

September 30, 2019

Brenda Lopez  
City of Westfield - Westfield Water Dept.  
Westfield DEW Water Division, 28 Sackett Street  
Westfield, MA 01085

Project Location: Westfield, MA  
Client Job Number:  
Project Number: 20170707 PFAS  
Laboratory Work Order Number: 19I0897  
PWSID# 1329000

Enclosed are results of analyses for samples received by the laboratory on September 18, 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 style with a loop at the end of the last name.

Michelle M. Koch  
Project Manager

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

City of Westfield - Westfield Water Dept.  
Westfield DEW Water Division, 28 Sackett Street  
Westfield, MA 01085  
ATTN: Brenda Lopez

REPORT DATE: 9/30/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 20170707 PFAS

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**ANALYTICAL SUMMARY**

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WORK ORDER NUMBER: 1910897

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

PROJECT LOCATION: Westfield, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
FB Well #2 POE	1910897-01	Field Blank		EPA 537	
Well #2 POE 10513	1910897-02	Drinking Water		EPA 537	
FB Well #2 GAC	1910897-03	Field Blank		EPA 537	
Well #2 GAC 10524	1910897-04	Drinking Water		EPA 537	
FB Well #2 RAW	1910897-05	Field Blank		EPA 537	
Well #2 Raw RW2	1910897-06	Drinking Water		EPA 537	

**CASE NARRATIVE SUMMARY**

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

**EPA 537**

**Qualifications:**

**S-17**

Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

**Analyte & Sample(s) Qualified:**

**d5-NEtFOSAA**

1910897-02[Well #2 POE 10513]

**EPA 537**

If more than the compound list from method EPA 537 has been reported, prep and analysis has been conducted by method SOP 434-PFAAS.

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

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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: FB Well #2 POE

Sampled: 9/18/2019 11:00

Sample ID: 1910897-01

Sample Matrix: Field Blank

**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	9/20/19	9/27/19 15:34	JFC
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:34	JFC
<b>Surrogates</b>		<b>% Recovery</b>		<b>Recovery Limits</b>		<b>Flag/Qual</b>				
13C-PFHxA		115		70-130					9/27/19 15:34	
13C-PFDA		104		70-130					9/27/19 15:34	
d5-NEtFOSAA		126		70-130					9/27/19 15:34	

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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: Well #2 POE 10513

Sampled: 9/18/2019 11:00

Sample ID: 1910897-02

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	9/20/19	9/26/19 22:46	JFC
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:46	JFC
Surrogates		% Recovery		Recovery Limits		Flag/Qual				
13C-PFHxA		102		70-130					9/26/19 22:46	
13C-PFDA		86.1		70-130					9/26/19 22:46	
<b>d5-NEtFOSAA</b>		<b>143</b>	*	70-130		S-17			9/26/19 22:46	

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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: FB Well #2 GAC

Sampled: 9/18/2019 11:20

Sample ID: 1910897-03

Sample Matrix: Field Blank

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	9/20/19	9/27/19 15:47	JFC
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:47	JFC
<b>Surrogates</b>		<b>% Recovery</b>	<b>Recovery Limits</b>			<b>Flag/Qual</b>				
13C-PFHxA		129	70-130				9/27/19 15:47			
13C-PFDA		107	70-130				9/27/19 15:47			
d5-NEtFOSAA		111	70-130				9/27/19 15:47			

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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: Well #2 GAC 10524

Sampled: 9/18/2019 11:20

Sample ID: 1910897-04

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	9/20/19	9/26/19 22:59	JFC
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 22:59	JFC
<b>Surrogates</b>		<b>% Recovery</b>		<b>Recovery Limits</b>		<b>Flag/Qual</b>				
13C-PFHxA		93.8		70-130					9/26/19 22:59	
13C-PFDA		105		70-130					9/26/19 22:59	
d5-NEtFOSAA		106		70-130					9/26/19 22:59	



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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: FB Well #2 RAW

Sampled: 9/18/2019 11:30

Sample ID: 1910897-05

Sample Matrix: Field Blank

**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	9/20/19	9/27/19 15:59	JFC
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/27/19 15:59	JFC
<b>Surrogates</b>		<b>% Recovery</b>		<b>Recovery Limits</b>		<b>Flag/Qual</b>				
13C-PFHxA		98.1		70-130					9/27/19 15:59	
13C-PFDA		74.4		70-130					9/27/19 15:59	
d5-NEtFOSAA		76.6		70-130					9/27/19 15:59	

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

Project Location: Westfield, MA

Sample Description:

Work Order: 1910897

Date Received: 9/18/2019

Field Sample #: Well #2 Raw RW2

Sampled: 9/18/2019 11:30

Sample ID: 1910897-06

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)	11	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorohexanoic acid (PFHxA)	6.2	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorohexanesulfonic acid (PFHxS)	32	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluoroheptanoic acid (PFHpA)	3.3	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorooctanoic acid (PFOA)	7.0	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorooctanesulfonic acid (PFOS)	21	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
N-EtFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
N-MeFOSAA	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorotridecanoic acid (PFTrDA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
Perfluorotetradecanoic acid (PFTA)	ND	2.0		ng/L	1		EPA 537	9/20/19	9/26/19 23:11	JFC
<b>Surrogates</b>		<b>% Recovery</b>		<b>Recovery Limits</b>		<b>Flag/Qual</b>				
13C-PFHxA		129		70-130					9/26/19 23:11	
13C-PFDA		109		70-130					9/26/19 23:11	
d5-NEtFOSAA		129		70-130					9/26/19 23:11	

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### Sample Extraction Data

Prep Method: SOP 434-PFAAS-EPA 537

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19I0897-01 [FB Well #2 POE]	B241076	250	1.00	09/20/19
19I0897-02 [Well #2 POE 10513]	B241076	250	1.00	09/20/19
19I0897-03 [FB Well #2 GAC]	B241076	250	1.00	09/20/19
19I0897-04 [Well #2 GAC 10524]	B241076	250	1.00	09/20/19
19I0897-05 [FB Well #2 RAW]	B241076	250	1.00	09/20/19
19I0897-06 [Well #2 Raw RW2]	B241076	250	1.00	09/20/19

**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
<b>Batch B241076 - SOP 434-PFAAS</b>										
<b>Blank (B241076-BLK1)</b>										
Prepared: 09/20/19 Analyzed: 09/28/19										
Perfluorobutanoic acid (PFBA)	ND	2.0	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	ng/L							
Perfluoropentanoic acid (PFPeA)	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							
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0	ng/L							
Perfluorooctanesulfonamide (FOSA)	ND	2.0	ng/L							
6:2 Fluorotelomersulfonate (6:2 FTS A)	ND	2.0	ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0	ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	ng/L							
N-EtFOSAA	ND	2.0	ng/L							
8:2 Fluorotelomersulfonate (8:2 FTS A)	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							
Surrogate: 13C-PFHxA	29.7		ng/L	40.0		74.2	70-130			
Surrogate: 13C-PFDA	28.2		ng/L	40.0		70.4	70-130			
Surrogate: d5-NEtFOSAA	166		ng/L	160		104	70-130			
<b>LCS (B241076-BS1)</b>										
Prepared: 09/20/19 Analyzed: 09/28/19										
Perfluorobutanesulfonic acid (PFBS)	10.5	2.0	ng/L	8.85		119	70-130			
Perfluorohexanoic acid (PFHxA)	8.87	2.0	ng/L	10.0		88.7	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.73	2.0	ng/L	9.10		95.9	70-130			
Perfluoroheptanoic acid (PFHpA)	7.09	2.0	ng/L	10.0		70.9	70-130			
Perfluorooctanoic acid (PFOA)	7.03	2.0	ng/L	10.0		70.3	70-130			
Perfluorooctanesulfonic acid (PFOS)	7.93	2.0	ng/L	9.25		85.8	70-130			
Perfluorononanoic acid (PFNA)	9.14	2.0	ng/L	10.0		91.4	70-130			
Perfluorodecanoic acid (PFDA)	9.05	2.0	ng/L	10.0		90.5	70-130			
N-EtFOSAA	11.3	2.0	ng/L	10.0		113	70-130			
Perfluoroundecanoic acid (PFUnA)	9.10	2.0	ng/L	10.0		91.0	70-130			
N-MeFOSAA	10.8	2.0	ng/L	10.0		108	70-130			
Perfluorododecanoic acid (PFDoA)	8.52	2.0	ng/L	10.0		85.2	70-130			
Perfluorotridecanoic acid (PFTrDA)	8.73	2.0	ng/L	10.0		87.3	70-130			
Perfluorotetradecanoic acid (PFTA)	8.94	2.0	ng/L	10.0		89.4	70-130			
Surrogate: 13C-PFHxA	32.5		ng/L	40.0		81.2	70-130			
Surrogate: 13C-PFDA	34.7		ng/L	40.0		86.8	70-130			
Surrogate: d5-NEtFOSAA	142		ng/L	160		88.9	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 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.
S-17	Surrogate recovery is outside of control limits. Data validation is not affected since all associated results are less than the reporting limit and bias is on the high side.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>EPA 537 in Drinking Water</i>	
Perfluorobutanesulfonic acid (PFBS)	NH,ME,RI,NJ,CT,PA
Perfluorohexanoic acid (PFHxA)	NH,ME,RI,NJ,CT,PA
Perfluorohexanesulfonic acid (PFHxS)	NH,ME,RI,NJ,CT,PA
Perfluoroheptanoic acid (PFHpA)	NH,ME,RI,NJ,CT,PA
Perfluorooctanoic acid (PFOA)	NH,NY,ME,RI,NJ,CT,PA
Perfluorooctanesulfonic acid (PFOS)	NH,NY,ME,RI,NJ,CT,PA
Perfluorononanoic acid (PFNA)	NH,ME,RI,NJ,CT,PA
Perfluorodecanoic acid (PFDA)	NH,ME,RI,NJ,CT,PA
N-EtFOSAA	NH,RI,NJ,CT,PA
Perfluoroundecanoic acid (PFUnA)	NH,ME,RI,NJ,CT,PA
N-MeFOSAA	NH,RI,NJ,CT,PA
Perfluorododecanoic acid (PFDoA)	NH,ME,RI,NJ,CT,PA
Perfluorotridecanoic acid (PFTrDA)	NH,ME,RI,NJ,CT,PA
Perfluorotetradecanoic acid (PFTA)	ME,RI,NJ,CT,PA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2020
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

19110897

CHAIN OF CUSTODY RECORD

Phone: 413-525-2332  
Fax: 413-525-6405

Email: info@contestlabs.com

**Requested Turnaround Time**  
 7-Day  10-Day  Standard  
 Other: \_\_\_\_\_

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

**Data Delivery**  
 Format: PDF  EXCEL   
 Other: \_\_\_\_\_

Enhanced Data Package Required:   
 Email To: brendia.lopez@cityofwestfield.org  
 Email To: h.stayron@cityofwestfield.org

Company Name: Westfield Water Resources  
 Address: 28 Sackett Street  
 Phone: 1-(413)-569-0668

Project Name: Quarterly Well 2 PFC Sampling  
 Project Location: Westfield

Project Number: \_\_\_\_\_  
 Project Manager: Brenda Lopez

Con-Test Bid: \_\_\_\_\_  
 Invoice Recipient: Hannah Larkham

Sampled By: \_\_\_\_\_

Con-Test Work Order #	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	FB Well #2 POE	SEP 18 2019	1100		Grab	DW	C
2	Well #2 POE 10513	SEP 18 2019	1100		Grab	DW	C
3	FB Well #2 GAC	SEP 18 2019	1120		Grab	DW	C
4	Well #2 GAC 10524	SEP 18 2019	1120		Grab	DW	C
5	FB Well #2 Raw	SEP 18 2019	1130		Grab	DW	C
6	Well #2 Raw RW2	SEP 18 2019	1130		Grab	DW	C

**ANALYSIS REQUESTED**

Perfluorocarbons							
Chlorine Residual							

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

**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)

**Container Codes:**  
 A = Amber Glass  
 G = Glass  
 P = Plastic  
 ST = Sterile  
 V = Vial  
 S = Summa Canister  
 T = Tedlar Bag  
 O = Other (please define)

**Program Information**

MCP Analytical Certification Form Required   
 RCP Analysis Certification Form Required   
 MA State DW Form Required   
 PWSID # 1329000

NECAC and AIHA-LAP, LLC Accredited

TURNAROUND TIME (BUSINESS DAYS) STARTS AT 9:00 AM THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON THIS CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME CANNOT START UNTIL ALL QUESTIONS HAVE BEEN ANSWERED.

Relinquished by: (signature) \_\_\_\_\_ Date/Time: 9/18/19 12:00

Received by: (signature) \_\_\_\_\_ Date/Time: 9/18/19 12:00

Relinquished by: (signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by: (signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished by: (signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by: (signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

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 Westfield

Received By mp Date 9/8/17 Time 1200

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

Were samples within Temperature? 2-6°C F By Gun # 5 Actual Temp - 16.1  
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 F  
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? F

Proper Media/Containers Used? T

Were trip blanks received? F

Do all samples have the proper pH? NA

Who was notified? \_\_\_\_\_  
Who was notified? \_\_\_\_\_  
Who was notified? \_\_\_\_\_

MS/MSD? F  
Is splitting samples required? F  
On COC? F 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	9	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:**

7 Day turn per lab manager.