

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Sacramento  
880 Riverside Parkway  
West Sacramento, CA 95605  
Tel: (916)373-5600

TestAmerica Job ID: 320-44463-4  
Client Project/Site: 2018-PFAS Phase 2  
Revision: 1

For:  
Shannon & Wilson, Inc  
2355 Hill Rd.  
Fairbanks, Alaska 99709-5244

Attn: Sheila Hinkley



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Authorized for release by:  
12/9/2018 10:55:07 AM

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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: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## 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.
B	Compound was found in the blank and sample.

## 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: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

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**Job ID: 320-44463-4**

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**Laboratory: TestAmerica Sacramento**

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## Narrative

**Job Narrative**  
**320-44463-4**

### Receipt

The samples were received on 10/24/2018 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

### LCMS

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

### Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-256546.

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

# Detection Summary

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

Client Sample ID: [REDACTED] -2018PFAS-P2

Lab Sample ID: 320-44463-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	1.8		1.7	0.50	ng/L	1			537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.7	0.22	ng/L	1			537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.7	0.74	ng/L	1			537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.4		1.7	0.23	ng/L	1			537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.60	J	1.7	0.17	ng/L	1			537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.6	B	1.7	0.15	ng/L	1			537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.0		1.7	0.47	ng/L	1			537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: Shannon & Wilson, Inc  
 Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

**Client Sample ID:** ██████████-2018PFAS-P2

**Lab Sample ID:** 320-44463-6

**Date Collected:** 10/23/18 11:34

**Matrix:** Water

**Date Received:** 10/24/18 10:10

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	1.8		1.7	0.50	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.7	0.22	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorooctanoic acid (PFOA)	1.3	J	1.7	0.74	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorononanoic acid (PFNA)	2.4		1.7	0.23	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.95	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.48	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorobutanesulfonic acid (PFBS)	0.60	J	1.7	0.17	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorohexanesulfonic acid (PFHxS)	3.6	B	1.7	0.15	ng/L		11/02/18 08:33	11/03/18 15:46	1
Perfluorooctanesulfonic acid (PFOS)	3.0		1.7	0.47	ng/L		11/02/18 08:33	11/03/18 15:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	93		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C2 PFHxA	95		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C4 PFHpA	100		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C4 PFOA	104		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C5 PFNA	100		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C2 PFDA	106		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C2 PFUnA	102		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C2 PFDoA	94		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C2 PFTeDA	96		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C3 PFBS	93		25 - 150	11/02/18 08:33	11/03/18 15:46	1
18O2 PFHxS	101		25 - 150	11/02/18 08:33	11/03/18 15:46	1
13C4 PFOS	104		25 - 150	11/02/18 08:33	11/03/18 15:46	1

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# Isotope Dilution Summary

Client: Shannon & Wilson, Inc  
 Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)	PFDoA (25-150)
320-44463-6	██████████-2018PFPA	93	95	100	104	100	106	102	94
LCS 320-256546/2-A	Lab Control Sample	94	96	96	102	93	92	98	91
LCSD 320-256546/3-A	Lab Control Sample Dup	98	94	97	106	101	95	104	91
MB 320-256546/1-A	Method Blank	98	98	101	105	102	103	103	92

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFTDA (25-150)	3C3-PFBs (25-150)	PFHxS (25-150)	PFOS (25-150)
320-44463-6	██████████-2018PFPA	96	93	101	104
LCS 320-256546/2-A	Lab Control Sample	107	90	93	106
LCSD 320-256546/3-A	Lab Control Sample Dup	96	96	93	100
MB 320-256546/1-A	Method Blank	112	90	97	97

#### Surrogate Legend

- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- PFHpA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- 13C3-PFBs = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS

# QC Sample Results

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-256546/1-A**

**Matrix: Water**

**Analysis Batch: 256822**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 256546**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorotetradecanoic acid (PFTeA)	0.329	J	2.0	0.29	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorohexanesulfonic acid (PFHxS)	0.321	J	2.0	0.17	ng/L		11/02/18 08:33	11/03/18 14:46	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/02/18 08:33	11/03/18 14:46	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	98		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C2 PFHxA	98		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C4 PFHpA	101		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C4 PFOA	105		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C5 PFNA	102		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C2 PFDA	103		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C2 PFUnA	103		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C2 PFDoA	92		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C2 PFTeDA	112		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C3 PFBS	90		25 - 150	11/02/18 08:33	11/03/18 14:46	1
18O2 PFHxS	97		25 - 150	11/02/18 08:33	11/03/18 14:46	1
13C4 PFOS	97		25 - 150	11/02/18 08:33	11/03/18 14:46	1

**Lab Sample ID: LCS 320-256546/2-A**

**Matrix: Water**

**Analysis Batch: 256822**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 256546**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorohexanoic acid (PFHxA)	40.0	39.4		ng/L		98	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	39.9		ng/L		100	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	37.5		ng/L		94	64 - 124
Perfluorononanoic acid (PFNA)	40.0	43.0		ng/L		107	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	43.4		ng/L		109	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	42.7		ng/L		107	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	38.6		ng/L		97	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	47.7		ng/L		119	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	31.3		ng/L		78	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	37.2		ng/L		105	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.5		ng/L		89	63 - 123

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# QC Sample Results

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-256546/2-A**  
**Matrix: Water**  
**Analysis Batch: 256822**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 256546**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	37.1	31.4		ng/L		85	67 - 127
<b>Isotope Dilution</b>							
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
13C5 PFPeA	94		25 - 150				
13C2 PFHxA	96		25 - 150				
13C4 PFHpA	96		25 - 150				
13C4 PFOA	102		25 - 150				
13C5 PFNA	93		25 - 150				
13C2 PFDA	92		25 - 150				
13C2 PFUnA	98		25 - 150				
13C2 PFDoA	91		25 - 150				
13C2 PFTeDA	107		25 - 150				
13C3 PFBS	90		25 - 150				
18O2 PFHxS	93		25 - 150				
13C4 PFOS	106		25 - 150				

**Lab Sample ID: LCSD 320-256546/3-A**  
**Matrix: Water**  
**Analysis Batch: 256822**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 256546**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	66 - 126	2	30
Perfluoroheptanoic acid (PFHpA)	40.0	42.6		ng/L		107	66 - 126	7	30
Perfluorooctanoic acid (PFOA)	40.0	36.6		ng/L		91	64 - 124	2	30
Perfluorononanoic acid (PFNA)	40.0	38.4		ng/L		96	68 - 128	11	30
Perfluorodecanoic acid (PFDA)	40.0	40.7		ng/L		102	69 - 129	7	30
Perfluoroundecanoic acid (PFUnA)	40.0	40.3		ng/L		101	60 - 120	6	30
Perfluorododecanoic acid (PFDoA)	40.0	38.6		ng/L		96	71 - 131	0	30
Perfluorotridecanoic acid (PFTriA)	40.0	44.3		ng/L		111	72 - 132	7	30
Perfluorotetradecanoic acid (PFTeA)	40.0	34.4		ng/L		86	68 - 128	9	30
Perfluorobutanesulfonic acid (PFBS)	35.4	36.0		ng/L		102	73 - 133	3	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.0		ng/L		93	63 - 123	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.7		ng/L		96	67 - 127	13	30
<b>Isotope Dilution</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
13C5 PFPeA	98		25 - 150						
13C2 PFHxA	94		25 - 150						
13C4 PFHpA	97		25 - 150						
13C4 PFOA	106		25 - 150						
13C5 PFNA	101		25 - 150						
13C2 PFDA	95		25 - 150						
13C2 PFUnA	104		25 - 150						

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# QC Sample Results

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-256546/3-A

Matrix: Water

Analysis Batch: 256822

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 256546

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C2 PFDoA	91		25 - 150
13C2 PFTeDA	96		25 - 150
13C3 PFBS	96		25 - 150
18O2 PFHxS	93		25 - 150
13C4 PFOS	100		25 - 150

# QC Association Summary

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## LCMS

### Prep Batch: 256546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-44463-6	[REDACTED]-2018PFAS-P2	Total/NA	Water	3535	
MB 320-256546/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-256546/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-256546/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

### Analysis Batch: 256822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-44463-6	[REDACTED]-2018PFAS-P2	Total/NA	Water	537 (modified)	256546
MB 320-256546/1-A	Method Blank	Total/NA	Water	537 (modified)	256546
LCS 320-256546/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	256546
LCSD 320-256546/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	256546

# Lab Chronicle

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

**Client Sample ID:** [REDACTED] -2018PFAS-P2

**Lab Sample ID: 320-44463-6**

**Date Collected: 10/23/18 11:34**

**Matrix: Water**

**Date Received: 10/24/18 10:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288 mL	10.00 mL	256546	11/02/18 08:33	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1			256822	11/03/18 15:46	CBW	TAL SAC

### Laboratory References:

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

# Accreditation/Certification Summary

Client: Shannon & Wilson, Inc  
 Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

## Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	11-30-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

# Method Summary

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

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



# Sample Summary

Client: Shannon & Wilson, Inc  
Project/Site: 2018-PFAS Phase 2

TestAmerica Job ID: 320-44463-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-44463-6	[REDACTED]	Water	10/23/18 11:34	10/24/18 10:10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# CHAIN-OF-CUSTODY RECORD

Analytical Methods (include preservative if used)

**Turn Around Time:**  
 Normal     Rush  
 Please Specify

Quote No: \_\_\_\_\_

J-Flags:  Yes     No

Sample Identity	Lab No.	Time	Date Sampled	Analytical Methods (include preservative if used)				Total Number of Containers	Remarks/Matrix Composition/Grab? Sample Containers
<u>[Redacted]</u>	<u>8 PFAS-P2</u>	<u>1134</u>	<u>10/23/18</u>	<u>2</u>				<u>2</u>	<u>GLW</u>

*PFAS EPA 534  
 12-Analytes*

**Project Information**  
 Number: 10A65-002  
 Name: 2018 PFAS Phase 2  
 Contact: SMH  
 Ongoing Project? Yes  No   
 Sampler: ARM

**Sample Receipt**  
 Total No. of Containers: \_\_\_\_\_  
 COC Seals/Intact? Y/N/NA \_\_\_\_\_  
 Received Good Cond /Cold \_\_\_\_\_  
 Temp: \_\_\_\_\_  
 Delivery Method: Goldotreak

**Relinquished By: 1.**  
 Signature: \_\_\_\_\_ Time: 1615  
 Printed Name: A. Masters Date: 10/23/18  
 Company: Shannon & Wilson, Inc

**Relinquished By: 2.**  
 Signature: \_\_\_\_\_ Time: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company: \_\_\_\_\_

**Relinquished By: 3.**  
 Signature: \_\_\_\_\_ Time: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company: \_\_\_\_\_

**Notes:**  
B, 11 to SW1

**Received By: 1.**  
 Signature: \_\_\_\_\_ Time: 1610  
 Printed Name: David H Date: 10/24/18  
 Company: TA Sen

**Received By: 2.**  
 Signature: \_\_\_\_\_ Time: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company: \_\_\_\_\_

**Received By: 3.**  
 Signature: \_\_\_\_\_ Time: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company: \_\_\_\_\_

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report  
 Yellow - w/shipment - for consignee files  
 Pink - Shannon & Wilson - job file





## Login Sample Receipt Checklist

Client: Shannon & Wilson, Inc

Job Number: 320-44463-4

**Login Number: 44463**

**List Source: TestAmerica Sacramento**

**List Number: 1**

**Creator: Nelson, Kym D**

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	seal
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.	False	gel packs
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
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.	False	Refer to Job Narrative for details.
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	