

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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Tel: (916)373-5600

TestAmerica Job ID: 320-30853-1  
Client Project/Site: Fort McCoy PFAS

For:  
Hyde Environmental, Inc.  
W175 N11163 Stonewood Drive  
Suite 110  
Germantown, Wisconsin 53022

(b) (6)

Authorized for release by:  
9/7/2017 2:03:37 PM

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*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix sp ke concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Job ID: 320-30853-1**

**Laboratory: TestAmerica Sacramento**

## Narrative

### Job Narrative 320-30853-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/17/2017 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

#### Receipt Exceptions

A Chain-of-Custody (COC) was not received with these samples: OW-145 (320-30853-1), OW-117 (320-30853-2), P-134A (320-30853-3), OW-134 (320-30853-4), P-133A (320-30853-5), OW-133B (320-30853-6), OW-133B DUP (320-30853-7), OW-308 (320-30853-8), OW-308 (320-30853-8[MS]), OW-308 (320-30853-8[MSD]), P-308A (320-30853-9), OW-137 (320-30853-10), OW-141 (320-30853-11), OW-142 (320-30853-12) and EQ Blank (320-30853-13). A copy of the COC was received from the project manager in order to log the samples in.

#### LCMS

Method(s) 537 (modified): The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-181076 and analytical batch 320-181949 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### Organic Prep

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

# Detection Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Client Sample ID: OW-145

## Lab Sample ID: 320-30853-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.8		1.8	0.41	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	8.9		1.8	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	11		1.8	0.70	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.6		1.8	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	150		1.8	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.1		1.8	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	130		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	140		1.8	1.1	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-117

## Lab Sample ID: 320-30853-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.4		1.8	0.41	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.3		1.8	0.89	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.1		1.8	0.71	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.0		1.8	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	9.3		1.8	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	44		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	220		1.8	1.1	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: P-134A

## Lab Sample ID: 320-30853-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.0	J	1.8	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.3		1.8	0.79	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-134

## Lab Sample ID: 320-30853-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.7		1.8	0.41	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.9		1.8	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.1		1.8	0.70	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.6		1.8	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.5		1.8	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.8		1.8	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	46		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	95		1.8	1.1	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: P-133A

## Lab Sample ID: 320-30853-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.7		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		1.8	0.68	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	9.4		1.8	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	19		1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.9		1.8	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-133B

## Lab Sample ID: 320-30853-6

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

# Detection Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Client Sample ID: OW-133B (Continued)

Lab Sample ID: 320-30853-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.3		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.4		1.8	0.90	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.8		1.8	0.72	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.3		1.8	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	10		1.8	0.68	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.9		1.8	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	48		1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	43		1.8	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-133B DUP

Lab Sample ID: 320-30853-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.6		1.7	0.39	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.8		1.7	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.1		1.7	0.66	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.3		1.7	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	11		1.7	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.4		1.7	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	48		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	48		1.7	1.1	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-308

Lab Sample ID: 320-30853-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	13		1.9	0.43	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	25	F1	1.9	0.92	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	41	F1	1.9	0.73	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	21	F1	1.9	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	18		1.9	0.70	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.3		1.9	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	100	F1	1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	790		19	12	ng/L	10		537 (modified)	Total/NA

## Client Sample ID: P-308A

Lab Sample ID: 320-30853-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.6		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.89	J	1.8	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.1		1.8	0.68	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.8		1.8	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	8.3		1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		1.8	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-137

Lab Sample ID: 320-30853-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	30		1.9	0.43	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	29		1.9	0.93	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	39		1.9	0.74	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	22		1.9	0.76	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

# Detection Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Client Sample ID: OW-137 (Continued)

## Lab Sample ID: 320-30853-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	12		1.9	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.6		1.9	0.87	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	88		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	230		1.9	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-141

## Lab Sample ID: 320-30853-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.3		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.91	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.73	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.8	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.5		1.8	0.69	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.85	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	26		1.8	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	21		1.8	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: OW-142

## Lab Sample ID: 320-30853-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.69	J	1.8	0.69	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.8	0.84	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	10		1.8	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	19		1.8	1.2	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: EQ Blank

## Lab Sample ID: 320-30853-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	1.6	J	1.8	0.71	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-145**

**Date Collected: 08/14/17 10:25**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-1**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.8		1.8	0.41	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluoropentanoic acid (PFPeA)	8.9		1.8	0.88	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluorohexanoic acid (PFHxA)	11		1.8	0.70	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluoroheptanoic acid (PFHpA)	7.6		1.8	0.71	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluorooctanoic acid (PFOA)	150		1.8	0.66	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluorobutanesulfonic acid (PFBS)	3.1		1.8	0.81	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluorohexanesulfonic acid (PFHxS)	130		1.8	0.77	ng/L		08/24/17 14:39	08/29/17 22:34	1
Perfluorooctanesulfonic acid (PFOS)	140		1.8	1.1	ng/L		08/24/17 14:39	08/29/17 22:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	52		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C2 PFHxA	77		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C4 PFOA	94		25 - 150				08/24/17 14:39	08/29/17 22:34	1
18O2 PFHxS	87		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C4 PFOS	94		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C4-PFHpA	97		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C5 PFPeA	71		25 - 150				08/24/17 14:39	08/29/17 22:34	1
13C3-PFBS	80		25 - 150				08/24/17 14:39	08/29/17 22:34	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-117**

**Date Collected: 08/14/17 11:25**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-2**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.4		1.8	0.41	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluoropentanoic acid (PFPeA)	2.3		1.8	0.89	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluorohexanoic acid (PFHxA)	4.1		1.8	0.71	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluoroheptanoic acid (PFHpA)	3.0		1.8	0.72	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluorooctanoic acid (PFOA)	9.3		1.8	0.67	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.82	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluorohexanesulfonic acid (PFHxS)	44		1.8	0.78	ng/L		08/24/17 14:39	08/29/17 22:41	1
Perfluorooctanesulfonic acid (PFOS)	220		1.8	1.1	ng/L		08/24/17 14:39	08/29/17 22:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	43		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C2 PFHxA	60		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C4 PFOA	73		25 - 150				08/24/17 14:39	08/29/17 22:41	1
18O2 PFHxS	84		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C4 PFOS	82		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C4-PFHpA	75		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C5 PFPeA	59		25 - 150				08/24/17 14:39	08/29/17 22:41	1
13C3-PFBS	71		25 - 150				08/24/17 14:39	08/29/17 22:41	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: P-134A**  
**Date Collected: 08/14/17 12:45**  
**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-3**  
**Matrix: Water**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>1.0</b>	<b>J</b>	1.8	0.41	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluoropentanoic acid (PFPeA)	<0.89		1.8	0.89	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluorohexanoic acid (PFHxA)	<0.71		1.8	0.71	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluoroheptanoic acid (PFHpA)	<0.72		1.8	0.72	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluorooctanoic acid (PFOA)	<0.68		1.8	0.68	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluorobutanesulfonic acid (PFBS)	<0.83		1.8	0.83	ng/L		08/24/17 14:39	08/29/17 22:48	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>3.3</b>		1.8	0.79	ng/L		08/24/17 14:39	08/29/17 22:48	1
Perfluorooctanesulfonic acid (PFOS)	<1.2		1.8	1.2	ng/L		08/24/17 14:39	08/29/17 22:48	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	40		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C2 PFHxA	67		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C4 PFOA	56		25 - 150				08/24/17 14:39	08/29/17 22:48	1
18O2 PFHxS	94		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C4 PFOS	98		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C4-PFHpA	77		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C5 PFPeA	60		25 - 150				08/24/17 14:39	08/29/17 22:48	1
13C3-PFBS	74		25 - 150				08/24/17 14:39	08/29/17 22:48	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-134**

**Date Collected: 08/14/17 13:05**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-4**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.7		1.8	0.41	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluoropentanoic acid (PFPeA)	1.9		1.8	0.88	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluorohexanoic acid (PFHxA)	3.1		1.8	0.70	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluoroheptanoic acid (PFHpA)	2.6		1.8	0.71	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluorooctanoic acid (PFOA)	5.5		1.8	0.66	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluorobutanesulfonic acid (PFBS)	2.8		1.8	0.81	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluorohexanesulfonic acid (PFHxS)	46		1.8	0.77	ng/L		08/24/17 14:39	08/29/17 22:55	1
Perfluorooctanesulfonic acid (PFOS)	95		1.8	1.1	ng/L		08/24/17 14:39	08/29/17 22:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	48		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C2 PFHxA	80		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C4 PFOA	93		25 - 150				08/24/17 14:39	08/29/17 22:55	1
18O2 PFHxS	99		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C4 PFOS	99		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C4-PFHpA	96		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C5 PFPeA	72		25 - 150				08/24/17 14:39	08/29/17 22:55	1
13C3-PFBS	82		25 - 150				08/24/17 14:39	08/29/17 22:55	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: P-133A**  
**Date Collected: 08/14/17 13:50**  
**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-5**  
**Matrix: Water**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>5.7</b>		1.8	0.42	ng/L		08/24/17 14:39	08/29/17 23:02	1
Perfluoropentanoic acid (PFPeA)	<0.90		1.8	0.90	ng/L		08/24/17 14:39	08/29/17 23:02	1
Perfluorohexanoic acid (PFHxA)	<0.72		1.8	0.72	ng/L		08/24/17 14:39	08/29/17 23:02	1
Perfluoroheptanoic acid (PFHpA)	<0.73		1.8	0.73	ng/L		08/24/17 14:39	08/29/17 23:02	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>3.8</b>		1.8	0.68	ng/L		08/24/17 14:39	08/29/17 23:02	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>9.4</b>		1.8	0.84	ng/L		08/24/17 14:39	08/29/17 23:02	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>19</b>		1.8	0.79	ng/L		08/24/17 14:39	08/29/17 23:02	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>2.9</b>		1.8	1.2	ng/L		08/24/17 14:39	08/29/17 23:02	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	47		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C2 PFHxA	61		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C4 PFOA	76		25 - 150				08/24/17 14:39	08/29/17 23:02	1
18O2 PFHxS	83		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C4 PFOS	82		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C4-PFHpA	80		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C5 PFPeA	55		25 - 150				08/24/17 14:39	08/29/17 23:02	1
13C3-PFBS	71		25 - 150				08/24/17 14:39	08/29/17 23:02	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-133B**

**Lab Sample ID: 320-30853-6**

**Date Collected: 08/14/17 14:15**

**Matrix: Water**

**Date Received: 08/18/17 09:55**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.3		1.8	0.42	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluoropentanoic acid (PFPeA)	4.4		1.8	0.90	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluorohexanoic acid (PFHxA)	4.8		1.8	0.72	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluoroheptanoic acid (PFHpA)	3.3		1.8	0.73	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluorooctanoic acid (PFOA)	10		1.8	0.68	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluorobutanesulfonic acid (PFBS)	3.9		1.8	0.84	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluorohexanesulfonic acid (PFHxS)	48		1.8	0.79	ng/L		08/24/17 14:39	08/29/17 23:09	1
Perfluorooctanesulfonic acid (PFOS)	43		1.8	1.2	ng/L		08/24/17 14:39	08/29/17 23:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	38		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C2 PFHxA	68		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C4 PFOA	79		25 - 150				08/24/17 14:39	08/29/17 23:09	1
18O2 PFHxS	96		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C4 PFOS	97		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C4-PFHpA	83		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C5 PFPeA	60		25 - 150				08/24/17 14:39	08/29/17 23:09	1
13C3-PFBS	79		25 - 150				08/24/17 14:39	08/29/17 23:09	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-133B DUP**

**Lab Sample ID: 320-30853-7**

**Date Collected: 08/14/17 00:00**

**Matrix: Water**

**Date Received: 08/18/17 09:55**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.6		1.7	0.39	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluoropentanoic acid (PFPeA)	4.8		1.7	0.83	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluorohexanoic acid (PFHxA)	5.1		1.7	0.66	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluoroheptanoic acid (PFHpA)	3.3		1.7	0.67	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluorooctanoic acid (PFOA)	11		1.7	0.63	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluorobutanesulfonic acid (PFBS)	3.4		1.7	0.77	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluorohexanesulfonic acid (PFHxS)	48		1.7	0.73	ng/L		08/24/17 14:39	08/29/17 23:15	1
Perfluorooctanesulfonic acid (PFOS)	48		1.7	1.1	ng/L		08/24/17 14:39	08/29/17 23:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	36		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C2 PFHxA	70		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C4 PFOA	73		25 - 150				08/24/17 14:39	08/29/17 23:15	1
18O2 PFHxS	101		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C4 PFOS	105		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C4-PFHpA	85		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C5 PFPeA	58		25 - 150				08/24/17 14:39	08/29/17 23:15	1
13C3-PFBS	83		25 - 150				08/24/17 14:39	08/29/17 23:15	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-308**

**Date Collected: 08/14/17 14:50**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-8**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	13		1.9	0.43	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluoropentanoic acid (PFPeA)	25	F1	1.9	0.92	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluorohexanoic acid (PFHxA)	41	F1	1.9	0.73	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluoroheptanoic acid (PFHpA)	21	F1	1.9	0.75	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluorooctanoic acid (PFOA)	18		1.9	0.70	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluorobutanesulfonic acid (PFBS)	5.3		1.9	0.86	ng/L		08/24/17 14:39	08/29/17 23:29	1
Perfluorohexanesulfonic acid (PFHxS)	100	F1	1.9	0.81	ng/L		08/24/17 14:39	08/29/17 23:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	44		25 - 150				08/24/17 14:39	08/29/17 23:29	1
13C2 PFHxA	79		25 - 150				08/24/17 14:39	08/29/17 23:29	1
13C4 PFOA	92		25 - 150				08/24/17 14:39	08/29/17 23:29	1
18O2 PFHxS	96		25 - 150				08/24/17 14:39	08/29/17 23:29	1
13C4-PFHpA	95		25 - 150				08/24/17 14:39	08/29/17 23:29	1
13C5 PFPeA	70		25 - 150				08/24/17 14:39	08/29/17 23:29	1
13C3-PFBS	78		25 - 150				08/24/17 14:39	08/29/17 23:29	1

## Method: 537 (modified) - Perfluorinated Hydrocarbons - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	790		19	12	ng/L		08/24/17 14:39	08/31/17 15:01	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	114		25 - 150				08/24/17 14:39	08/31/17 15:01	10

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: P-308A**

**Date Collected: 08/14/17 15:32**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-9**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>3.6</b>		1.8	0.42	ng/L		08/24/17 14:39	08/29/17 23:50	1
Perfluoropentanoic acid (PFPeA)	<0.90		1.8	0.90	ng/L		08/24/17 14:39	08/29/17 23:50	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>0.89</b>	<b>J</b>	1.8	0.72	ng/L		08/24/17 14:39	08/29/17 23:50	1
Perfluoroheptanoic acid (PFHpA)	<0.73		1.8	0.73	ng/L		08/24/17 14:39	08/29/17 23:50	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>2.1</b>		1.8	0.68	ng/L		08/24/17 14:39	08/29/17 23:50	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>3.8</b>		1.8	0.84	ng/L		08/24/17 14:39	08/29/17 23:50	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>8.3</b>		1.8	0.79	ng/L		08/24/17 14:39	08/29/17 23:50	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>11</b>		1.8	1.2	ng/L		08/24/17 14:39	08/29/17 23:50	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	46		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C2 PFHxA	80		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C4 PFOA	81		25 - 150				08/24/17 14:39	08/29/17 23:50	1
18O2 PFHxS	100		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C4 PFOS	103		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C4-PFHpA	101		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C5 PFPeA	72		25 - 150				08/24/17 14:39	08/29/17 23:50	1
13C3-PFBS	86		25 - 150				08/24/17 14:39	08/29/17 23:50	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-137**

**Date Collected: 08/15/17 09:20**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-10**

**Matrix: Water**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	30		1.9	0.43	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluoropentanoic acid (PFPeA)	29		1.9	0.93	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluorohexanoic acid (PFHxA)	39		1.9	0.74	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluoroheptanoic acid (PFHpA)	22		1.9	0.76	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluorooctanoic acid (PFOA)	12		1.9	0.71	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluorobutanesulfonic acid (PFBS)	5.6		1.9	0.87	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluorohexanesulfonic acid (PFHxS)	88		1.9	0.82	ng/L		08/24/17 14:39	08/29/17 23:57	1
Perfluorooctanesulfonic acid (PFOS)	230		1.9	1.2	ng/L		08/24/17 14:39	08/29/17 23:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	33		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C2 PFHxA	70		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C4 PFOA	91		25 - 150				08/24/17 14:39	08/29/17 23:57	1
18O2 PFHxS	92		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C4 PFOS	102		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C4-PFHpA	91		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C5 PFPeA	56		25 - 150				08/24/17 14:39	08/29/17 23:57	1
13C3-PFBS	69		25 - 150				08/24/17 14:39	08/29/17 23:57	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-141**

**Date Collected: 08/15/17 09:15**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-11**

**Matrix: Water**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.3		1.8	0.42	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.91	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.73	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.8	0.74	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluorooctanoic acid (PFOA)	2.5		1.8	0.69	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluorobutanesulfonic acid (PFBS)	1.9		1.8	0.85	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluorohexanesulfonic acid (PFHxS)	26		1.8	0.80	ng/L		08/24/17 14:39	08/30/17 00:04	1
Perfluorooctanesulfonic acid (PFOS)	21		1.8	1.2	ng/L		08/24/17 14:39	08/30/17 00:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	38		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C2 PFHxA	72		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C4 PFOA	87		25 - 150				08/24/17 14:39	08/30/17 00:04	1
18O2 PFHxS	96		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C4 PFOS	103		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C4-PFHpA	93		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C5 PFPeA	62		25 - 150				08/24/17 14:39	08/30/17 00:04	1
13C3-PFBS	74		25 - 150				08/24/17 14:39	08/30/17 00:04	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-142**

**Date Collected: 08/15/17 10:15**

**Date Received: 08/18/17 09:55**

**Lab Sample ID: 320-30853-12**

**Matrix: Water**

**Method: 537 (modified) - Perfluorinated Hydrocarbons**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>3.0</b>		1.8	0.42	ng/L		08/24/17 14:39	08/30/17 00:11	1
Perfluoropentanoic acid (PFPeA)	<0.91		1.8	0.91	ng/L		08/24/17 14:39	08/30/17 00:11	1
Perfluorohexanoic acid (PFHxA)	<0.72		1.8	0.72	ng/L		08/24/17 14:39	08/30/17 00:11	1
Perfluoroheptanoic acid (PFHpA)	<0.74		1.8	0.74	ng/L		08/24/17 14:39	08/30/17 00:11	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>0.69 J</b>		1.8	0.69	ng/L		08/24/17 14:39	08/30/17 00:11	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>1.0 J</b>		1.8	0.84	ng/L		08/24/17 14:39	08/30/17 00:11	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>10</b>		1.8	0.80	ng/L		08/24/17 14:39	08/30/17 00:11	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>19</b>		1.8	1.2	ng/L		08/24/17 14:39	08/30/17 00:11	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	34		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C2 PFHxA	64		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C4 PFOA	67		25 - 150				08/24/17 14:39	08/30/17 00:11	1
18O2 PFHxS	83		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C4 PFOS	87		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C4-PFHpA	81		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C5 PFPeA	57		25 - 150				08/24/17 14:39	08/30/17 00:11	1
13C3-PFBS	70		25 - 150				08/24/17 14:39	08/30/17 00:11	1

# Client Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: EQ Blank**

**Lab Sample ID: 320-30853-13**

**Date Collected: 08/15/17 10:30**

**Matrix: Water**

**Date Received: 08/18/17 09:55**

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.41		1.8	0.41	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluoropentanoic acid (PFPeA)	<0.89		1.8	0.89	ng/L		08/24/17 14:39	08/30/17 00:18	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>1.6</b>	<b>J</b>	1.8	0.71	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluoroheptanoic acid (PFHpA)	<0.73		1.8	0.73	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluorooctanoic acid (PFOA)	<0.68		1.8	0.68	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluorobutanesulfonic acid (PFBS)	<0.83		1.8	0.83	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluorohexanesulfonic acid (PFHxS)	<0.79		1.8	0.79	ng/L		08/24/17 14:39	08/30/17 00:18	1
Perfluorooctanesulfonic acid (PFOS)	<1.2		1.8	1.2	ng/L		08/24/17 14:39	08/30/17 00:18	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	92		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C2 PFHxA	108		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C4 PFOA	121		25 - 150				08/24/17 14:39	08/30/17 00:18	1
18O2 PFHxS	91		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C4 PFOS	93		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C4-PFHpA	130		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C5 PFPeA	104		25 - 150				08/24/17 14:39	08/30/17 00:18	1
13C3-PFBS	87		25 - 150				08/24/17 14:39	08/30/17 00:18	1

# Isotope Dilution Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Method: 537 (modified) - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		<sup>13</sup> C4 PFBA (25-150)	<sup>13</sup> C2 PFHxA (25-150)	<sup>13</sup> C4 PFOA (25-150)	<sup>18</sup> O2 PFHxS (25-150)	<sup>13</sup> C4 PFOS (25-150)	<sup>13</sup> C4-PFHpA (25-150)	<sup>13</sup> C5 PFPeA (25-150)	<sup>13</sup> C3-PFBS (25-150)
320-30853-1	OW-145	52	77	94	87	94	97	71	80
320-30853-2	OW-117	43	60	73	84	82	75	59	71
320-30853-3	P-134A	40	67	56	94	98	77	60	74
320-30853-4	OW-134	48	80	93	99	99	96	72	82
320-30853-5	P-133A	47	61	76	83	82	80	55	71
320-30853-6	OW-133B	38	68	79	96	97	83	60	79
320-30853-7	OW-133B DUP	36	70	73	101	105	85	58	83
320-30853-8	OW-308	44	79	92	96		95	70	78
320-30853-8 - DL	OW-308					114			
320-30853-8 MS	OW-308	42	75	87	92		91	65	83
320-30853-8 MS - DL	OW-308					112			
320-30853-8 MSD	OW-308	42	72	88	95		91	65	85
320-30853-8 MSD - DL	OW-308					114			
320-30853-9	P-308A	46	80	81	100	103	101	72	86
320-30853-10	OW-137	33	70	91	92	102	91	56	69
320-30853-11	OW-141	38	72	87	96	103	93	62	74
320-30853-12	OW-142	34	64	67	83	87	81	57	70
320-30853-13	EQ Blank	92	108	121	91	93	130	104	87
LCS 320-181076/2-A	Lab Control Sample	86	105	118	91	89	125	100	84
MB 320-181076/1-A	Method Blank	98	113	128	101	99	132	110	94

#### Surrogate Legend

- <sup>13</sup>C4 PFBA = <sup>13</sup>C4 PFBA
- <sup>13</sup>C2 PFHxA = <sup>13</sup>C2 PFHxA
- <sup>13</sup>C4 PFOA = <sup>13</sup>C4 PFOA
- <sup>18</sup>O2 PFHxS = <sup>18</sup>O2 PFHxS
- <sup>13</sup>C4 PFOS = <sup>13</sup>C4 PFOS
- <sup>13</sup>C4-PFHpA = <sup>13</sup>C4-PFHpA
- <sup>13</sup>C5 PFPeA = <sup>13</sup>C5 PFPeA
- <sup>13</sup>C3-PFBS = <sup>13</sup>C3-PFBS

# QC Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Method: 537 (modified) - Perfluorinated Hydrocarbons

**Lab Sample ID: MB 320-181076/1-A**  
**Matrix: Water**  
**Analysis Batch: 181949**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.46		2.0	0.46	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluoropentanoic acid (PFPeA)	<0.99		2.0	0.99	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluorohexanoic acid (PFHxA)	<0.79		2.0	0.79	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluoroheptanoic acid (PFHpA)	<0.80		2.0	0.80	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluorooctanoic acid (PFOA)	<0.75		2.0	0.75	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluorobutanesulfonic acid (PFBS)	<0.92		2.0	0.92	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluorohexanesulfonic acid (PFHxS)	<0.87		2.0	0.87	ng/L		08/24/17 14:39	08/29/17 22:20	1
Perfluorooctanesulfonic acid (PFOS)	<1.3		2.0	1.3	ng/L		08/24/17 14:39	08/29/17 22:20	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C2 PFHxA	113		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C4 PFOA	128		25 - 150	08/24/17 14:39	08/29/17 22:20	1
18O2 PFHxS	101		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C4 PFOS	99		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C4-PFHpA	132		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C5 PFPeA	110		25 - 150	08/24/17 14:39	08/29/17 22:20	1
13C3-PFBS	94		25 - 150	08/24/17 14:39	08/29/17 22:20	1

**Lab Sample ID: LCS 320-181076/2-A**  
**Matrix: Water**  
**Analysis Batch: 181949**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	42.5		ng/L		106	74 - 138
Perfluoropentanoic acid (PFPeA)	40.0	40.1		ng/L		100	69 - 134
Perfluorohexanoic acid (PFHxA)	40.0	41.6		ng/L		104	70 - 136
Perfluoroheptanoic acid (PFHpA)	40.0	42.5		ng/L		106	63 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.5		ng/L		99	63 - 141
Perfluorobutanesulfonic acid (PFBS)	35.4	38.3		ng/L		108	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	36.4	37.3		ng/L		102	58 - 138
Perfluorooctanesulfonic acid (PFOS)	37.1	39.0		ng/L		105	47 - 162

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	86		25 - 150
13C2 PFHxA	105		25 - 150
13C4 PFOA	118		25 - 150
18O2 PFHxS	91		25 - 150
13C4 PFOS	89		25 - 150
13C4-PFHpA	125		25 - 150
13C5 PFPeA	100		25 - 150
13C3-PFBS	84		25 - 150

# QC Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Method: 537 (modified) - Perfluorinated Hydrocarbons (Continued)

**Lab Sample ID: 320-30853-8 MS**  
**Matrix: Water**  
**Analysis Batch: 181949**

**Client Sample ID: OW-308**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Perfluorobutanoic acid (PFBA)	13		37.8	55.5		ng/L		113	74 - 138
Perfluoropentanoic acid (PFPeA)	25	F1	37.8	76.5	F1	ng/L		137	69 - 134
Perfluorohexanoic acid (PFHxA)	41	F1	37.8	104	F1	ng/L		165	70 - 136
Perfluoroheptanoic acid (PFHpA)	21	F1	37.8	70.6		ng/L		131	63 - 135
Perfluorooctanoic acid (PFOA)	18		37.8	63.3		ng/L		120	63 - 141
Perfluorobutanesulfonic acid (PFBS)	5.3		33.4	42.7		ng/L		112	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	100	F1	34.4	170	F1	ng/L		196	58 - 138

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C4 PFBA	42		25 - 150
13C2 PFHxA	75		25 - 150
13C4 PFOA	87		25 - 150
18O2 PFHxS	92		25 - 150
13C4-PFHpA	91		25 - 150
13C5 PFPeA	65		25 - 150
13C3-PFBS	83		25 - 150

**Lab Sample ID: 320-30853-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 181949**

**Client Sample ID: OW-308**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Perfluorobutanoic acid (PFBA)	13		38.2	58.4		ng/L		119	74 - 138	5	30
Perfluoropentanoic acid (PFPeA)	25	F1	38.2	88.1	F1	ng/L		165	69 - 134	14	30
Perfluorohexanoic acid (PFHxA)	41	F1	38.2	126	F1	ng/L		222	70 - 136	20	30
Perfluoroheptanoic acid (PFHpA)	21	F1	38.2	77.4	F1	ng/L		147	63 - 135	9	30
Perfluorooctanoic acid (PFOA)	18		38.2	67.0		ng/L		128	63 - 141	6	30
Perfluorobutanesulfonic acid (PFBS)	5.3		33.8	43.7		ng/L		114	55 - 147	2	30
Perfluorohexanesulfonic acid (PFHxS)	100	F1	34.8	202	F1	ng/L		287	58 - 138	17	30

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	42		25 - 150
13C2 PFHxA	72		25 - 150
13C4 PFOA	88		25 - 150
18O2 PFHxS	95		25 - 150
13C4-PFHpA	91		25 - 150
13C5 PFPeA	65		25 - 150
13C3-PFBS	85		25 - 150

# QC Sample Results

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Method: 537 (modified) - Perfluorinated Hydrocarbons - DL

**Lab Sample ID: 320-30853-8 MS**  
**Matrix: Water**  
**Analysis Batch: 182313**

**Client Sample ID: OW-308**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Perfluorooctanesulfonic acid (PFOS) - DL	790		35.1	1250	4	ng/L		1321	47 - 162
<b>MS MS</b>									
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
13C4 PFOS - DL	112		25 - 150						

**Lab Sample ID: 320-30853-8 MSD**  
**Matrix: Water**  
**Analysis Batch: 182313**

**Client Sample ID: OW-308**  
**Prep Type: Total/NA**  
**Prep Batch: 181076**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorooctanesulfonic acid (PFOS) - DL	790		35.5	1680	4	ng/L		2495	47 - 162	29	30
<b>MSD MSD</b>											
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
13C4 PFOS - DL	114		25 - 150								



# QC Association Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## LCMS

### Prep Batch: 181076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-30853-1	OW-145	Total/NA	Water	3535	
320-30853-2	OW-117	Total/NA	Water	3535	
320-30853-3	P-134A	Total/NA	Water	3535	
320-30853-4	OW-134	Total/NA	Water	3535	
320-30853-5	P-133A	Total/NA	Water	3535	
320-30853-6	OW-133B	Total/NA	Water	3535	
320-30853-7	OW-133B DUP	Total/NA	Water	3535	
320-30853-8 - DL	OW-308	Total/NA	Water	3535	
320-30853-8	OW-308	Total/NA	Water	3535	
320-30853-9	P-308A	Total/NA	Water	3535	
320-30853-10	OW-137	Total/NA	Water	3535	
320-30853-11	OW-141	Total/NA	Water	3535	
320-30853-12	OW-142	Total/NA	Water	3535	
320-30853-13	EQ Blank	Total/NA	Water	3535	
MB 320-181076/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-181076/2-A	Lab Control Sample	Total/NA	Water	3535	
320-30853-8 MS - DL	OW-308	Total/NA	Water	3535	
320-30853-8 MS	OW-308	Total/NA	Water	3535	
320-30853-8 MSD	OW-308	Total/NA	Water	3535	
320-30853-8 MSD - DL	OW-308	Total/NA	Water	3535	

### Analysis Batch: 181949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-30853-1	OW-145	Total/NA	Water	537 (modified)	181076
320-30853-2	OW-117	Total/NA	Water	537 (modified)	181076
320-30853-3	P-134A	Total/NA	Water	537 (modified)	181076
320-30853-4	OW-134	Total/NA	Water	537 (modified)	181076
320-30853-5	P-133A	Total/NA	Water	537 (modified)	181076
320-30853-6	OW-133B	Total/NA	Water	537 (modified)	181076
320-30853-7	OW-133B DUP	Total/NA	Water	537 (modified)	181076
320-30853-8	OW-308	Total/NA	Water	537 (modified)	181076
320-30853-9	P-308A	Total/NA	Water	537 (modified)	181076
320-30853-10	OW-137	Total/NA	Water	537 (modified)	181076
320-30853-11	OW-141	Total/NA	Water	537 (modified)	181076
320-30853-12	OW-142	Total/NA	Water	537 (modified)	181076
320-30853-13	EQ Blank	Total/NA	Water	537 (modified)	181076
MB 320-181076/1-A	Method Blank	Total/NA	Water	537 (modified)	181076
LCS 320-181076/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	181076
320-30853-8 MS	OW-308	Total/NA	Water	537 (modified)	181076
320-30853-8 MSD	OW-308	Total/NA	Water	537 (modified)	181076

### Analysis Batch: 182313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-30853-8 - DL	OW-308	Total/NA	Water	537 (modified)	181076
320-30853-8 MS - DL	OW-308	Total/NA	Water	537 (modified)	181076
320-30853-8 MSD - DL	OW-308	Total/NA	Water	537 (modified)	181076

TestAmerica Sacramento

# Lab Chronicle

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Client Sample ID: OW-145

Date Collected: 08/14/17 10:25

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.1 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 22:34	(b)	TAL SAC

## Client Sample ID: OW-117

Date Collected: 08/14/17 11:25

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			278.6 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 22:41	(b)	TAL SAC

## Client Sample ID: P-134A

Date Collected: 08/14/17 12:45

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.8 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 22:48	(b)	TAL SAC

## Client Sample ID: OW-134

Date Collected: 08/14/17 13:05

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			281.6 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 22:55	(b)	TAL SAC

## Client Sample ID: P-133A

Date Collected: 08/14/17 13:50

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.5 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:02	(b)	TAL SAC

## Client Sample ID: OW-133B

Date Collected: 08/14/17 14:15

Date Received: 08/18/17 09:55

## Lab Sample ID: 320-30853-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.8 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:09	(b)	TAL SAC

TestAmerica Sacramento

# Lab Chronicle

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Client Sample ID: OW-133B DUP

## Lab Sample ID: 320-30853-7

Date Collected: 08/14/17 00:00

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			297.1 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:15	(b)	TAL SAC

## Client Sample ID: OW-308

## Lab Sample ID: 320-30853-8

Date Collected: 08/14/17 14:50

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			267.9 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:29	(b)	TAL SAC
Total/NA	Prep	3535	DL		267.9 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10			182313	08/31/17 15:01	(b)	TAL SAC

## Client Sample ID: P-308A

## Lab Sample ID: 320-30853-9

Date Collected: 08/14/17 15:32

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			273.9 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:50	(b)	TAL SAC

## Client Sample ID: OW-137

## Lab Sample ID: 320-30853-10

Date Collected: 08/15/17 09:20

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			265 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/29/17 23:57	(b)	TAL SAC

## Client Sample ID: OW-141

## Lab Sample ID: 320-30853-11

Date Collected: 08/15/17 09:15

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			270.7 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/30/17 00:04	(b)	TAL SAC

## Client Sample ID: OW-142

## Lab Sample ID: 320-30853-12

Date Collected: 08/15/17 10:15

Matrix: Water

Date Received: 08/18/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			272.1 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC

TestAmerica Sacramento

# Lab Chronicle

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

**Client Sample ID: OW-142**

**Lab Sample ID: 320-30853-12**

**Date Collected: 08/15/17 10:15**

**Matrix: Water**

**Date Received: 08/18/17 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	537 (modified)		1			181949	08/30/17 00:11	(b)	TAL SAC

**Client Sample ID: EQ Blank**

**Lab Sample ID: 320-30853-13**

**Date Collected: 08/15/17 10:30**

**Matrix: Water**

**Date Received: 08/18/17 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.5 mL	0.50 mL	181076	08/24/17 14:39	(b)	TAL SAC
Total/NA	Analysis	537 (modified)		1			181949	08/30/17 00:18	(b)	TAL SAC

**Laboratory References:**

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

## Laboratory: TestAmerica Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Oregon	NELAP	10	4040	01-28-18

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# Method Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

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Method	Method Description	Protocol	Laboratory
537 (modified)	Perfluorinated Hydrocarbons	EPA	TAL SAC

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**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

- 1
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- 12
- 13
- 14
- 15

# Sample Summary

Client: Hyde Environmental, Inc.  
Project/Site: Fort McCoy PFAS

TestAmerica Job ID: 320-30853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-30853-1	OW-145	Water	08/14/17 10:25	08/18/17 09:55
320-30853-2	OW-117	Water	08/14/17 11:25	08/18/17 09:55
320-30853-3	P-134A	Water	08/14/17 12:45	08/18/17 09:55
320-30853-4	OW-134	Water	08/14/17 13:05	08/18/17 09:55
320-30853-5	P-133A	Water	08/14/17 13:50	08/18/17 09:55
320-30853-6	OW-133B	Water	08/14/17 14:15	08/18/17 09:55
320-30853-7	OW-133B DUP	Water	08/14/17 00:00	08/18/17 09:55
320-30853-8	OW-308	Water	08/14/17 14:50	08/18/17 09:55
320-30853-9	P-308A	Water	08/14/17 15:32	08/18/17 09:55
320-30853-10	OW-137	Water	08/15/17 09:20	08/18/17 09:55
320-30853-11	OW-141	Water	08/15/17 09:15	08/18/17 09:55
320-30853-12	OW-142	Water	08/15/17 10:15	08/18/17 09:55
320-30853-13	EQ Blank	Water	08/15/17 10:30	08/18/17 09:55

TestAmerica Sacramento

Regulatory Program:  DW  WPCS  RCRA  Other:

Company Name: [Redacted]		Client Contact		Project Manager: (b) (6)		Site Contact:		Date: 10/17		COC No.:	
Address: [Redacted]		City/State/Zip: [Redacted]		Phone: (b) (6)		Fax: [Redacted]		Carrier:		COGS:	
Project Name: [Redacted]		Site: [Redacted]		PO #		Analysis Turnaround Time		For Lab Use Only:		Sampler:	
						<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT: If different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Walk-In Client:		Job / SDG No.:	
								Lab Sampling:		Sample Specific Notes:	
								Filtered Sample (Y/N) <input type="checkbox"/> Perform MS/MSD (Y/N) <input type="checkbox"/>		Barcode: [Barcode] 320-30853 Chain of Custody	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.					
DW-1345		10/17/05	11:25			2					
DW-117		10/17/05	12:15			2					
DW-121A		10/17/05	13:15			2					
DW-134		10/17/05	14:50			2					
DW-133A		10/17/05	14:15			2					
DW-138B		10/17/05	14:50			2					
DW-133B DUP		10/17/05	15:30			2					
DW-130B		10/17/05	16:20			2					
P305A		10/17/05	16:15			2					
DW-137		10/17/05	16:15			2					
DW-141		10/17/05	16:15			2					
DW-142		10/17/05	16:15			2					
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other Possible Hazard Identification: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.											
Special Instructions/QC Requirements & Comments:											
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp. (C): Obs'd 2.4		Corrd.:		Therm ID No.:		AK-7			
Relinquished by: (b) (6)		Company: [Redacted]		Date/Time: 8-17-11 9:55		Received by: [Redacted]		Company: [Redacted]			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:			



West Sacramento, CA 95605  
Phone: 916.373.5880 Fax:

THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TAL-4210 (07/13)

Regulatory Program:  DW  HDSIS  RCRA  Other:

Company Name: [Redacted] Address: [Redacted] City/State/Zip: [Redacted] Phone: [Redacted] Fax: [Redacted]		Client Contact Project Name: [Redacted] Site: [Redacted] P O #: [Redacted]		Project Man: [Redacted] Tell/Fax: [Redacted]		Site Contact: Lab Contact: [Redacted]		Date: _____ Carrier: _____		COC No: _____ of _____ COCs	
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT # different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Sample Date: _____ Sample Time: _____ Sample Type (C-Comp, G-Grab): _____ Matrix: _____ # of Cont: _____		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____		Sampler: For Lab Use Only: Walk-in Client: Lab Sampling:		Job / SDS No.: _____ Samples Specific Notes:			
Preservation User: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other Possible Hazard Identification: _____ Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months											
Special Instructions/QC Requirements & Comments:											
Relinquished by: [Redacted]		Relinquished by: [Redacted]		Relinquished by: [Redacted]		Relinquished by: [Redacted]		Relinquished by: [Redacted]		Relinquished by: [Redacted]	
Date/Time: [Redacted]		Date/Time: [Redacted]		Date/Time: [Redacted]		Date/Time: [Redacted]		Date/Time: [Redacted]		Date/Time: [Redacted]	
Company: [Redacted]		Company: [Redacted]		Company: [Redacted]		Company: [Redacted]		Company: [Redacted]		Company: [Redacted]	
Cooler Temp (°C): _____ Obs'd: _____ Corrd: _____		Therm ID No.: _____		Date/Time: 8-17-17 955		Date/Time:		Date/Time:		Date/Time:	



# Login Sample Receipt Checklist

Client: Hyde Environmental, Inc.

Job Number: 320-30853-1

**Login Number: 30853**

**List Source: TestAmerica Sacramento**

**List Number: 1**

**Creator: (b) (6)**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

