

# Technical Report

prepared for:

**Chandra Prasad**  
10 Deer Run Ridge  
Woodbridge CT, 06525  
**Attention: Chandra Prasad**

Report Date: 05/07/2021  
**Client Project ID: PFAS CHECK AMITY FIELD 1**  
York Project (SDG) No.: 21E0077

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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ClientServices@yorklab.com

Report Date: 05/07/2021  
Client Project ID: PFAS CHECK AMITY FIELD 1  
York Project (SDG) No.: 21E0077

**Chandra Prasad**  
10 Deer Run Ridge  
Woodbridge CT, 06525  
Attention: Chandra Prasad

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 30, 2021 with a temperature of 12.7 C. The project was identified as your project: **PFAS CHECK AMITY FIELD 1**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0077-01	Run-Off swale by Anity Field	Drinking Water	04/29/2021	04/30/2021
21E0077-02	PFAS Field Blank	Drinking Water	04/29/2021	04/30/2021

## **General Notes for York Project (SDG) No.: 21E0077**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 05/07/2021





## Sample Information

**Client Sample ID:** Run-Off swale by Anity Field

**York Sample ID:** 21E0077-01

<u>York Project (SDG) No.</u> 21E0077	<u>Client Project ID</u> PFAS CHECK AMITY FIELD 1	<u>Matrix</u> Drinking Water	<u>Collection Date/Time</u> April 29, 2021 3:00 pm	<u>Date Received</u> 04/30/2021
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**PFAS, EPA 537.1 List**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
335-67-1	<b>Perfluorooctanoic acid (PFOA)</b>	<b>4.60</b>		ng/L	2.78	1	EPA 537.1 Certifications: NELAC-NY12058	05/05/2021 16:06	05/07/2021 12:49	WL
1763-23-1	<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>5.52</b>		ng/L	2.78	1	EPA 537.1 Certifications: NELAC-NY12058	05/05/2021 16:06	05/07/2021 12:49	WL
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
2355-31-9	N-MeFOSAA	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
2991-50-6	N-EtFOSAA	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
756426-58-1	9CL-PF3ONS	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
763051-92-9	11CL-PF3OUdS	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL
919005-14-4	ADONA	ND		ng/L	2.78	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 12:49	WL

**Surrogate Recoveries**

**Result**

**Acceptance Range**

Surrogate: d5-N-EtFOSAA	92.3 %	70-130
Surrogate: 13C-PFDA	93.0 %	70-130
Surrogate: 13C-PFHxA	106 %	70-130
Surrogate: M3HFPO-DA	124 %	70-130



### Sample Information

**Client Sample ID:** Run-Off swale by Anity Field

**York Sample ID:** 21E0077-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0077	PFAS CHECK AMITY FIELD 1	Drinking Water	April 29, 2021 3:00 pm	04/30/2021

### Sample Information

**Client Sample ID:** PFAS Field Blank

**York Sample ID:** 21E0077-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0077	PFAS CHECK AMITY FIELD 1	Drinking Water	April 29, 2021 3:00 pm	04/30/2021

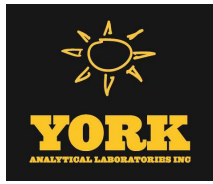
### PFAS, EPA 537.1 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ng/L	2.94	1	EPA 537.1 Certifications: NELAC-NY12058	05/05/2021 16:06	05/07/2021 00:29	WL
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	2.94	1	EPA 537.1 Certifications: NELAC-NY12058	05/05/2021 16:06	05/07/2021 00:29	WL
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
2355-31-9	N-MeFOSAA	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
2991-50-6	N-EtFOSAA	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
756426-58-1	9CL-PF3ONS	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
763051-92-9	11CL-PF3OUdS	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	2.94	1	EPA 537.1 Certifications:	05/05/2021 16:06	05/07/2021 00:29	WL



**Sample Information**

**Client Sample ID:** PFAS Field Blank

**York Sample ID:** 21E0077-02

York Project (SDG) No.  
21E0077

Client Project ID  
PFAS CHECK AMITY FIELD 1

Matrix  
Drinking Water

Collection Date/Time  
April 29, 2021 3:00 pm

Date Received  
04/30/2021

**PFAS, EPA 537.1 List**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 537.1 SPE DVB

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
919005-14-4	ADONA	ND		ng/L	2.94	1	EPA 537.1	05/05/2021 16:06	05/07/2021 00:29	WL
							Certifications:			
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
<i>Surrogate: d5-N-EtFOSAA</i>		96.9 %	70-130							
<i>Surrogate: 13C-PFDA</i>		86.1 %	70-130							
<i>Surrogate: 13C-PFHxA</i>		89.5 %	60-130							
<i>Surrogate: M3HFPO-DA</i>		111 %	60-130							



## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



York Analytical Laboratories, Inc.  
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# Field Chain-of-Custody Record

YORK Project No.  
21E0077

Page \_\_\_ of \_\_\_

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company: CHANDRA PRASAD	Company:	Address: 10 DEER RUN RIDGE WOODBRIDGE, CT 06525	Address:	Company: CHANDRA PRASAD	Company:	Address: 10 DEER RUN RIDGE WOODBRIDGE, CT 06525	Address:	RUSH - Next Day	
Phone: 203 314 0379	Phone:	203 314 0379	Phone:	203 314 0379	203 314 0379	203 314 0379	203 314 0379	RUSH - Two Day	
Contact:	Contact:	Contact:	Contact:	Contact:	Contact:	Contact:	Contact:	RUSH - Three Day	
E-mail: chandraprasad@yorklab.com	E-mail:	E-mail: chandraprasad@yorklab.com	E-mail:	E-mail: chandraprasad@yorklab.com	E-mail:	E-mail: chandraprasad@yorklab.com	E-mail:	RUSH - Four Day	
<p>Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.</p> <p>CHANDRA PRASAD</p> <p>Samples Collected by: (print your name above and sign below)</p> <p><i>[Signature]</i></p>									
Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.		Compared to the following Regulation(s): (please fill in)	
S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD					
GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQUIS (Standard)					
DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced Deliverables	NYSDEC EQUIS					
WW - wastewater	Pennsylvania	NY ASP B Package	NJDEP SRP HazSite	NJDEP SRP HazSite					
O - Oil ; Other	Other		Other:	Other:					
Sample Matrix		Date/Time Sampled		Analysis Requested		Container Description			
Surface Water	4/29/2021	PFAS, EPA 537.1 LIST		# 2055					
Surface Water	4/29/2021	PFAS, EPA 537.1 LIST		# 2084					
	4/29/2021			# 4492					
	4/29/2021			# 4454					
<p><b>Comments:</b></p> <p>Run-off swale by Ambly Field</p> <p><del>FIELD BANKS (PFAS)</del></p> <p>Run-off swale by Ambly Field</p> <p>PFAS Field BLANK</p> <p>PFAS Field BLANK</p>									
Preservation: (check all that apply)		Samples Relinquished by / Company		Date/Time		Special Instruction			
HCl	MeOH	HNO3	H2SO4	NaOH	ZnAc	Field Filtered Lab to Filter			
Ascorbic Acid	Other:								
<p>Samples Relinquished by / Company: [Signature]</p> <p>Date/Time: 4/30/2021 2 PM</p> <p>Samples Relinquished by / Company: [Signature]</p> <p>Date/Time: [Signature]</p> <p>Samples Relinquished by / Company: [Signature]</p> <p>Date/Time: [Signature]</p> <p>Samples Received in LAB by: [Signature]</p> <p>Date/Time: 4/30/21 1400</p> <p>Temp. Received at Lab: 12.7 Degrees C</p>									