

The data in this file provides drinking water results for both Kenai and Valdez.

Please refer to the sample name to identify samples from each community.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Sacramento

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Tel: (916)373-5600

TestAmerica Job ID: 320-45133-1

Client Project/Site: PFAS, AK Drinking Water

For:

Alaska Department of Env. Conservation

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Authorized for release by:

12/20/2018 12:17:47 PM

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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: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

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.

Metals

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.

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: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Job ID: 320-45133-1

Laboratory: TestAmerica Sacramento

Narrative

Job Narrative 320-45133-1

Receipt

Twenty samples were received on 11/10/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

Metals

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

LCMS

Method(s) 537 DW: Elevated reporting limits are provided for the following samples due to insufficient sample provided for VAL-04 (Maritime Hanger) (320-45133-10) and VAL-05 (Maritime Hanger) (320-45133-11) in preparation batch 320-260277.

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

Detection Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-01 ()

Lab Sample ID: 320-45133-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorohexanoic acid	0.90	J	2.0	0.30	ng/L	1			537 DW	Total/NA

Client Sample ID: KEN-02 ()

Lab Sample ID: 320-45133-2

No Detections.

Client Sample ID: KEN-03 ()

Lab Sample ID: 320-45133-3

No Detections.

Client Sample ID: KEN-04 ()

Lab Sample ID: 320-45133-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorohexanoic acid	0.45	J	2.0	0.29	ng/L	1			537 DW	Total/NA

Client Sample ID: KEN-05 ()

Lab Sample ID: 320-45133-5

No Detections.

Client Sample ID: KEN-06 ()

Lab Sample ID: 320-45133-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	0.60	J	1.0	0.50	ug/L	1			200.8	Total Recoverable

Client Sample ID: VAL-01 ()

Lab Sample ID: 320-45133-7

No Detections.

Client Sample ID: VAL-02 ()

Lab Sample ID: 320-45133-8

No Detections.

Client Sample ID: VAL-03 ()

Lab Sample ID: 320-45133-9

No Detections.

Client Sample ID: VAL-04 ()

Lab Sample ID: 320-45133-10

No Detections.

Client Sample ID: VAL-05 ()

Lab Sample ID: 320-45133-11

No Detections.

Client Sample ID: VAL-06 ()

Lab Sample ID: 320-45133-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	2.5		2.0	0.79	ng/L	1			537 DW	Total/NA

Client Sample ID: VAL-07 ()

Lab Sample ID: 320-45133-13

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-08 () **Lab Sample ID: 320-45133-14**

No Detections.

Client Sample ID: VAL-09 () **Lab Sample ID: 320-45133-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	1.2	J	2.0	0.94	ng/L	1			537 DW	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.6	J	2.0	0.64	ng/L	1			537 DW	Total/NA
Perfluorohexanoic acid	0.38	J	2.0	0.29	ng/L	1			537 DW	Total/NA

Client Sample ID: VAL-10 () **Lab Sample ID: 320-45133-16**

No Detections.

Client Sample ID: VAL-11 **Lab Sample ID: 320-45133-17**

No Detections.

Client Sample ID: VAL-12 () **Lab Sample ID: 320-45133-18**

No Detections.

Client Sample ID: VAL-13 () **Lab Sample ID: 320-45133-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorohexanoic acid	0.41	J	2.0	0.29	ng/L	1			537 DW	Total/NA

Client Sample ID: VAL-14 () **Lab Sample ID: 320-45133-20**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-01 ()
Date Collected: 11/05/18 13:30
Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-1
Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.97	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorooctanoic acid (PFOA)	ND		6.1	2.8	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.48	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.65	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluoroheptanoic acid (PFHpA)	ND		3.1	1.3	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.82	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorodecanoic acid	ND		2.0	0.54	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorododecanoic acid	ND		2.0	0.84	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorohexanoic acid	0.90	J	2.0	0.30	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorotetradecanoic acid	ND		2.0	0.91	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluorotridecanoic acid	ND		2.0	0.66	ng/L		11/19/18 17:12	11/30/18 03:40	1
Perfluoroundecanoic acid	ND		2.0	0.61	ng/L		11/19/18 17:12	11/30/18 03:40	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.52	ng/L		11/19/18 17:12	11/30/18 03:40	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.1	1.1	ng/L		11/19/18 17:12	11/30/18 03:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	89		70 - 130				11/19/18 17:12	11/30/18 03:40	1
13C2 PFDA	93		70 - 130				11/19/18 17:12	11/30/18 03:40	1

Client Sample ID: KEN-02 ()
Date Collected: 11/05/18 15:10
Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-2
Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.93	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorooctanoic acid (PFOA)	ND		5.9	2.6	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.46	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.63	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.78	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorodecanoic acid	ND		2.0	0.52	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorododecanoic acid	ND		2.0	0.80	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorohexanoic acid	ND		2.0	0.28	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorotetradecanoic acid	ND		2.0	0.87	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluorotridecanoic acid	ND		2.0	0.64	ng/L		11/19/18 17:12	11/30/18 03:47	1
Perfluoroundecanoic acid	ND		2.0	0.59	ng/L		11/19/18 17:12	11/30/18 03:47	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.50	ng/L		11/19/18 17:12	11/30/18 03:47	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/19/18 17:12	11/30/18 03:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	81		70 - 130				11/19/18 17:12	11/30/18 03:47	1
13C2 PFDA	92		70 - 130				11/19/18 17:12	11/30/18 03:47	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-03 ()

Date Collected: 11/05/18 16:50

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-3

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.94	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.79	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorododecanoic acid	ND		2.0	0.81	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorotetradecanoic acid	ND		2.0	0.88	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/19/18 17:12	11/30/18 03:55	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/19/18 17:12	11/30/18 03:55	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/19/18 17:12	11/30/18 03:55	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/19/18 17:12	11/30/18 03:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	78		70 - 130				11/19/18 17:12	11/30/18 03:55	1
13C2 PFDA	88		70 - 130				11/19/18 17:12	11/30/18 03:55	1

Client Sample ID: KEN-04 ()

Date Collected: 11/05/18 17:00

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-4

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.96	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorooctanoic acid (PFOA)	ND		6.1	2.7	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.65	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.81	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorododecanoic acid	ND		2.0	0.83	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorohexanoic acid	0.45	J	2.0	0.29	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorotetradecanoic acid	ND		2.0	0.90	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluorotridecanoic acid	ND		2.0	0.66	ng/L		11/19/18 17:12	11/30/18 04:02	1
Perfluoroundecanoic acid	ND		2.0	0.61	ng/L		11/19/18 17:12	11/30/18 04:02	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/19/18 17:12	11/30/18 04:02	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/19/18 17:12	11/30/18 04:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	77		70 - 130				11/19/18 17:12	11/30/18 04:02	1
13C2 PFDA	83		70 - 130				11/19/18 17:12	11/30/18 04:02	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-05 ()

Lab Sample ID: 320-45133-5

Date Collected: 11/06/18 12:10

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.95	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.80	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorododecanoic acid	ND		2.0	0.82	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorotetradecanoic acid	ND		2.0	0.89	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/19/18 17:12	12/01/18 08:47	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/19/18 17:12	12/01/18 08:47	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/19/18 17:12	12/01/18 08:47	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/19/18 17:12	12/01/18 08:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	76		70 - 130				11/19/18 17:12	12/01/18 08:47	1
13C2 PFDA	78		70 - 130				11/19/18 17:12	12/01/18 08:47	1

Client Sample ID: KEN-06 ()

Lab Sample ID: 320-45133-6

Date Collected: 11/06/18 14:30

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.96	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorooctanoic acid (PFOA)	ND		6.1	2.7	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.48	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.65	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.81	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorodecanoic acid	ND		2.0	0.54	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorododecanoic acid	ND		2.0	0.83	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorotetradecanoic acid	ND		2.0	0.90	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluorotridecanoic acid	ND		2.0	0.66	ng/L		11/19/18 17:12	11/30/18 04:32	1
Perfluoroundecanoic acid	ND		2.0	0.61	ng/L		11/19/18 17:12	11/30/18 04:32	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.52	ng/L		11/19/18 17:12	11/30/18 04:32	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/19/18 17:12	11/30/18 04:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	99		70 - 130				11/19/18 17:12	11/30/18 04:32	1
13C2 PFDA	104		70 - 130				11/19/18 17:12	11/30/18 04:32	1

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.60	J	1.0	0.50	ug/L		12/19/18 08:10	12/19/18 21:54	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-01 ()

Lab Sample ID: 320-45133-7

Date Collected: 11/07/18 09:15

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.95	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.80	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorododecanoic acid	ND		2.0	0.82	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorotetradecanoic acid	ND		2.0	0.89	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/20/18 07:29	12/02/18 18:43	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/20/18 07:29	12/02/18 18:43	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/20/18 07:29	12/02/18 18:43	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/20/18 07:29	12/02/18 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	92		70 - 130				11/20/18 07:29	12/02/18 18:43	1
13C2 PFDA	94		70 - 130				11/20/18 07:29	12/02/18 18:43	1

Client Sample ID: VAL-02 ()

Lab Sample ID: 320-45133-8

Date Collected: 11/07/18 09:15

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.92	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorooctanoic acid (PFOA)	ND		5.8	2.6	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.46	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.62	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.78	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorodecanoic acid	ND		1.9	0.51	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorododecanoic acid	ND		1.9	0.79	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorohexanoic acid	ND		1.9	0.28	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorotetradecanoic acid	ND		1.9	0.86	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluorotridecanoic acid	ND		1.9	0.63	ng/L		11/20/18 07:29	12/02/18 18:50	1
Perfluoroundecanoic acid	ND		1.9	0.58	ng/L		11/20/18 07:29	12/02/18 18:50	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		1.9	0.49	ng/L		11/20/18 07:29	12/02/18 18:50	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	96		70 - 130				11/20/18 07:29	12/02/18 18:50	1
13C2 PFDA	105		70 - 130				11/20/18 07:29	12/02/18 18:50	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-03 ()

Date Collected: 11/07/18 09:40

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-9

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.93	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorooctanoic acid (PFOA)	ND		5.9	2.6	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.46	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.62	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.78	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorodecanoic acid	ND		2.0	0.52	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorododecanoic acid	ND		2.0	0.80	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorohexanoic acid	ND		2.0	0.28	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorotetradecanoic acid	ND		2.0	0.87	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluorotridecanoic acid	ND		2.0	0.63	ng/L		11/20/18 07:29	12/02/18 18:58	1
Perfluoroundecanoic acid	ND		2.0	0.59	ng/L		11/20/18 07:29	12/02/18 18:58	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.50	ng/L		11/20/18 07:29	12/02/18 18:58	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	87		70 - 130				11/20/18 07:29	12/02/18 18:58	1
13C2 PFDA	98		70 - 130				11/20/18 07:29	12/02/18 18:58	1

Client Sample ID: VAL-04 ()

Date Collected: 11/07/18 09:50

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-10

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.5	1.2	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorooctanoic acid (PFOA)	ND		7.5	3.4	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorononanoic acid (PFNA)	ND		2.5	0.59	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.5	0.80	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluoroheptanoic acid (PFHpA)	ND		3.7	1.6	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.5	1.0	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorodecanoic acid	ND		2.5	0.66	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorododecanoic acid	ND		2.5	1.0	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorohexanoic acid	ND		2.5	0.36	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorotetradecanoic acid	ND		2.5	1.1	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluorotridecanoic acid	ND		2.5	0.81	ng/L		11/20/18 07:29	12/02/18 19:05	1
Perfluoroundecanoic acid	ND		2.5	0.75	ng/L		11/20/18 07:29	12/02/18 19:05	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.5	0.64	ng/L		11/20/18 07:29	12/02/18 19:05	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.7	1.4	ng/L		11/20/18 07:29	12/02/18 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	95		70 - 130				11/20/18 07:29	12/02/18 19:05	1
13C2 PFDA	103		70 - 130				11/20/18 07:29	12/02/18 19:05	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-05 ()

Lab Sample ID: 320-45133-11

Date Collected: 11/07/18 09:50

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.5	1.2	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorooctanoic acid (PFOA)	ND		7.6	3.4	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorononanoic acid (PFNA)	ND		2.5	0.59	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.5	0.81	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluoroheptanoic acid (PFHpA)	ND		3.8	1.6	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.5	1.0	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorodecanoic acid	ND		2.5	0.67	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorododecanoic acid	ND		2.5	1.0	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorohexanoic acid	ND		2.5	0.37	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorotetradecanoic acid	ND		2.5	1.1	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluorotridecanoic acid	ND		2.5	0.82	ng/L		11/20/18 07:29	12/02/18 19:13	1
Perfluoroundecanoic acid	ND		2.5	0.76	ng/L		11/20/18 07:29	12/02/18 19:13	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.5	0.64	ng/L		11/20/18 07:29	12/02/18 19:13	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.8	1.4	ng/L		11/20/18 07:29	12/02/18 19:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	101		70 - 130				11/20/18 07:29	12/02/18 19:13	1
13C2 PFDA	105		70 - 130				11/20/18 07:29	12/02/18 19:13	1

Client Sample ID: VAL-06 ()

Lab Sample ID: 320-45133-12

Date Collected: 11/07/18 10:55

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.93	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorooctanoic acid (PFOA)	ND		5.9	2.7	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.46	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.63	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorobutanesulfonic acid (PFBS)	2.5		2.0	0.79	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorodecanoic acid	ND		2.0	0.52	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorododecanoic acid	ND		2.0	0.81	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorohexanoic acid	ND		2.0	0.28	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorotetradecanoic acid	ND		2.0	0.87	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluorotridecanoic acid	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 19:20	1
Perfluoroundecanoic acid	ND		2.0	0.59	ng/L		11/20/18 07:29	12/02/18 19:20	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.50	ng/L		11/20/18 07:29	12/02/18 19:20	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	91		70 - 130				11/20/18 07:29	12/02/18 19:20	1
13C2 PFDA	100		70 - 130				11/20/18 07:29	12/02/18 19:20	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-07 ()

Date Collected: 11/07/18 11:35

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-13

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.93	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorooctanoic acid (PFOA)	ND		5.9	2.7	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.46	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.63	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.79	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorodecanoic acid	ND		2.0	0.52	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorododecanoic acid	ND		2.0	0.81	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorohexanoic acid	ND		2.0	0.28	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorotetradecanoic acid	ND		2.0	0.87	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluorotridecanoic acid	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 19:28	1
Perfluoroundecanoic acid	ND		2.0	0.59	ng/L		11/20/18 07:29	12/02/18 19:28	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.50	ng/L		11/20/18 07:29	12/02/18 19:28	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 19:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	88		70 - 130				11/20/18 07:29	12/02/18 19:28	1
13C2 PFDA	94		70 - 130				11/20/18 07:29	12/02/18 19:28	1

Client Sample ID: VAL-08 ()

Date Collected: 11/07/18 11:50

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-14

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.92	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorooctanoic acid (PFOA)	ND		5.8	2.6	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.46	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.62	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.78	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorodecanoic acid	ND		1.9	0.52	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorododecanoic acid	ND		1.9	0.80	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorohexanoic acid	ND		1.9	0.28	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorotetradecanoic acid	ND		1.9	0.87	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluorotridecanoic acid	ND		1.9	0.63	ng/L		11/20/18 07:29	12/02/18 19:50	1
Perfluoroundecanoic acid	ND		1.9	0.58	ng/L		11/20/18 07:29	12/02/18 19:50	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		1.9	0.50	ng/L		11/20/18 07:29	12/02/18 19:50	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 19:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	93		70 - 130				11/20/18 07:29	12/02/18 19:50	1
13C2 PFDA	103		70 - 130				11/20/18 07:29	12/02/18 19:50	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-09 ()

Lab Sample ID: 320-45133-15

Date Collected: 11/07/18 13:50

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1.2	J	2.0	0.94	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	1.6	J	2.0	0.64	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.79	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorododecanoic acid	ND		2.0	0.81	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorohexanoic acid	0.38	J	2.0	0.29	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorotetradecanoic acid	ND		2.0	0.88	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/20/18 07:29	12/02/18 19:57	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/20/18 07:29	12/02/18 19:57	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/20/18 07:29	12/02/18 19:57	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/20/18 07:29	12/02/18 19:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	106		70 - 130				11/20/18 07:29	12/02/18 19:57	1
13C2 PFDA	96		70 - 130				11/20/18 07:29	12/02/18 19:57	1

Client Sample ID: VAL-10 ()

Lab Sample ID: 320-45133-16

Date Collected: 11/07/18 14:25

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.94	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorooctanoic acid (PFOA)	ND		5.9	2.7	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.46	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.63	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.79	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorodecanoic acid	ND		2.0	0.52	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorododecanoic acid	ND		2.0	0.81	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorotetradecanoic acid	ND		2.0	0.88	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluorotridecanoic acid	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 20:05	1
Perfluoroundecanoic acid	ND		2.0	0.59	ng/L		11/20/18 07:29	12/02/18 20:05	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.50	ng/L		11/20/18 07:29	12/02/18 20:05	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/20/18 07:29	12/02/18 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	97		70 - 130				11/20/18 07:29	12/02/18 20:05	1
13C2 PFDA	98		70 - 130				11/20/18 07:29	12/02/18 20:05	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-11

Date Collected: 11/07/18 14:30

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-17

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.92	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorooctanoic acid (PFOA)	ND		5.8	2.6	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.46	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.62	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.3	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.78	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorodecanoic acid	ND		1.9	0.51	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorododecanoic acid	ND		1.9	0.79	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorohexanoic acid	ND		1.9	0.28	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorotetradecanoic acid	ND		1.9	0.86	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluorotridecanoic acid	ND		1.9	0.63	ng/L		11/20/18 07:29	12/02/18 20:12	1
Perfluoroundecanoic acid	ND		1.9	0.58	ng/L		11/20/18 07:29	12/02/18 20:12	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		1.9	0.49	ng/L		11/20/18 07:29	12/02/18 20:12	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	87		70 - 130				11/20/18 07:29	12/02/18 20:12	1
13C2 PFDA	106		70 - 130				11/20/18 07:29	12/02/18 20:12	1

Client Sample ID: VAL-12 ()

Date Collected: 11/07/18 15:00

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-18

Matrix: Water

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.89	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorooctanoic acid (PFOA)	ND		5.7	2.5	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.44	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.60	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluoroheptanoic acid (PFHpA)	ND		2.8	1.2	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.75	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorodecanoic acid	ND		1.9	0.50	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorododecanoic acid	ND		1.9	0.77	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorohexanoic acid	ND		1.9	0.27	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorotetradecanoic acid	ND		1.9	0.84	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluorotridecanoic acid	ND		1.9	0.61	ng/L		11/20/18 07:29	12/02/18 20:20	1
Perfluoroundecanoic acid	ND		1.9	0.57	ng/L		11/20/18 07:29	12/02/18 20:20	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		1.9	0.48	ng/L		11/20/18 07:29	12/02/18 20:20	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.8	1.0	ng/L		11/20/18 07:29	12/02/18 20:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	84		70 - 130				11/20/18 07:29	12/02/18 20:20	1
13C2 PFDA	105		70 - 130				11/20/18 07:29	12/02/18 20:20	1

TestAmerica Sacramento

Client Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-13 ()

Lab Sample ID: 320-45133-19

Date Collected: 11/07/18 15:10

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.95	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.80	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorododecanoic acid	ND		2.0	0.82	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorohexanoic acid	0.41	J	2.0	0.29	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorotetradecanoic acid	ND		2.0	0.89	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/20/18 07:29	12/02/18 20:27	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/20/18 07:29	12/02/18 20:27	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/20/18 07:29	12/02/18 20:27	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/20/18 07:29	12/02/18 20:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	110		70 - 130				11/20/18 07:29	12/02/18 20:27	1
13C2 PFDA	106		70 - 130				11/20/18 07:29	12/02/18 20:27	1

Client Sample ID: VAL-14 ()

Lab Sample ID: 320-45133-20

Date Collected: 11/07/18 15:50

Matrix: Water

Date Received: 11/10/18 09:00

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.91	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorooctanoic acid (PFOA)	ND		5.7	2.6	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.45	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.61	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluoroheptanoic acid (PFHpA)	ND		2.9	1.2	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.76	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorodecanoic acid	ND		1.9	0.51	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorododecanoic acid	ND		1.9	0.78	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorohexanoic acid	ND		1.9	0.28	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorotetradecanoic acid	ND		1.9	0.85	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluorotridecanoic acid	ND		1.9	0.62	ng/L		11/20/18 07:29	12/02/18 20:35	1
Perfluoroundecanoic acid	ND		1.9	0.57	ng/L		11/20/18 07:29	12/02/18 20:35	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		1.9	0.49	ng/L		11/20/18 07:29	12/02/18 20:35	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		2.9	1.1	ng/L		11/20/18 07:29	12/02/18 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	86		70 - 130				11/20/18 07:29	12/02/18 20:35	1
13C2 PFDA	106		70 - 130				11/20/18 07:29	12/02/18 20:35	1

TestAmerica Sacramento

Surrogate Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		PFHxA (70-130)	PFDA (70-130)
320-45133-1	KEN-01 ()	89	93
320-45133-2	KEN-02 ()	81	92
320-45133-3	KEN-03 ()	78	88
320-45133-4	KEN-04 ()	77	83
320-45133-5	KEN-05 ()	76	78
320-45133-6	KEN-06 ()	99	104
320-45133-7	VAL-01 ()	92	94
320-45133-8	VAL-02 ()	96	105
320-45133-9	VAL-03 ()	87	98
320-45133-10	VAL-04 ()	95	103
320-45133-11	VAL-05 ()	101	105
320-45133-12	VAL-06 ()	91	100
320-45133-13	VAL-07 (4)	88	94
320-45133-14	VAL-08 ()	93	103
320-45133-15	VAL-09 ()	106	96
320-45133-16	VAL-10 ()	97	98
320-45133-17	VAL-11 ()	87	106
320-45133-18	VAL-12 ()	84	105
320-45133-19	VAL-13 ()	110	106
320-45133-20	VAL-14 ()	86	106
LCS 320-260239/2-A	Lab Control Sample	80	85
LCS 320-260277/2-A	Lab Control Sample	90	93
LCSD 320-260239/3-A	Lab Control Sample Dup	77	83
LCSD 320-260277/3-A	Lab Control Sample Dup	96	100
MB 320-260239/1-A	Method Blank	84	87
MB 320-260277/1-A	Method Blank	103	109

Surrogate Legend

PFHxA = 13C2 PFHxA

PFDA = 13C2 PFDA

QC Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS)

Lab Sample ID: MB 320-260239/1-A

Matrix: Water

Analysis Batch: 262060

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.95	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.80	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorododecanoic acid	ND		2.0	0.82	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorotetradecanoic acid	ND		2.0	0.89	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/19/18 17:12	11/30/18 01:25	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/19/18 17:12	11/30/18 01:25	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/19/18 17:12	11/30/18 01:25	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/19/18 17:12	11/30/18 01:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C2 PFHxA	84		70 - 130				11/19/18 17:12	11/30/18 01:25	1
13C2 PFDA	87		70 - 130				11/19/18 17:12	11/30/18 01:25	1

Lab Sample ID: LCS 320-260239/2-A

Matrix: Water

Analysis Batch: 262060

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	186	131		ng/L		70	70 - 130
Perfluorooctanoic acid (PFOA)	200	144		ng/L		72	70 - 130
Perfluorononanoic acid (PFNA)	200	166		ng/L		83	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	182	131		ng/L		72	70 - 130
Perfluoroheptanoic acid (PFHpA)	200	145		ng/L		72	70 - 130
Perfluorobutanesulfonic acid (PFBS)	177	135		ng/L		77	70 - 130
Perfluorodecanoic acid	200	164		ng/L		82	70 - 130
Perfluorododecanoic acid	200	158		ng/L		79	70 - 130
Perfluorohexanoic acid	200	153		ng/L		76	70 - 130
Perfluorotetradecanoic acid	200	162		ng/L		81	70 - 130
Perfluorotridecanoic acid	200	168		ng/L		84	70 - 130
Perfluoroundecanoic acid	200	164		ng/L		82	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	200	146		ng/L		73	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid	200	150		ng/L		75	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
13C2 PFHxA	80		70 - 130				
13C2 PFDA	85		70 - 130				

TestAmerica Sacramento

QC Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Lab Sample ID: LCSD 320-260239/3-A

Matrix: Water

Analysis Batch: 262350

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 260239

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	186	134		ng/L		72	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	200	141		ng/L		70	70 - 130	2	30
Perfluorononanoic acid (PFNA)	200	159		ng/L		80	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)	182	135		ng/L		74	70 - 130	2	30
Perfluoroheptanoic acid (PFHpA)	200	150		ng/L		75	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	177	135		ng/L		76	70 - 130	0	30
Perfluorodecanoic acid	200	165		ng/L		82	70 - 130	1	30
Perfluorododecanoic acid	200	170		ng/L		85	70 - 130	7	30
Perfluorohexanoic acid	200	152		ng/L		76	70 - 130	1	30
Perfluorotetradecanoic acid	200	156		ng/L		78	70 - 130	4	30
Perfluorotridecanoic acid	200	179		ng/L		89	70 - 130	6	30
Perfluoroundecanoic acid	200	167		ng/L		83	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid	200	146		ng/L		73	70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid	200	147		ng/L		74	70 - 130	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFHxA	77		70 - 130
13C2 PFDA	83		70 - 130

Lab Sample ID: MB 320-260277/1-A

Matrix: Water

Analysis Batch: 262524

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.95	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorooctanoic acid (PFOA)	ND		6.0	2.7	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.47	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.64	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	1.3	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.80	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorodecanoic acid	ND		2.0	0.53	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorododecanoic acid	ND		2.0	0.82	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorohexanoic acid	ND		2.0	0.29	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorotetradecanoic acid	ND		2.0	0.89	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluorotridecanoic acid	ND		2.0	0.65	ng/L		11/20/18 07:29	12/02/18 18:20	1
Perfluoroundecanoic acid	ND		2.0	0.60	ng/L		11/20/18 07:29	12/02/18 18:20	1
N-ethylperfluorooctanesulfonamidoacetic acid	ND		2.0	0.51	ng/L		11/20/18 07:29	12/02/18 18:20	1
N-methylperfluorooctanesulfonamidoacetic acid	ND		3.0	1.1	ng/L		11/20/18 07:29	12/02/18 18:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	103		70 - 130	11/20/18 07:29	12/02/18 18:20	1
13C2 PFDA	109		70 - 130	11/20/18 07:29	12/02/18 18:20	1

TestAmerica Sacramento

QC Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LCS 320-260277/2-A

Matrix: Water

Analysis Batch: 262524

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorooctanesulfonic acid (PFOS)	92.8	88.3		ng/L		95	70 - 130
Perfluorooctanoic acid (PFOA)	100	93.9		ng/L		94	70 - 130
Perfluorononanoic acid (PFNA)	100	95.9		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	91.0	92.2		ng/L		101	70 - 130
Perfluoroheptanoic acid (PFHpA)	100	91.7		ng/L		92	70 - 130
Perfluorobutanesulfonic acid (PFBS)	88.4	82.8		ng/L		94	70 - 130
Perfluorodecanoic acid	100	94.5		ng/L		95	70 - 130
Perfluorododecanoic acid	100	96.2		ng/L		96	70 - 130
Perfluorohexanoic acid	100	89.0		ng/L		89	70 - 130
Perfluorotetradecanoic acid	100	87.9		ng/L		88	70 - 130
Perfluorotridecanoic acid	100	91.9		ng/L		92	70 - 130
Perfluoroundecanoic acid	100	96.2		ng/L		96	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid	100	93.3		ng/L		93	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid	100	94.2		ng/L		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
13C2 PFHxA	90		70 - 130
13C2 PFDA	93		70 - 130

Lab Sample ID: LCSD 320-260277/3-A

Matrix: Water

Analysis Batch: 262524

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 260277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorooctanesulfonic acid (PFOS)	92.8	85.7		ng/L		92	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	100	95.1		ng/L		95	70 - 130	1	30
Perfluorononanoic acid (PFNA)	100	103		ng/L		103	70 - 130	7	30
Perfluorohexanesulfonic acid (PFHxS)	91.0	88.2		ng/L		97	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	100	93.8		ng/L		94	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	88.4	81.8		ng/L		93	70 - 130	1	30
Perfluorodecanoic acid	100	96.1		ng/L		96	70 - 130	2	30
Perfluorododecanoic acid	100	95.0		ng/L		95	70 - 130	1	30
Perfluorohexanoic acid	100	93.6		ng/L		94	70 - 130	5	30
Perfluorotetradecanoic acid	100	92.5		ng/L		93	70 - 130	5	30
Perfluorotridecanoic acid	100	93.5		ng/L		93	70 - 130	2	30
Perfluoroundecanoic acid	100	102		ng/L		102	70 - 130	6	30
N-ethylperfluorooctanesulfonamidoacetic acid	100	97.9		ng/L		98	70 - 130	5	30
N-methylperfluorooctanesulfonamidoacetic acid	100	101		ng/L		101	70 - 130	7	30

TestAmerica Sacramento

QC Sample Results

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Method: 537 DW - Perfluorinated Alkyl Acids (LC/MS) (Continued)

Lab Sample ID: LCSD 320-260277/3-A

Matrix: Water

Analysis Batch: 262524

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 260277

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFHxA	96		70 - 130
13C2 PFDA	100		70 - 130

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-518099/1-A

Matrix: Water

Analysis Batch: 518337

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 518099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.50	ug/L		12/19/18 08:10	12/19/18 21:42	1

Lab Sample ID: LCS 440-518099/2-A

Matrix: Water

Analysis Batch: 518337

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 518099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	80.0	80.0		ug/L		100	85 - 115

QC Association Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

LCMS

Prep Batch: 260239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-1	KEN-01 ()	Total/NA	Water	537 DW	
320-45133-2	KEN-02 ()	Total/NA	Water	537 DW	
320-45133-3	KEN-03 ()	Total/NA	Water	537 DW	
320-45133-4	KEN-04 ()	Total/NA	Water	537 DW	
320-45133-5	KEN-05 ()	Total/NA	Water	537 DW	
320-45133-6	KEN-06 ()	Total/NA	Water	537 DW	
MB 320-260239/1-A	Method Blank	Total/NA	Water	537 DW	
LCS 320-260239/2-A	Lab Control Sample	Total/NA	Water	537 DW	
LCSD 320-260239/3-A	Lab Control Sample Dup	Total/NA	Water	537 DW	

Prep Batch: 260277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-7	VAL-01 ()	Total/NA	Water	537 DW	
320-45133-8	VAL-02 ()	Total/NA	Water	537 DW	
320-45133-9	VAL-03 ()	Total/NA	Water	537 DW	
320-45133-10	VAL-04 ()	Total/NA	Water	537 DW	
320-45133-11	VAL-05 ()	Total/NA	Water	537 DW	
320-45133-12	VAL-06 ()	Total/NA	Water	537 DW	
320-45133-13	VAL-07 ()	Total/NA	Water	537 DW	
320-45133-14	VAL-08 ()	Total/NA	Water	537 DW	
320-45133-15	VAL-09 ()	Total/NA	Water	537 DW	
320-45133-16	VAL-10 ()	Total/NA	Water	537 DW	
320-45133-17	VAL-11 ()	Total/NA	Water	537 DW	
320-45133-18	VAL-12 ()	Total/NA	Water	537 DW	
320-45133-19	VAL-13 ()	Total/NA	Water	537 DW	
320-45133-20	VAL-14 ()	Total/NA	Water	537 DW	
MB 320-260277/1-A	Method Blank	Total/NA	Water	537 DW	
LCS 320-260277/2-A	Lab Control Sample	Total/NA	Water	537 DW	
LCSD 320-260277/3-A	Lab Control Sample Dup	Total/NA	Water	537 DW	

Analysis Batch: 262060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-260239/1-A	Method Blank	Total/NA	Water	537 DW	260239
LCS 320-260239/2-A	Lab Control Sample	Total/NA	Water	537 DW	260239

Analysis Batch: 262062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-1	KEN-01 ()	Total/NA	Water	537 DW	260239
320-45133-2	KEN-02 ()	Total/NA	Water	537 DW	260239
320-45133-3	KEN-03 ()	Total/NA	Water	537 DW	260239
320-45133-4	KEN-04 ()	Total/NA	Water	537 DW	260239

Analysis Batch: 262064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-6	KEN-06 ()	Total/NA	Water	537 DW	260239

Analysis Batch: 262350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-5	KEN-05 ()	Total/NA	Water	537 DW	260239
LCSD 320-260239/3-A	Lab Control Sample Dup	Total/NA	Water	537 DW	260239

TestAmerica Sacramento

QC Association Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

LCMS (Continued)

Analysis Batch: 262524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-7	VAL-01 ()	Total/NA	Water	537 DW	260277
320-45133-8	VAL-02 ()	Total/NA	Water	537 DW	260277
320-45133-9	VAL-03 ()	Total/NA	Water	537 DW	260277
320-45133-10	VAL-04 ()	Total/NA	Water	537 DW	260277
320-45133-11	VAL-05 ()	Total/NA	Water	537 DW	260277
320-45133-12	VAL-06 ()	Total/NA	Water	537 DW	260277
320-45133-13	VAL-07 ()	Total/NA	Water	537 DW	260277
MB 320-260277/1-A	Method Blank	Total/NA	Water	537 DW	260277
LCS 320-260277/2-A	Lab Control Sample	Total/NA	Water	537 DW	260277
LCSD 320-260277/3-A	Lab Control Sample Dup	Total/NA	Water	537 DW	260277

Analysis Batch: 262526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-14	VAL-08 ()	Total/NA	Water	537 DW	260277
320-45133-15	VAL-09 ()	Total/NA	Water	537 DW	260277
320-45133-16	VAL-10 ()	Total/NA	Water	537 DW	260277
320-45133-17	VAL-11 ()	Total/NA	Water	537 DW	260277
320-45133-18	VAL-12 ()	Total/NA	Water	537 DW	260277
320-45133-19	VAL-13 ()	Total/NA	Water	537 DW	260277
320-45133-20	VAL-14 ()	Total/NA	Water	537 DW	260277

Metals

Prep Batch: 518099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-6	KEN-06 ()	Total Recoverable	Water	200.2	
MB 440-518099/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-518099/2-A	Lab Control Sample	Total Recoverable	Water	200.2	

Analysis Batch: 518337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-45133-6	KEN-06 ()	Total Recoverable	Water	200.8	518099
MB 440-518099/1-A	Method Blank	Total Recoverable	Water	200.8	518099
LCS 440-518099/2-A	Lab Control Sample	Total Recoverable	Water	200.8	518099

Lab Chronicle

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-01 ([REDACTED])

Date Collected: 11/05/18 13:30

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-1

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	537 DW			244.8 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262062	11/30/18 03:40	JRB	TAL SAC

Client Sample ID: KEN-02 ([REDACTED])

Date Collected: 11/05/18 15:10

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-2

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	537 DW			255.5 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262062	11/30/18 03:47	JRB	TAL SAC

Client Sample ID: KEN-03 ([REDACTED])

Date Collected: 11/05/18 16:50

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-3

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	537 DW			251.8 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262062	11/30/18 03:55	JRB	TAL SAC

Client Sample ID: KEN-04 ([REDACTED])

Date Collected: 11/05/18 17:00

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-4

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	537 DW			247.7 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262062	11/30/18 04:02	JRB	TAL SAC

Client Sample ID: KEN-05 ([REDACTED])

Date Collected: 11/06/18 12:10

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-5

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	537 DW			250.2 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262350	12/01/18 08:47	JRB	TAL SAC

Client Sample ID: KEN-06 ([REDACTED])

Date Collected: 11/06/18 14:30

Date Received: 11/10/18 09:00

Lab Sample ID: 320-45133-6

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	537 DW			247.1 mL	10.00 mL	260239	11/19/18 17:12	JER	TAL SAC
Total/NA	Analysis	537 DW		1			262064	11/30/18 04:32	JRB	TAL SAC

TestAmerica Sacramento

Lab Chronicle

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: KEN-06 [REDACTED]

Lab Sample ID: 320-45133-6

Date Collected: 11/06/18 14:30

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	200.2			25 mL	25 mL	518099	12/19/18 08:10	KE	TAL IRV
Total Recoverable	Analysis	200.8		1			518337	12/19/18 21:54	B1H	TAL IRV

Client Sample ID: VAL-01 ([REDACTED])

Lab Sample ID: 320-45133-7

Date Collected: 11/07/18 09:15

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			249.8 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 18:43	JRB	TAL SAC

Client Sample ID: VAL-02 ([REDACTED])

Lab Sample ID: 320-45133-8

Date Collected: 11/07/18 09:15

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			258 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 18:50	JRB	TAL SAC

Client Sample ID: VAL-03 ([REDACTED])

Lab Sample ID: 320-45133-9

Date Collected: 11/07/18 09:40

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			256.4 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 18:58	JRB	TAL SAC

Client Sample ID: VAL-04 [REDACTED]

Lab Sample ID: 320-45133-10

Date Collected: 11/07/18 09:50

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			200.2 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 19:05	JRB	TAL SAC

Client Sample ID: VAL-05 [REDACTED])

Lab Sample ID: 320-45133-11

Date Collected: 11/07/18 09:50

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			198 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 19:13	JRB	TAL SAC

TestAmerica Sacramento

Lab Chronicle

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-06 ([REDACTED])

Lab Sample ID: 320-45133-12

Date Collected: 11/07/18 10:55

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			254.4 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 19:20	JRB	TAL SAC

Client Sample ID: VAL-07 ([REDACTED])

Lab Sample ID: 320-45133-13

Date Collected: 11/07/18 11:35

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			254.6 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262524	12/02/18 19:28	JRB	TAL SAC

Client Sample ID: VAL-08 ([REDACTED])

Lab Sample ID: 320-45133-14

Date Collected: 11/07/18 11:50

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			257.1 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 19:50	JRB	TAL SAC

Client Sample ID: VAL-09 ([REDACTED])

Lab Sample ID: 320-45133-15

Date Collected: 11/07/18 13:50

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			251.8 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 19:57	JRB	TAL SAC

Client Sample ID: VAL-10 ([REDACTED])

Lab Sample ID: 320-45133-16

Date Collected: 11/07/18 14:25

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			253.1 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 20:05	JRB	TAL SAC

Client Sample ID: VAL-11

Lab Sample ID: 320-45133-17

Date Collected: 11/07/18 14:30

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			258 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 20:12	JRB	TAL SAC

TestAmerica Sacramento

Lab Chronicle

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Client Sample ID: VAL-12 ()

Lab Sample ID: 320-45133-18

Date Collected: 11/07/18 15:00

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			265.4 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 20:20	JRB	TAL SAC

Client Sample ID: VAL-13 ()

Lab Sample ID: 320-45133-19

Date Collected: 11/07/18 15:10

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			251 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 20:27	JRB	TAL SAC

Client Sample ID: VAL-14 ()

Lab Sample ID: 320-45133-20

Date Collected: 11/07/18 15:50

Matrix: Water

Date Received: 11/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	537 DW			261.7 mL	10.00 mL	260277	11/20/18 07:29	SK	TAL SAC
Total/NA	Analysis	537 DW		1			262526	12/02/18 20:35	JRB	TAL SAC

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Accreditation/Certification Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

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
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

Laboratory: TestAmerica Irvine

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	State Program	10	CA01531	06-30-19
Arizona	State Program	9	AZ0671	10-14-19
California	LA Cty Sanitation Districts	9	10256	06-30-19
California	State Program	9	CA ELAP 2706	06-30-19
Guam	State Program	9	Cert. No. 17-003R	01-23-19 *
Hawaii	State Program	9	N/A	01-29-19 *
Kansas	NELAP	7	E-10420	07-31-19
Nevada	State Program	9	CA015312018-1	07-31-19
New Mexico	State Program	6	N/A	01-29-19 *
Oregon	NELAP	10	4028	01-29-19 *
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-18-00214	07-09-21
Washington	State Program	10	C900	09-03-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Sacramento

Method Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Method	Method Description	Protocol	Laboratory
537 DW	Perfluorinated Alkyl Acids (LC/MS)	EPA	TAL SAC
200.8	Metals (ICP/MS)	EPA	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
537 DW	Extraction of Perfluorinated Alkyl Acids	EPA	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Sample Summary

Client: Alaska Department of Env. Conservation
Project/Site: PFAS, AK Drinking Water

TestAmerica Job ID: 320-45133-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-45133-1	KEN-01 ()	Water	11/05/18 13:30	11/10/18 09:00
320-45133-2	KEN-02 ()	Water	11/05/18 15:10	11/10/18 09:00
320-45133-3	KEN-03 ()	Water	11/05/18 16:50	11/10/18 09:00
320-45133-4	KEN-04 ()	Water	11/05/18 17:00	11/10/18 09:00
320-45133-5	KEN-05 ()	Water	11/06/18 12:10	11/10/18 09:00
320-45133-6	KEN-06 ()	Water	11/06/18 14:30	11/10/18 09:00
320-45133-7	VAL-01 ()	Water	11/07/18 09:15	11/10/18 09:00
320-45133-8	VAL-02 ()	Water	11/07/18 09:15	11/10/18 09:00
320-45133-9	VAL-03 ()	Water	11/07/18 09:40	11/10/18 09:00
320-45133-10	VAL-04 ()	Water	11/07/18 09:50	11/10/18 09:00
320-45133-11	VAL-05 ()	Water	11/07/18 09:50	11/10/18 09:00
320-45133-12	VAL-06 ()	Water	11/07/18 10:55	11/10/18 09:00
320-45133-13	VAL-07 ()	Water	11/07/18 11:35	11/10/18 09:00
320-45133-14	VAL-08 ()	Water	11/07/18 11:50	11/10/18 09:00
320-45133-15	VAL-09 ()	Water	11/07/18 13:50	11/10/18 09:00
320-45133-16	VAL-10 ()	Water	11/07/18 14:25	11/10/18 09:00
320-45133-17	VAL-11 ()	Water	11/07/18 14:30	11/10/18 09:00
320-45133-18	VAL-12 ()	Water	11/07/18 15:00	11/10/18 09:00
320-45133-19	VAL-13 ()	Water	11/07/18 15:10	11/10/18 09:00
320-45133-20	VAL-14 ()	Water	11/07/18 15:50	11/10/18 09:00

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: Alaska Contaminated Sites/Superfund

Client Contact		Project Manager: <u>Anne Marie Palmieri</u>		Site Contact:		Date:		COC No:	
Company Name: <u>Alaska DEC</u>		Tel/Fax: <u>907-746-3184 / 907-746-3185</u>		Lab Contact:		Carrier:		1 of 2 COCs	
Address: <u>410 Willoughby Ave.</u>		Analysis Turnaround Time		 320-45133 Chain of Custody		Sampler:		For Lab Use Only:	
City/State/Zip: <u>Juneau, AK 99801</u>		☒ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day				alk-in Client:			
Phone: <u>907-746-3184</u>						ib Sampling:			
Fax: <u>907-746-3185</u>						ib / SDG No.:			
Project Name:				Filtered Sample (Y/N)		Perform MS / MSD (Y/N)			
Site:				537-DW-MOD		200.8 Lead			
P O #									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes
KEN-01	11-5-18	13:30	G	WA	1	N	X	
KEN-02	11-5-18	15:10	G	WA	1	N	X	
KEN-03	11-5-18	16:50	G	WA	1	N	X	
KEN-04	11-5-18	17:00	G	WA	1	N	X	
KEN-05	11-6-18	12:10	G	WA	1	N	X	
KEN-06	11-6-18	14:30	G	WA	2	N	XX	
VAL-01	11-7-18	09:15	G	WA	1	N	X	
VAL-02	11-7-18	09:15	G	WA	1	N	X	
VAL-03	11-7-18	09:40	G	WA	1	N	X	
VAL-04	11-7-18	09:50	G	WA	1	N	X	
VAL-05	11-7-18	09:50	G	WA	1	N	X	
VAL-06	11-7-18	10:55	G	WA	1	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other Vizma

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.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
email results: annemarie.palmieri@alaska.gov

Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.: _____ Cooler Temp. (°C): Obs'd: -0.3 Corr'd: 0.4 Therm ID No.: AK-6

Relinquished by: <u>Gaudin</u>	Company: <u>DEC</u>	Date/Time: <u>11/9/18 4:20</u>	Received by: <u>[Signature]</u>	Company: <u>THSAC</u>	Date/Time: <u>11/10/18 9:00</u>
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: Alaska Contaminated Sites/Superfund

Client Contact		Project Manager: Annemarie Palmieri		Site Contact:		Date:		COC No:	
Company Name: Alaska DEC		Tel/Fax: 907-746-3184 / 907-746-3185		Lab Contact:		Carrier:		2 of 2 COCs	
Address: 410 Willoughby Ave		Analysis Turnaround Time						Sampler:	
City/State/Zip: Juneau, AK 99801		☒ CALENDAR DAYS ☐ WORKING DAYS						For Lab Use Only:	
Phone: 907-746-3184		TAT if different from Below						Walk-in Client:	
Fax: 907-746-3185		☒ 2 weeks						Lab Sampling:	
Project Name:		☐ 1 week							
Site:		☐ 2 days						Job / SDG No.:	
P.O.#		☐ 1 day							
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes
VAL-07		11-7-18	11:35	WA	WA	1	N	X	
VAL-08		11-7-18	11:50	G	WA	1	N	X	
VAL-09		11-7-18	13:50	G	WA	1	N	X	
VAL-10		11-7-18	14:25	G	WA	1	N	X	
VAL-11		11-7-18	14:30	G	WA	1	N	X	Field Blank
VAL-12		11-7-18	15:00	G	WA	1	N	X	
VAL-13		11-7-18	15:10	G	WA	1	N	X	
VAL-14		11-7-18	15:50	G	WA	1	N	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other									
Possible Hazard Identification:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
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.		☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months							
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown									
Special Instructions/QC Requirements & Comments:									
email results - annemarie.palmieri@alaska.gov									
Custody Seals Intact: ☒ Yes ☐ No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Cor'd: _____		Therm ID No.:			
Relinquished by: [Signature]		Company: DEC		Date/Time: 11/9/18 9:20		Received by: [Signature]		Company: TASAC	
Relinquished by:		Company:		Date/Time:		Received by:		Company:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:	

(continued)

TestAmerica

[illegible]

Login Sample Receipt Checklist

Client: Alaska Department of Env. Conservation

Job Number: 320-45133-1

Login Number: 45133

List Number: 1

Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	True	
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?	False	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alaska Department of Env. Conservation

Job Number: 320-45133-1

Login Number: 45133
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 11/14/18 01:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	Not Present
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.	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?	N/A	Received project as a subcontract.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	