA)	9.46	2.0	ng/L	10.0		94.6	70-130			
Perfluorotridecanoic acid (PFTrDA)	9.36	2.0	ng/L	10.0		93.6	70-130			
Perfluorotetradecanoic acid (PFTA)	8.67	2.0	ng/L	10.0		86.7	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.62	2.0	ng/L	10.0		76.2	70-130			
11Cl-PF3OUdS (F53B Major)	6.87	2.0	ng/L	9.40		73.1	70-130			
9Cl-PF3ONS (F53B Minor)	8.38	2.0	ng/L	9.30		90.1	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	7.82	2.0	ng/L	10.0		78.2	70-130			
Surrogate: 13C-PFHxA	*31.4*		ng/L	40.0		78.4	70-130			
Surrogate: M3HFPO-DA	*30.4*		ng/L	40.0		76.0	70-130			
Surrogate: 13C-PFDA	*32.8*		ng/L	40.0		82.1	70-130			
Surrogate: d5-NEtFOSAA	*148*		ng/L	160		92.6	70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY

http://www.contestlabs.com

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 2_06262019

2000459

Company Name:	Loureiro
Address:	100 Northwest Drive
Phone:	860 747 6181
Project Name:	DELD Drinking Water
Project Location:	~~221 Oral School Rd~~ / Mystic
Project Number:	18HG001
Project Manager:	John Bondus
Con-Test Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Stansfield

Requested Turnaround Time
- 7-Day ☐ 10-Day ☐
- PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
- 1-Day ☐ 3-Day ☒
- 2-Day ☐ 4-Day ☐

Dissolved Metals Samples
- ○ Field Filtered
- ○ Lab to Filter

Orthophosphate Samples
- ○ Field Filtered
- ○ Lab to Filter

Data Delivery
- Format: PDF ☐ EXCEL ☐
- Other: Equis 4 file Format
- CLP Like Data Pkg Required: ☐
- Email To: ja bondus@loureiro.com
- Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1) [O]	BOD (SM 21-22 5210B) [I]	Nitrate-N (300) [I]	Nitrite-N (300) [I]
1	1401682	4/9/20	10²⁰	Grab			2		4						
2	1401683	4/9/20	10²⁰	Grab				(B)	~~2~~ 1						

[2] Preservation Code

Courier Use Only
Total Number Of:
VIALS____
GLASS____
PLASTIC____
BACTERIA____
ENCORE____

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

Relinquished by: (signature)	Date/Time:
Received by: (signature) [signature] SU/26	Date/Time: 932 4-10-2020
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: PFAS preserved with Trizma

Detection Limit Requirements / **Special Requirements**
- MA: ☐ MA MCP Required
- MCP Certification Form Required
- ☒ CT RCP Required
- CT: RCP Certification Form Required
- ☐ MA State DW Required
- Other: PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
- Government ☐ Federal ☐ City ☐
- Municipality ☐ 21 J ☐ Brownfield ☐
- MWRA ☐ School ☐ MBTA ☐
- WRTA ☐

Other
- ☐ Chromatogram
- ☐ AIHA-LAP,LLC

PCB ONLY
- ☐ Soxhlet
- ☐ Non Soxhlet

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine wha analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx®

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Courier

Received By UR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? T Were Samples Tampered with? F

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? NA MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 20, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 402 Oral School Rd
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0462

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

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con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/20/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0462

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 402 Oral School Rd

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401811	20D0462-01	Drinking Water		EPA 537.1	
1401812	20D0462-02	Drinking Water		EPA 537.1	

con-test® ANALYTICAL LABORATORY

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 402 Oral School Rd | Sample Description: | Work Order: 20D0462

Date Received: 4/10/2020

Field Sample #: 1401811 | Sampled: 4/9/2020 11:20

Sample ID: 20D0462-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:21	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	83.7	70-130		4/15/20 14:21
M3HFPO-DA	79.5	70-130		4/15/20 14:21
13C-PFDA	78.4	70-130		4/15/20 14:21
d5-NEtFOSAA	91.3	70-130		4/15/20 14:21

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Project Location: 402 Oral School Rd | Sample Description: | Work Order: 20D0462

Date Received: 4/10/2020

Field Sample #: 1401812 | Sampled: 4/9/2020 11:20

Sample ID: 20D0462-02

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:43	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	90.1	70-130		4/15/20 14:43
M3HFPO-DA	87.1	70-130		4/15/20 14:43
13C-PFDA	88.4	70-130		4/15/20 14:43
d5-NEtFOSAA	98.3	70-130		4/15/20 14:43

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Sample Extraction Data

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0462-01 [1401811]	B256145	250	1.00	04/13/20
20D0462-02 [1401812]	B256145	250	1.00	04/13/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B256145 - EPA 537.1										
Blank (B256145-BLK1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*36.3*		ng/L	40.0		90.8	70-130			
Surrogate: M3HFPO-DA	*35.5*		ng/L	40.0		88.9	70-130			
Surrogate: 13C-PFDA	*36.8*		ng/L	40.0		91.9	70-130			
Surrogate: d5-NEtFOSAA	*173*		ng/L	160		108	70-130			
LCS (B256145-BS1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	7.80	2.0	ng/L	8.85		88.2	70-130			
Perfluorohexanoic acid (PFHxA)	8.65	2.0	ng/L	10.0		86.5	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.45	2.0	ng/L	9.10		92.8	70-130			
Perfluoroheptanoic acid (PFHpA)	9.09	2.0	ng/L	10.0		90.9	70-130			
Perfluorooctanoic acid (PFOA)	9.28	2.0	ng/L	10.0		92.8	70-130			
Perfluorooctanesulfonic acid (PFOS)	8.20	2.0	ng/L	9.25		88.6	70-130			
Perfluorononanoic acid (PFNA)	9.35	2.0	ng/L	10.0		93.5	70-130			
Perfluorodecanoic acid (PFDA)	9.44	2.0	ng/L	10.0		94.4	70-130			
N-EtFOSAA	12.4	2.0	ng/L	10.0		124	70-130			
Perfluoroundecanoic acid (PFUnA)	9.34	2.0	ng/L	10.0		93.4	70-130			
N-MeFOSAA	10.7	2.0	ng/L	10.0		107	70-130			
Perfluorododecanoic acid (PFDoA)	9.46	2.0	ng/L	10.0		94.6	70-130			
Perfluorotridecanoic acid (PFTrDA)	9.36	2.0	ng/L	10.0		93.6	70-130			
Perfluorotetradecanoic acid (PFTA)	8.67	2.0	ng/L	10.0		86.7	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.62	2.0	ng/L	10.0		76.2	70-130			
11Cl-PF3OUdS (F53B Major)	6.87	2.0	ng/L	9.40		73.1	70-130			
9Cl-PF3ONS (F53B Minor)	8.38	2.0	ng/L	9.30		90.1	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	7.82	2.0	ng/L	10.0		78.2	70-130			
Surrogate: 13C-PFHxA	*31.4*		ng/L	40.0		78.4	70-130			
Surrogate: M3HFPO-DA	*30.4*		ng/L	40.0		76.0	70-130			
Surrogate: 13C-PFDA	*32.8*		ng/L	40.0		82.1	70-130			
Surrogate: d5-NEtFOSAA	*148*		ng/L	160		92.6	70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
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9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

2000462

Company Name: Loureiro
Address: 100 Northwest Drive
Phone: 860 747 6181
Project Name: DECD Drinking Water
Project Location: 402 Oral School Rd.
Project Number: 18HG001
Project Manager: John Bondos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 File EDD
CLP Like Data Pkg Required: ☐
Email To: jabondos@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1] Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	BOD (SM 21-22 5210B)	Nitrate-N (300)	Nitrite-N (300)	BOD MS/MSD
1	1401811	4/9/20	11[20]	Grab	DW				6			X	X	X	X	X
2	1401812	4/9/20	11[20]	Grab	DW				1			X				

Relinquished by: (signature) Date/Time:
Received by: (signature) 5.1 | 2.6 °C 32 Date/Time: 4-10-2020
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Client Comments: PFAS preserved with Trizma

Detection Limit Requirements
MA
CT
Other:

Special Requirements
☐ MA MCP Required
☐ MCP Certification Form Required
☒ CT RCP Required
☐ RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

[2] Preservation Code
Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx®

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples________

con-test®
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Loureiro

Received By LR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler ____ On Ice T No Ice ____
Direct from Sampling ____ Ambient ____ Melted Ice ____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6
By Blank # ____ Actual Temp - ____

Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished ? T Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? T
Are there Lab to Filters? F Who was notified? ____
Are there Rushes? F Who was notified? ____
Are there Short Holds? F Who was notified? ____
Is there enough Volume? F
Is there Headspace where applicable? NA MS/MSD? F
Proper Media/Containers Used? T Is splitting samples required? F
Were trip blanks received? F On COC? F
Do all samples have the proper pH? NA Acid ____ Base ____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	3	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

Limited volume for sample 1401812

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 16, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 402 Oral School Rd
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0453

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/16/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0453

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 402 Oral School Rd

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401811	20D0453-01	Drinking Water		EPA 300.0	
1401811	20D0453-02	Drinking Water		SM 21-22 5210B	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SM 21-22 5210B

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Biochemical Oxygen Demand
B256077-BS1

R-02

Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.

Analyte & Samples(s) Qualified:

Biochemical Oxygen Demand
20D0453-02[1401811], B256077-DUP1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Biochemical Oxygen Demand
20D0453-02[1401811], B256077-MSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 402 Oral School Rd Sample Description: Work Order: 20D0453

Date Received: 4/10/2020

Field Sample #: 1401811 Sampled: 4/9/2020 11:20

Sample ID: 20D0453-01

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Nitrate as N	0.38	0.10	10	mg/L	1		EPA 300.0	4/10/20	4/10/20 22:38	KMV
Nitrite as N	ND	0.100	1	mg/L	1		EPA 300.0	4/10/20	4/10/20 22:38	KMV

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 402 Oral School Rd Sample Description: Work Order: 20D0453

Date Received: 4/10/2020

Field Sample #: 1401811 Sampled: 4/9/2020 11:20

Sample ID: 20D0453-02

Sample Matrix: Drinking Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Biochemical Oxygen Demand	ND	4.0	mg/L	1	R-02, R-06	SM 21-22 5210B	4/10/20	4/10/20 19:30	DJM

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: EPA 300.0-EPA 300.0

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0453-01 [1401811]	B256083	10.0	10.0	04/10/20

SM 21-22 5210B

Lab Number [Field ID]	Batch	Initial [mL]	Date
20D0453-02 [1401811]	B256077	150	04/10/20

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B256077 - SM 21-22 5210B												
Blank (B256077-BLK1)				Prepared & Analyzed: 04/10/20								
Biochemical Oxygen Demand	ND	2.0	mg/L									
LCS (B256077-BS1)				Prepared & Analyzed: 04/10/20								
Biochemical Oxygen Demand	130	2.0	mg/L	198		**66.9**	*	85-115				L-04
Duplicate (B256077-DUP1)	**Source: 20D0453-02**			Prepared & Analyzed: 04/10/20								
Biochemical Oxygen Demand	4.6	4.0	mg/L		ND				NC		26.6	R-02
Matrix Spike (B256077-MS1)	**Source: 20D0453-02**			Prepared & Analyzed: 04/10/20								
Biochemical Oxygen Demand	150	2.0	mg/L	198	ND	74.7		66.8-127				
Matrix Spike Dup (B256077-MSD1)	**Source: 20D0453-02**			Prepared & Analyzed: 04/10/20								
Biochemical Oxygen Demand	190	2.0	mg/L	198	ND	96.0		66.8-127	**24.9**	*	20	R-06
Batch B256083 - EPA 300.0												
Blank (B256083-BLK1)				Prepared & Analyzed: 04/10/20								
Nitrate as N	ND	0.10	mg/L									
Nitrite as N	ND	0.100	mg/L									
LCS (B256083-BS1)				Prepared & Analyzed: 04/10/20								
Nitrate as N	1.0		mg/L	1.00		103		90-110				
Nitrite as N	1.02		mg/L	1.00		102		90-110				
LCS Dup (B256083-BSD1)				Prepared & Analyzed: 04/10/20								
Nitrate as N	1.0		mg/L	1.00		103		90-110	0.234		20	
Nitrite as N	1.01		mg/L	1.00		101		90-110	0.384		20	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
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DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
R-02	Duplicate RPD is outside of control limits. Outlier can be attributed to sample non-homogeneity encountered during sample prep.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Drinking Water	
Nitrate as N	MA
Nitrite as N	MA
SM 21-22 5210B in Water	
Biochemical Oxygen Demand	CT,MA,NH,NY,RI,ME,VA,NC

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NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

20D0453

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Doc # 381 Rev 2_06262019

Page 1 of 1

Company Name:	Loureiro
Address:	100 Northwest Drive
Phone:	860 747 6181
Project Name:	DECD Drinking water
Project Location:	402 Oral School Rd.
Project Number:	18HG001
Project Manager:	John Bondos
Con-Test Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Stanfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☒
2-Day ☐ 4-Day ☐

Dissolved Metal Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: PDF ☐ EXCEL ☐
Other: LEA Equis 4 File EDD
CLP Like Data Pkg Required: ☐
Email To: jbondos@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	BOD LSM 21-22 SCMBD	Nitrate-N (300)	Nitrite-N (300)	BOD MS/MSD									[2] Preservation Code
1	1401811	4/9/20	11:20	Grab	DW				6			X	X	X	X	X									
2	1401812	4/9/20	11:20	Grab	DW				1			X													

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time:
Received by: (signature) 5.4 | 2.6 °C32	Date/Time: 4-10-2020
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: PFAS preserved with Trizma

Detection Limit Requirements
MA
GW-1
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☒ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con Test values your partnership on each project and will try to assist with missing information, but will not b held accountable.

Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx®

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10.30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Confirm

Received By JR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished ? F Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? T
Are there Lab to Filters? F Who was notified? _____
Are there Rushes? T Who was notified? Lucy
Are there Short Holds? T Who was notified? Lucy
Is there enough Volume? T
Is there Headspace where applicable? NA MS/MSD? T
Proper Media/Containers Used? T Is splitting samples required? F
Were trip blanks received? F On COC? F
Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic	3	16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic	1	8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 3, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: 340 Cow Hill Rd., Groton, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20C1387

Enclosed are results of analyses for samples received by the laboratory on March 31, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/3/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20C1387

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 340 Cow Hill Rd., Groton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401669	20C1387-01	Drinking Water		EPA 537.1	

con-test® ANALYTICAL LABORATORY

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington
Technical Representative

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 340 Cow Hill Rd., Groton, CT Sample Description: Work Order: 20C1387

Date Received: 3/31/2020

Field Sample #: 1401669 Sampled: 3/30/2020 09:00

Sample ID: 20C1387-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/1/20	4/2/20 23:09	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	94.2	70-130		4/2/20 23:09
M3HFPO-DA	89.4	70-130		4/2/20 23:09
13C-PFDA	91.5	70-130		4/2/20 23:09
d5-NEtFOSAA	102	70-130		4/2/20 23:09

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Sample Extraction Data

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20C1387-01 [1401669]	B255419	250	1.00	04/01/20

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B255419 - EPA 537.1										
Blank (B255419-BLK1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*37.9*		ng/L	40.0		94.8	70-130			
Surrogate: M3HFPO-DA	*35.8*		ng/L	40.0		89.4	70-130			
Surrogate: 13C-PFDA	*37.7*		ng/L	40.0		94.3	70-130			
Surrogate: d5-NEtFOSAA	*170*		ng/L	160		106	70-130			
LCS (B255419-BS1)				Prepared: 04/01/20 Analyzed: 04/02/20						
Perfluorobutanesulfonic acid (PFBS)	8.41	2.0	ng/L	8.85		95.1	70-130			
Perfluorohexanoic acid (PFHxA)	10.2	2.0	ng/L	10.0		102	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.1	2.0	ng/L	9.10		111	70-130			
Perfluoroheptanoic acid (PFHpA)	9.41	2.0	ng/L	10.0		94.1	70-130			
Perfluorooctanoic acid (PFOA)	10.0	2.0	ng/L	10.0		100	70-130			
Perfluorooctanesulfonic acid (PFOS)	9.62	2.0	ng/L	9.25		104	70-130			
Perfluorononanoic acid (PFNA)	11.3	2.0	ng/L	10.0		113	70-130			
Perfluorodecanoic acid (PFDA)	10.3	2.0	ng/L	10.0		103	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	10.1	2.0	ng/L	10.0		101	70-130			
N-MeFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluorododecanoic acid (PFDoA)	10.6	2.0	ng/L	10.0		106	70-130			
Perfluorotridecanoic acid (PFTrDA)	11.0	2.0	ng/L	10.0		110	70-130			
Perfluorotetradecanoic acid (PFTA)	10.8	2.0	ng/L	10.0		108	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.87	2.0	ng/L	10.0		78.7	70-130			
11Cl-PF3OUdS (F53B Major)	8.72	2.0	ng/L	9.40		92.8	70-130			
9Cl-PF3ONS (F53B Minor)	10.4	2.0	ng/L	9.30		112	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.43	2.0	ng/L	10.0		94.3	70-130			
Surrogate: 13C-PFHxA	*40.0*		ng/L	40.0		99.9	70-130			
Surrogate: M3HFPO-DA	*37.8*		ng/L	40.0		94.5	70-130			
Surrogate: 13C-PFDA	*40.6*		ng/L	40.0		101	70-130			
Surrogate: d5-NEtFOSAA	*174*		ng/L	160		109	70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
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11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

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Fax: 413-525-6405
Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

KAF 20C1387

Company Name: Loureiro
Address: 100 Northwest Drive
Phone: 860 747 6181
Project Name: Oral School Road
Project Location: Groton CT
Project Number: 18HG001.001
Project Manager: John Bondos
Con-Test Quote Name/Number:
Invoice Recipient:
Sampled By: S. Stansfield

Requested Turnaround Time
7-Day ☐ 10-Day ☐
PFAS 10-Day (std) ☐ Due Date:

Rush Approval Required
1-Day ☐ 5 Day 3-Day ☐
2-Day ☐ 4-Day ☐

Dissolved Metals Samples
○ Field Filtered
○ Lab to Filter

Orthophosphate Samples
○ Field Filtered
○ Lab to Filter

Data Delivery
Format: Equis 4 file PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: drdabrowski@loureiro.com
Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1]Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)	[2] Preservation Code
1	1401669	3/30/20	900	Grab	TB				2			X	

Courier Use Only
Total Number Of:
VIALS
GLASS
PLASTIC
BACTERIA
ENCORE

Glassware in the fridge? Y / N
Glassware in freezer? Y / N
Prepackaged Cooler? Y / N
*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Relinquished by: (signature)	Date/Time: 1500 3/30
Received by: (signature) FED EX	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time: 925 3/31
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Client Comments: LEA Equis 4 file format, CT RCP, preservative = Trizma, 5 day TAT

Detection Limit Requirements
MA
GW
Other:

Special Requirements
☐ MA MCP Required
MCP Certification Form Required
☐ CT RCP Required
RCP Certification Form Required
☐ MA State DW Required
PWSID #

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☒ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine wha analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Cor Test values your partnership on each project and will try to assist with missing information, but will not t held accountable.

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IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx

770134572157

Delivered
Tuesday 3/31/2020 at 9:25 am

DELIVERED

Signed for by: R.PIATRAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770134571025 (master)	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA
770134572157	WINDSOR LOCKS, CT	3/30/2020		3/31/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770134572157

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770134571025

WEIGHT
37 lbs / 16.78 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
37 lbs / 16.78 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
3/31/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Laurel

Received By RAP Date 3/31/20 Time 925

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____

Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 3.1/4.1

By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished ? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? F MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	2	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

April 20, 2020

John Bondos
Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062

Project Location: Mystic, CT
Client Job Number:
Project Number: 18HG001.001
Laboratory Work Order Number: 20D0461

Enclosed are results of analyses for samples received by the laboratory on April 10, 2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano
Project Manager

Table of Contents

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Loureiro Engineering Associates
100 Northwest Drive
Plainville, CT 06062
ATTN: John Bondos

REPORT DATE: 4/20/2020

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 18HG001.001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 20D0461

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Mystic, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
1401818	20D0461-01	Drinking Water		EPA 537.1	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Mystic, CT | Sample Description: | Work Order: 20D0461

Date Received: 4/10/2020

Field Sample #: 1401818 | Sampled: 4/9/2020 09:00

Sample ID: 20D0461-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	4/13/20	4/15/20 14:00	BLM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C-PFHxA	80.2	70-130		4/15/20 14:00
M3HFPO-DA	77.6	70-130		4/15/20 14:00
13C-PFDA	84.7	70-130		4/15/20 14:00
d5-NEtFOSAA	101	70-130		4/15/20 14:00

con-test® ANALYTICAL LABORATORY
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Sample Extraction Data

Prep Method: EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
20D0461-01 [1401818]	B256145	250	1.00	04/13/20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B256145 - EPA 537.1										
Blank (B256145-BLK1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0	ng/L							
N-MeFOSAA	ND	2.0	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	2.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	2.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0	ng/L							
Surrogate: 13C-PFHxA	*36.3*		ng/L	40.0		90.8	70-130			
Surrogate: M3HFPO-DA	*35.5*		ng/L	40.0		88.9	70-130			
Surrogate: 13C-PFDA	*36.8*		ng/L	40.0		91.9	70-130			
Surrogate: d5-NEtFOSAA	*173*		ng/L	160		108	70-130			
LCS (B256145-BS1)				Prepared: 04/13/20 Analyzed: 04/15/20						
Perfluorobutanesulfonic acid (PFBS)	7.80	2.0	ng/L	8.85		88.2	70-130			
Perfluorohexanoic acid (PFHxA)	8.65	2.0	ng/L	10.0		86.5	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.45	2.0	ng/L	9.10		92.8	70-130			
Perfluoroheptanoic acid (PFHpA)	9.09	2.0	ng/L	10.0		90.9	70-130			
Perfluorooctanoic acid (PFOA)	9.28	2.0	ng/L	10.0		92.8	70-130			
Perfluorooctanesulfonic acid (PFOS)	8.20	2.0	ng/L	9.25		88.6	70-130			
Perfluorononanoic acid (PFNA)	9.35	2.0	ng/L	10.0		93.5	70-130			
Perfluorodecanoic acid (PFDA)	9.44	2.0	ng/L	10.0		94.4	70-130			
N-EtFOSAA	12.4	2.0	ng/L	10.0		124	70-130			
Perfluoroundecanoic acid (PFUnA)	9.34	2.0	ng/L	10.0		93.4	70-130			
N-MeFOSAA	10.7	2.0	ng/L	10.0		107	70-130			
Perfluorododecanoic acid (PFDoA)	9.46	2.0	ng/L	10.0		94.6	70-130			
Perfluorotridecanoic acid (PFTrDA)	9.36	2.0	ng/L	10.0		93.6	70-130			
Perfluorotetradecanoic acid (PFTA)	8.67	2.0	ng/L	10.0		86.7	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.62	2.0	ng/L	10.0		76.2	70-130			
11Cl-PF3OUdS (F53B Major)	6.87	2.0	ng/L	9.40		73.1	70-130			
9Cl-PF3ONS (F53B Minor)	8.38	2.0	ng/L	9.30		90.1	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	7.82	2.0	ng/L	10.0		78.2	70-130			
Surrogate: 13C-PFHxA	*31.4*		ng/L	40.0		78.4	70-130			
Surrogate: M3HFPO-DA	*30.4*		ng/L	40.0		76.0	70-130			
Surrogate: 13C-PFDA	*32.8*		ng/L	40.0		82.1	70-130			
Surrogate: d5-NEtFOSAA	*148*		ng/L	160		92.6	70-130			

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 537.1 in Drinking Water	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,NY,NH,PA
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA
11Cl-PF3OUdS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA
9Cl-PF3ONS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2021
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2021
RI	Rhode Island Department of Health	LAO00112	12/30/2020
NC	North Carolina Div. of Water Quality	652	12/31/2020
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2020
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com

http://www.contestlabs.com

Doc # 381 Rev 2_06262019

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

20D0461

Company Name:	Loureiro
Address:	100 Northwest Drive
Phone:	860 747 6181
Project Name:	DECD Drinking water
Project Location:	Mystic CT
Project Number:	18HG001
Project Manager:	John Bondos
Con-Test Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Stansfield

Requested Turnaround Time		Dissolved Metals Samples	
7-Day ☐	10-Day ☐	○	Field Filtered
PFAS 10-Day (std) ☐	Due Date:	○	Lab to Filter
Rush-Approval Required		**Orthophosphate Samples**	
1-Day ☐	3-Day ☒	○	Field Filtered
2-Day ☐	4-Day ☐	○	Lab to Filter

Data Delivery

Format: PDF ☐ EXCEL ☐

Other: LEA Equis EQ File

CLP Like Data Pkg Required? ☐

Email To: jnbondos@loureiro.com

Fax To #:

ANALYSIS REQUESTED

Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	COMP/GRAB	[1] Matrix Code	Conc Code	VIALS	GLASS	PLASTIC	BACTERIA	ENCORE	PFAS (537.1)											[2] Preservation Code
1	1401814	4/9/20	900	Grab			1					X											

Courier Use Only

Total Number Of:

VIALS ____

GLASS ____

PLASTIC ____

BACTERIA ____

ENCORE ____

Glassware in the fridge? Y / N

Glassware in freezer? Y / N

Prepackaged Cooler? Y / N

*Contest is not responsible for missing samples from prepacked coolers

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define) ____

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define) ____

Relinquished by: (signature)		Date/Time:
Received by: (signature)	5.4 2.1 932	Date/Time: 4-10-2020
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Client Comments: PFAS preserved with Trizma

Detection Limit Requirements

MA: ____

CT: ____

Other: ____

Special Requirements

☐ MA MCP Required

MCP Certification Form Required

☒ CT RCP Required

RCP Certification Form Required

☐ MA State DW Required

PWSID #: ____

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

NELAC and AIHA-LAP, LLC Accredited

Project Entity

Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other

☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY

☐ Soxhlet
☐ Non Soxhlet

Lab Comments:

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Table of Contents

IMPORTANT!
We are continuing to respond to the impact of COVID-19 around the world. See our latest updates. For COVID-19-related recipient closures, you can redirect packages, Ask FedEx, or contact the shipper.

FedEx®

770208394894

Delivered
Friday 4/10/2020 at 9:32 am

DELIVERED

Signed for by: R.PIETRAIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM	TO
PLAINVILLE, CT US	EAST LONGMEADOW, MA US

Multiple-piece Shipment

2 Piece shipment

TRACKING NUMBER	SHIPPER CITY, STATE	SHIP DATE	STATUS	DELIVERY DATE	DESTINATION/RECIPIENT CITY, STATE
770208394883 (master)	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA
770208394894	WINDSOR LOCKS, CT	4/09/2020		4/10/2020	EAST LONGMEADOW, MA

Shipment Facts

TRACKING NUMBER
770208394894

SERVICE
FedEx Priority Overnight

MASTER TRACKING NUMBER
770208394883

WEIGHT
25 lbs / 11.34 kgs

DELIVERED TO
Shipping/Receiving

TOTAL PIECES
2

TOTAL SHIPMENT WEIGHT
25 lbs / 11.34 kgs

TERMS
Shipper

SHIPPER REFERENCE
18HG001.001

PACKAGING
Your Packaging

SPECIAL HANDLING SECTION
Deliver Weekday

STANDARD TRANSIT
4/10/2020 by 10:30 am

SHIP DATE

ACTUAL DELIVERY

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples_____

con-test® ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Courtesy

Received By JR Date 4-10-2020 Time 932

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 2 Actual Temp - 5.4, 2.6
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? T Were Samples Tampered with? F
Was COC Relinquished ? T Does Chain Agree With Samples? T
Are there broken/leaking/loose caps on any samples? F
Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all pertinent Information? Client T Analysis T Sampler Name T
Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? T
Are there Lab to Filters? F Who was notified? _____
Are there Rushes? F Who was notified? _____
Are there Short Holds? F Who was notified? _____
Is there enough Volume? T
Is there Headspace where applicable? NA MS/MSD? F
Proper Media/Containers Used? T Is splitting samples required? F
Were trip blanks received? F On COC? F
Do all samples have the proper pH? NA Acid _____ Base _____

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic	1	4oz Amb/Clear	
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear	
DI-		Other Glass		Other Plastic		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Unused Media

Vials	#	Containers:	#		#		#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.	
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear	
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear	
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear	
DI-		Other Plastic		Other Glass		Encore	
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:	
Sulfuric-		Perchlorate		Ziplock			

Comments:

Limited Volume