

November 27, 2019

Shane Grant
Eastern Water Solutions
5 Benson Road
Oxford, CT 06478

Project Location: 4 Barbourtown Rd. Canton, CT
Client Job Number:
Project Number: WELL #2, Y2hp CT 0230392
Laboratory Work Order Number: 19K0629

Enclosed are results of analyses for samples received by the laboratory on November 11, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Michelle Koch". The signature is written in a cursive, flowing style.

Michelle M. Koch
Project Manager

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
19K0629-01	5
19K0629-02	6
Sample Preparation Information	7
QC Data	8
Semivolatile Organic Compounds by - LC/MS-MS	8
B246729	8
Flag/Qualifier Summary	9
Certifications	10
Chain of Custody/Sample Receipt	11

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

Eastern Water Solutions
5 Benson Road
Oxford, CT 06478
ATTN: Shane Grant

REPORT DATE: 11/27/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: WELL #2, Y2hp CT 0230392

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19K0629

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

PROJECT LOCATION: 4 Barbourtown Rd. Canton, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Well #2 3/4 Field Blank	19K0629-01	Drinking Water		EPA 537.1	
Well #2 3/4	19K0629-02	Drinking Water		EPA 537.1	

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:****PF-01**

Surrogate recovery is outside of control limits. Sample not re-extracted past holding time per method.

Analyte & Samples(s) Qualified:**13C-PFDA**

19K0629-01[Well #2 3/4 Field Blank]

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.

A handwritten signature in black ink that reads "Tod Kopyscinski". The signature is written in a cursive style with a large, sweeping initial "T".

Tod E. Kopyscinski
Laboratory Director

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

Project Location: 4 Barbourtown Rd. Canton, CT

Sample Description:

Work Order: 19K0629

Date Received: 11/11/2019

Field Sample #: Well #2 3/4 Field Blank

Sampled: 11/11/2019 12:20

Sample ID: 19K0629-01

Sample Matrix: Drinking Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	MCL/SMCL		Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
		RL	MA ORSG							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
11Cl-PF3OUdS (F53B Major)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L	1		EPA 537.1	11/22/19	11/27/19 3:19	BLM
Surrogates		% Recovery		Recovery Limits		Flag/Qual				
13C-PFHxA		124		70-130					11/27/19 3:19	
M3HFPO-DA		116		70-130					11/27/19 3:19	
13C-PFDA		132	*	70-130		PF-01			11/27/19 3:19	
d5-NEtFOSAA		128		70-130					11/27/19 3:19	

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

Project Location: 4 Barbourtown Rd. Canton, CT

Sample Description:

Work Order: 19K0629

Date Received: 11/11/2019

Field Sample #: Well #2 3/4

Sample ID: 19K0629-02

Start Date/Time: 11/11/2019 12:26:00PM

Sample Matrix: Drinking Water

Stop Date/Time: 11/11/2019 12:30:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	MCL/SMCL			Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
		RL	MA	ORSG							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorohexanoic acid (PFHxA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluoroheptanoic acid (PFHpA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorooctanoic acid (PFOA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorooctanesulfonic acid (PFOS)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorononanoic acid (PFNA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorodecanoic acid (PFDA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
N-EtFOSAA	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluoroundecanoic acid (PFUnA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
N-MeFOSAA	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorododecanoic acid (PFDoA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorotridecanoic acid (PFTrDA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Perfluorotetradecanoic acid (PFTA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
11Cl-PF3OUdS (F53B Major)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
9Cl-PF3ONS (F53B Minor)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0			ng/L	1	EPA 537.1	11/22/19	11/27/19 3:41	BLM	
Surrogates		% Recovery	Recovery Limits			Flag/Qual					
13C-PFHxA		130	70-130						11/27/19 3:41		
M3HFPO-DA		122	70-130						11/27/19 3:41		
13C-PFDA		125	70-130						11/27/19 3:41		
d5-NEtFOSAA		125	70-130						11/27/19 3:41		

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

Sample Extraction Data

Prep Method: EPA 537-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19K0629-01 [Well #2 3/4 Field Blank]	B246729	250	1.00	11/22/19
19K0629-02 [Well #2 3/4]	B246729	250	1.00	11/22/19

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 B246729 - EPA 537										
Blank (B246729-BLK1)										
Prepared: 11/22/19 Analyzed: 11/27/19										
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 (PFTTrDA)	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	45.8		ng/L	40.0		115	70-130			
Surrogate: M3HFPO-DA	45.4		ng/L	40.0		114	70-130			
Surrogate: 13C-PFDA	43.7		ng/L	40.0		109	70-130			
Surrogate: d5-NEtFOSAA	167		ng/L	160		104	70-130			
LCS (B246729-BS1)										
Prepared: 11/22/19 Analyzed: 11/27/19										
Perfluorobutanesulfonic acid (PFBS)	9.44	2.0	ng/L	10.0		94.4	70-130			
Perfluorohexanoic acid (PFHxA)	10.3	2.0	ng/L	10.0		103	70-130			
Perfluorohexanesulfonic acid (PFHxS)	9.89	2.0	ng/L	9.10		109	70-130			
Perfluoroheptanoic acid (PFHpA)	10.3	2.0	ng/L	10.0		103	70-130			
Perfluorooctanoic acid (PFOA)	10.9	2.0	ng/L	10.0		109	70-130			
Perfluorooctanesulfonic acid (PFOS)	10.2	2.0	ng/L	9.25		110	70-130			
Perfluorononanoic acid (PFNA)	11.5	2.0	ng/L	10.0		115	70-130			
Perfluorodecanoic acid (PFDA)	12.0	2.0	ng/L	10.0		120	70-130			
N-EtFOSAA	12.1	2.0	ng/L	10.0		121	70-130			
Perfluoroundecanoic acid (PFUnA)	11.6	2.0	ng/L	10.0		116	70-130			
N-MeFOSAA	9.95	2.0	ng/L	10.0		99.5	70-130			
Perfluorododecanoic acid (PFDoA)	10.8	2.0	ng/L	10.0		108	70-130			
Perfluorotridecanoic acid (PFTTrDA)	10.8	2.0	ng/L	10.0		108	70-130			
Perfluorotetradecanoic acid (PFTA)	10.4	2.0	ng/L	10.0		104	70-130			
11Cl-PF3OUdS (F53B Major)	8.73	2.0	ng/L	9.40		92.9	70-130			
9Cl-PF3ONS (F53B Minor)	8.88	2.0	ng/L	9.30		95.5	70-130			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	9.94	2.0	ng/L	10.0		99.4	70-130			
Surrogate: 13C-PFHxA	40.7		ng/L	40.0		102	70-130			
Surrogate: M3HFPO-DA	39.6		ng/L	40.0		99.0	70-130			
Surrogate: 13C-PFDA	45.2		ng/L	40.0		113	70-130			
Surrogate: d5-NEtFOSAA	174		ng/L	160		109	70-130			

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 is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
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.
PF-01	Surrogate recovery is outside of control limits. Sample not re-extracted past holding time per method.

CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
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	12/14/2019
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

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 Eastern Water Solutions

Received By SA Date 11/11 Time 1422

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 # 5 Actual Temp - 2.8
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

Are there Rushes? F

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? NA

Proper Media/Containers Used? T

Were trip blanks received? F

Do all samples have the proper pH? _____

Who was notified? _____

Who was notified? _____

Who was notified? _____

MS/MSD? F

Is splitting samples required? F

On COC? F

Acid NA Base NA

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-		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: