

ANALYTICAL REPORT

Job Number: 320-27269-1

Job Description: Agri-Cycle #1611195 PIN H7001

Contract Number: C008010

For:

New York State D.E.C.

1115 Route 86

PO BOX 296

Ray Brook, NY 12977

Attention: Dale Becker



Approved for release.
Judy L Stone
Senior Project Manager
4/24/2017 11:42 AM

Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
04/24/2017

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Sacramento 880 Riverside Parkway, West Sacramento, CA 95605

Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



Table of Contents

Cover Title Page	1
Data Summaries	4
Report Narrative	4
Sample Summary	5
Detection Summary	6
Method Summary	10
Client Sample Results	11
Isotope Dilution Summary	20
QC Sample Results	22
Definitions	29
QC Association	30
Chronicle	32
Certification Summary	35
Organic Sample Data	37
LCMS	37
Method PFC IDA	37
Method PFC IDA QC Summary	38
Method PFC IDA Sample Data	51
Standards Data	187
Method PFC IDA ICAL Data	187
Method PFC IDA CCAL Data	326
Raw QC Data	429
Method PFC IDA Blank Data	429
Method PFC IDA LCS/LCSD Data	454
Method PFC IDA MS/MSD Data	468
Method PFC IDA Run Logs	526

Table of Contents

Method PFC IDA Prep Data	532
Inorganic Sample Data	565
General Chemistry Data	565
Gen Chem Cover Page	566
Gen Chem MDL	567
Gen Chem Analysis Run Log	569
Gen Chem Prep Data	570
Shipping and Receiving Documents	571
Client Chain of Custody	572
Sample Receipt Checklist	574

Job Narrative 320-27269-1

Receipt

The samples were received on 4/6/2017 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 6.6° C and 11.5° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria. Samples were received at 6.6 and 11.5 degrees. There was not enough ice in the cooler. AC-040517-SW (320-27269-1), AC-040517-SW (320-27269-1[MS]), AC-040517-SW (320-27269-1[MSD]), AC-040517-LW (320-27269-2), AC-040517-SCH1 (320-27269-3), AC-040517-SCH2 (320-27269-4), AC-040517-WDUP (320-27269-5), AC-040517-FC (320-27269-6), AC-040517-FC (320-27269-6[MS]), AC-040517-FC (320-27269-6[MSD]), AC-040517-YW (320-27269-7), AC-040517-WR1 (320-27269-8), AC-040517-WR2 (320-27269-9) and AC-040517-SDUP (320-27269-10)

The Chain of Custody states one container was received for each sample (sample 320-27269-1 reads 3 containers received, accounting for MS/MSD), however 2 (6 for sample 320-27269-1) were received: AC-040517-SW (320-27269-1), AC-040517-SW (320-27269-1[MS]), AC-040517-SW (320-27269-1[MSD]), AC-040517-LW (320-27269-2), AC-040517-SCH1 (320-27269-3), AC-040517-SCH2 (320-27269-4) and AC-040517-WDUP (320-27269-5)

LCMS

Method(s) 537 (modified): Due to the high concentration of Perfluorooctanesulfonic acid (PFOS), the matrix spike duplicate (MSD) for preparation batch 320-159159 and analytical batch 320-160096 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 537 (modified): The matrix spike (MS) recovery for Perfluorononanoic acid (PFNA) in preparation batch 320-159159 and analytical batch 320-160096 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit for 13C4 PFBA: AC-040517-YW (320-27269-7). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit for 13C8 FOSA: AC-040517-YW (320-27269-7) and AC-040517-SDUP (320-27269-10). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method(s) 537 (modified): The matrix spike (MS) recoveries for preparation batch 320-159520 and analytical batch 320-160509 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit: AC-040517-SW (320-27269-1), AC-040517-SW (320-27269-1[MS]), AC-040517-SW (320-27269-1[MSD]), AC-040517-LW (320-27269-2), AC-040517-SCH1 (320-27269-3), AC-040517-SCH2 (320-27269-4), AC-040517-WDUP (320-27269-5), (LCS 320-159520/2-A) and (MB 320-159520/1-A). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

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

General Chemistry

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

Organic Prep

Method(s) 3535: The following samples were decanted prior to preparation: AC-040517-SW (320-27269-1), AC-040517-SW (320-27269-1[MS]), AC-040517-SW (320-27269-1[MSD]), AC-040517-LW (320-27269-2), AC-040517-SCH1 (320-27269-3), AC-040517-SCH2 (320-27269-4) and AC-040517-WDUP (320-27269-5).

Method(s) 3535: The following samples displayed a strong color prior to extraction: AC-040517-SW (320-27269-1), AC-040517-SW (320-27269-1[MS]), AC-040517-SW (320-27269-1[MSD]), AC-040517-LW (320-27269-2) and AC-040517-WDUP (320-27269-5). See worksheet/batch notes for more information.

Method(s) SHAKE: Sample 320-27269-A-8 had a very dark green color after concentration to final volume and sample 320-27269-A-9 had a dark brown color.
AC-040517-WR1 (320-27269-8) and AC-040517-WR2 (320-27269-9)

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

Sample Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-27269-1	AC-040517-SW	Water	04/05/17 11:40	04/06/17 09:50
320-27269-2	AC-040517-LW	Water	04/05/17 11:50	04/06/17 09:50
320-27269-3	AC-040517-SCH1	Water	04/05/17 12:50	04/06/17 09:50
320-27269-4	AC-040517-SCH2	Water	04/05/17 13:25	04/06/17 09:50
320-27269-5	AC-040517-WDUP	Water	04/05/17 00:00	04/06/17 09:50
320-27269-6	AC-040517-FC	Solid	04/05/17 10:30	04/06/17 09:50
320-27269-7	AC-040517-YW	Solid	04/05/17 10:50	04/06/17 09:50
320-27269-8	AC-040517-WR1	Solid	04/05/17 11:05	04/06/17 09:50
320-27269-9	AC-040517-WR2	Solid	04/05/17 11:15	04/06/17 09:50
320-27269-10	AC-040517-SDUP	Solid	04/05/17 00:00	04/06/17 09:50

Detection Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SW

Lab Sample ID: 320-27269-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	90		2.0	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	87	F1	2.0	0.99	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	130		2.0	0.79	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	47		2.0	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	87		2.0	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	17		2.0	0.66	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	11		2.0	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	11		2.0	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	1.6	J	2.0	0.59	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	4.0	F1	2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.92	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.5		2.0	0.88	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	J	2.0	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	140		2.0	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.6	J	2.0	0.64	ng/L	1		537 (modified)	Total/NA

Client Sample ID: AC-040517-LW

Lab Sample ID: 320-27269-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	170		2.0	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	180		2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	31		2.0	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	17		2.0	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	7.3		2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	5.5		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	5.7		2.0	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	3.7	B	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	21		2.0	0.91	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	12		2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	130		2.0	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.4	J	2.0	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid (PFBA) - DL	930		20	4.5	ng/L	10		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	2000		20	9.8	ng/L	10		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	2700		20	7.8	ng/L	10		537 (modified)	Total/NA

Client Sample ID: AC-040517-SCH1

Lab Sample ID: 320-27269-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	30		1.9	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	56		1.9	0.95	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	110		1.9	0.76	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	140		1.9	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	190		1.9	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	40		1.9	0.63	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.7	J	1.9	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.5	J	1.9	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.80	J B	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.2		1.9	0.89	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	9.7		1.9	0.84	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SCH1 (Continued)

Lab Sample ID: 320-27269-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanesulfonic Acid (PFHpS)	0.70	J	1.9	0.69	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	21		1.9	1.2	ng/L	1		537 (modified)	Total/NA

Client Sample ID: AC-040517-SCH2

Lab Sample ID: 320-27269-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	75		2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	130		2.0	0.97	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	160		2.0	0.77	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	100		2.0	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	190		2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.5	J	2.0	0.64	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.0	J	2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	1.9	J B	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	8.0		2.0	0.90	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.7		2.0	0.86	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	29		2.0	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	5.6		2.0	0.63	ng/L	1		537 (modified)	Total/NA

Client Sample ID: AC-040517-WDUP

Lab Sample ID: 320-27269-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	84		2.0	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	89		2.0	0.98	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	140		2.0	0.78	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	52		2.0	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	97		2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	19		2.0	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	11		2.0	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	3.7		2.0	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	1.0	J	2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	2.0	0.20	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.91	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.6		2.0	0.87	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	150		2.0	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	2.4		2.0	0.63	ng/L	1		537 (modified)	Total/NA

Client Sample ID: AC-040517-FC

Lab Sample ID: 320-27269-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.45		0.38	0.25	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.2		0.38	0.14	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.5		0.38	0.17	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	27		0.38	0.20	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	13	F1	0.38	0.16	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	17		0.38	0.11	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	5.7		0.38	0.20	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	4.9		0.38	0.23	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-FC (Continued)

Lab Sample ID: 320-27269-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorotridecanoic Acid (PFTriA)	3.5		0.38	0.18	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	2.7		0.38	0.11	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.59		0.38	0.23	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.52		0.38	0.23	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	57		0.38	0.24	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.14	J	0.38	0.14	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.3		0.38	0.15	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: AC-040517-YW

Lab Sample ID: 320-27269-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	1.5		0.49	0.18	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	1.2		0.49	0.23	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.26	J	0.49	0.14	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: AC-040517-WR1

Lab Sample ID: 320-27269-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	2.1		0.59	0.21	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3		0.59	0.30	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.75		0.59	0.25	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.3		0.59	0.17	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.4		0.59	0.31	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	1.4		0.59	0.36	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	0.76		0.59	0.27	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	1.4		0.59	0.17	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.2		0.59	0.37	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: AC-040517-WR2

Lab Sample ID: 320-27269-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	3.3		0.80	0.28	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.2		0.80	0.35	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.5		0.80	0.41	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.0		0.80	0.33	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	4.8		0.80	0.23	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	4.5		0.80	0.42	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	4.8		0.80	0.48	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	3.0		0.80	0.37	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	2.4		0.80	0.23	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: AC-040517-SDUP

Lab Sample ID: 320-27269-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.56		0.43	0.28	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.6		0.43	0.15	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.7		0.43	0.19	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	31		0.43	0.22	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	15		0.43	0.18	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	19		0.43	0.12	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SDUP (Continued)

Lab Sample ID: 320-27269-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroundecanoic acid (PFUnA)	6.5		0.43	0.23	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	6.2		0.43	0.26	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic Acid (PFTriA)	3.3		0.43	0.20	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	3.0		0.43	0.12	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.81		0.43	0.25	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.58		0.43	0.25	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	59		0.43	0.27	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctane Sulfonamide (FOSA)	1.4		0.43	0.17	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Method Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Perfluorinated Hydrocarbons	EPA	TAL SAC
D 2216	Percent Moisture	ASTM	TAL SAC

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SW

Lab Sample ID: 320-27269-1

Date Collected: 04/05/17 11:40

Matrix: Water

Date Received: 04/06/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	90		2.0	0.46	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluoropentanoic acid (PFPeA)	87	F1	2.0	0.99	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorohexanoic acid (PFHxA)	130		2.0	0.79	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluoroheptanoic acid (PFHpA)	47		2.0	0.81	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorooctanoic acid (PFOA)	87		2.0	0.75	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorononanoic acid (PFNA)	17		2.0	0.66	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorodecanoic acid (PFDA)	11		2.0	0.44	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluoroundecanoic acid (PFUnA)	11		2.0	0.75	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorododecanoic acid (PFDoA)	1.6	J	2.0	0.59	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorotridecanoic Acid (PFTriA)	4.0	F1	2.0	0.55	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	2.0	0.20	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.92	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorohexanesulfonic acid (PFHxS)	4.5		2.0	0.88	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	J	2.0	0.72	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorooctanesulfonic acid (PFOS)	140		2.0	1.3	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		04/13/17 15:13	04/19/17 18:27	1
Perfluorooctane Sulfonamide (FOSA)	1.6	J	2.0	0.64	ng/L		04/13/17 15:13	04/19/17 18:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	4	*	25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C4 PFBA	9	*	25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C2 PFHxA	56		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C4 PFOA	79		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C5 PFNA	84		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C2 PFDA	97		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C2 PFUnA	91		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C2 PFDoA	75		25 - 150	04/13/17 15:13	04/19/17 18:27	1
18O2 PFHxS	81		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C4 PFOS	86		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C4-PFHpA	66		25 - 150	04/13/17 15:13	04/19/17 18:27	1
13C5 PFPeA	31		25 - 150	04/13/17 15:13	04/19/17 18:27	1

Client Sample ID: AC-040517-LW

Lab Sample ID: 320-27269-2

Date Collected: 04/05/17 11:50

Matrix: Water

Date Received: 04/06/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	170		2.0	0.79	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorooctanoic acid (PFOA)	180		2.0	0.74	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorononanoic acid (PFNA)	31		2.0	0.65	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorodecanoic acid (PFDA)	17		2.0	0.44	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluoroundecanoic acid (PFUnA)	7.3		2.0	0.74	ng/L		04/13/17 15:13	04/19/17 18:57	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-LW

Lab Sample ID: 320-27269-2

Date Collected: 04/05/17 11:50

Matrix: Water

Date Received: 04/06/17 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	5.5		2.0	0.58	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorotridecanoic Acid (PFTriA)	5.7		2.0	0.55	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorotetradecanoic acid (PFTeA)	3.7	B	2.0	0.20	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorobutanesulfonic acid (PFBS)	21		2.0	0.91	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorohexanesulfonic acid (PFHxS)	12		2.0	0.86	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.71	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorooctanesulfonic acid (PFOS)	130		2.0	1.3	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		04/13/17 15:13	04/19/17 18:57	1
Perfluorooctane Sulfonamide (FOSA)	1.4	J	2.0	0.63	ng/L		04/13/17 15:13	04/19/17 18:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	14	*	25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C4 PFBA	1	*	25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C2 PFHxA	12	*	25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C4 PFOA	24	*	25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C5 PFNA	42		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C2 PFDA	55		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C2 PFUnA	56		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C2 PFDoA	44		25 - 150	04/13/17 15:13	04/19/17 18:57	1
18O2 PFHxS	51		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C4 PFOS	62		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C4-PFHpA	25		25 - 150	04/13/17 15:13	04/19/17 18:57	1
13C5 PFPeA	6	*	25 - 150	04/13/17 15:13	04/19/17 18:57	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	930		20	4.5	ng/L		04/13/17 15:13	04/16/17 21:56	10
Perfluoropentanoic acid (PFPeA)	2000		20	9.8	ng/L		04/13/17 15:13	04/16/17 21:56	10
Perfluorohexanoic acid (PFHxA)	2700		20	7.8	ng/L		04/13/17 15:13	04/16/17 21:56	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	5	*	25 - 150	04/13/17 15:13	04/16/17 21:56	10
13C2 PFHxA	54		25 - 150	04/13/17 15:13	04/16/17 21:56	10
13C4-PFHpA	88		25 - 150	04/13/17 15:13	04/16/17 21:56	10
13C5 PFPeA	26		25 - 150	04/13/17 15:13	04/16/17 21:56	10

Client Sample ID: AC-040517-SCH1

Lab Sample ID: 320-27269-3

Date Collected: 04/05/17 12:50

Matrix: Water

Date Received: 04/06/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	30		1.9	0.44	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluoropentanoic acid (PFPeA)	56		1.9	0.95	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorohexanoic acid (PFHxA)	110		1.9	0.76	ng/L		04/13/17 15:13	04/16/17 22:18	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SCH1

Lab Sample ID: 320-27269-3

Date Collected: 04/05/17 12:50

Matrix: Water

Date Received: 04/06/17 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	140		1.9	0.77	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorooctanoic acid (PFOA)	190		1.9	0.72	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorononanoic acid (PFNA)	40		1.9	0.63	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorodecanoic acid (PFDA)	1.7	J	1.9	0.42	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluoroundecanoic acid (PFUnA)	1.5	J	1.9	0.72	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.56	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.9	0.53	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorotetradecanoic acid (PFTeA)	0.80	J B	1.9	0.19	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorobutanesulfonic acid (PFBS)	3.2		1.9	0.89	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorohexanesulfonic acid (PFHxS)	9.7		1.9	0.84	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.70	J	1.9	0.69	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorooctanesulfonic acid (PFOS)	21		1.9	1.2	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	1.2	ng/L		04/13/17 15:13	04/16/17 22:18	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.9	0.62	ng/L		04/13/17 15:13	04/16/17 22:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	2	*	25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C4 PFBA	18	*	25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C2 PFHxA	65		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C4 PFOA	82		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C5 PFNA	76		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C2 PFDA	72		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C2 PFUnA	67		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C2 PFDoA	58		25 - 150				04/13/17 15:13	04/16/17 22:18	1
18O2 PFHxS	97		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C4 PFOS	113		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C4-PFHpA	83		25 - 150				04/13/17 15:13	04/16/17 22:18	1
13C5 PFPeA	46		25 - 150				04/13/17 15:13	04/16/17 22:18	1

Client Sample ID: AC-040517-SCH2

Lab Sample ID: 320-27269-4

Date Collected: 04/05/17 13:25

Matrix: Water

Date Received: 04/06/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	75		2.0	0.45	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluoropentanoic acid (PFPeA)	130		2.0	0.97	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorohexanoic acid (PFHxA)	160		2.0	0.77	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluoroheptanoic acid (PFHpA)	100		2.0	0.79	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorooctanoic acid (PFOA)	190		2.0	0.74	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorononanoic acid (PFNA)	1.5	J	2.0	0.64	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.43	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluoroundecanoic acid (PFUnA)	1.0	J	2.0	0.74	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.57	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.54	ng/L		04/13/17 15:13	04/19/17 19:04	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SCH2

Lab Sample ID: 320-27269-4

Date Collected: 04/05/17 13:25

Matrix: Water

Date Received: 04/06/17 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	1.9	J B	2.0	0.20	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorobutanesulfonic acid (PFBS)	8.0		2.0	0.90	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorohexanesulfonic acid (PFHxS)	7.7		2.0	0.86	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.70	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorooctanesulfonic acid (PFOS)	29		2.0	1.3	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		04/13/17 15:13	04/19/17 19:04	1
Perfluorooctane Sulfonamide (FOSA)	5.6		2.0	0.63	ng/L		04/13/17 15:13	04/19/17 19:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	1	*	25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C4 PFBA	19	*	25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C2 PFHxA	69		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C4 PFOA	79		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C5 PFNA	56		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C2 PFDA	40		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C2 PFUnA	34		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C2 PFDoA	31		25 - 150				04/13/17 15:13	04/19/17 19:04	1
18O2 PFHxS	98		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C4 PFOS	102		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C4-PFHpA	85		25 - 150				04/13/17 15:13	04/19/17 19:04	1
13C5 PFPeA	52		25 - 150				04/13/17 15:13	04/19/17 19:04	1

Client Sample ID: AC-040517-WDUP

Lab Sample ID: 320-27269-5

Date Collected: 04/05/17 00:00

Matrix: Water

Date Received: 04/06/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	84		2.0	0.46	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluoropentanoic acid (PFPeA)	89		2.0	0.98	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorohexanoic acid (PFHxA)	140		2.0	0.78	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluoroheptanoic acid (PFHpA)	52		2.0	0.80	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorooctanoic acid (PFOA)	97		2.0	0.74	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorononanoic acid (PFNA)	19		2.0	0.65	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorodecanoic acid (PFDA)	11		2.0	0.44	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluoroundecanoic acid (PFUnA)	3.7		2.0	0.74	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorododecanoic acid (PFDoA)	1.0	J	2.0	0.58	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	2.0	0.20	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.91	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorohexanesulfonic acid (PFHxS)	4.6		2.0	0.87	ng/L		04/13/17 15:13	04/19/17 19:12	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-WDUP

Lab Sample ID: 320-27269-5

Date Collected: 04/05/17 00:00

Matrix: Water

Date Received: 04/06/17 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	1.6	J	2.0	0.71	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorooctanesulfonic acid (PFOS)	150		2.0	1.3	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		04/13/17 15:13	04/19/17 19:12	1
Perfluorooctane Sulfonamide (FOSA)	2.4		2.0	0.63	ng/L		04/13/17 15:13	04/19/17 19:12	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	2	*	25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C4 PFBA	8	*	25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C2 PFHxA	45		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C4 PFOA	62		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C5 PFNA	66		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C2 PFDA	72		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C2 PFUnA	66		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C2 PFDoA	54		25 - 150				04/13/17 15:13	04/19/17 19:12	1
18O2 PFHxS	68		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C4 PFOS	68		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C4-PFHpA	53		25 - 150				04/13/17 15:13	04/19/17 19:12	1
13C5 PFPeA	25		25 - 150				04/13/17 15:13	04/19/17 19:12	1

Client Sample ID: AC-040517-FC

Lab Sample ID: 320-27269-6

Date Collected: 04/05/17 10:30

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 51.2

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.38	0.13	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluoropentanoic acid (PFPeA)	0.45		0.38	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorohexanoic acid (PFHxA)	1.2		0.38	0.14	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluoroheptanoic acid (PFHpA)	2.5		0.38	0.17	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorooctanoic acid (PFOA)	27		0.38	0.20	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorononanoic acid (PFNA)	13	F1	0.38	0.16	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorodecanoic acid (PFDA)	17		0.38	0.11	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluoroundecanoic acid (PFUnA)	5.7		0.38	0.20	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorododecanoic acid (PFDoA)	4.9		0.38	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorotridecanoic Acid (PFTriA)	3.5		0.38	0.18	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorotetradecanoic acid (PFTeA)	2.7		0.38	0.11	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.38	0.20	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorohexanesulfonic acid (PFHxS)	0.59		0.38	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.52		0.38	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorooctanesulfonic acid (PFOS)	57		0.38	0.24	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Perfluorodecanesulfonic acid (PFDS)	0.14	J	0.38	0.14	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-FC

Lab Sample ID: 320-27269-6

Date Collected: 04/05/17 10:30

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 51.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctane Sulfonamide (FOSA)	1.3		0.38	0.15	ug/Kg	☼	04/11/17 16:06	04/17/17 22:56	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	26		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C4 PFBA	44		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C2 PFHxA	69		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C4 PFOA	66		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C5 PFNA	57		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C2 PFDA	60		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C2 PFUnA	61		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C2 PFDoA	39		25 - 150				04/11/17 16:06	04/17/17 22:56	1
18O2 PFHxS	65		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C4 PFOS	54		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C4-PFHpA	62		25 - 150				04/11/17 16:06	04/17/17 22:56	1
13C5 PFPeA	56		25 - 150				04/11/17 16:06	04/17/17 22:56	1

Client Sample ID: AC-040517-YW

Lab Sample ID: 320-27269-7

Date Collected: 04/05/17 10:50

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 40.4

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.49	0.16	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluoropentanoic acid (PFPeA)	ND		0.49	0.32	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorohexanoic acid (PFHxA)	1.5		0.49	0.18	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluoroheptanoic acid (PFHpA)	ND		0.49	0.22	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorooctanoic acid (PFOA)	ND		0.49	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorononanoic acid (PFNA)	ND		0.49	0.21	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorodecanoic acid (PFDA)	ND		0.49	0.14	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluoroundecanoic acid (PFUnA)	ND		0.49	0.26	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorododecanoic acid (PFDoA)	ND		0.49	0.30	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorotridecanoic Acid (PFTriA)	1.2		0.49	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorotetradecanoic acid (PFTeA)	0.26	J	0.49	0.14	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.49	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.49	0.29	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.49	0.29	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.49	0.31	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.49	0.18	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Perfluorooctane Sulfonamide (FOSA)	ND		0.49	0.20	ug/Kg	☼	04/11/17 16:06	04/17/17 23:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	16	*	25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C4 PFBA	22	*	25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C2 PFHxA	65		25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C4 PFOA	73		25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C5 PFNA	76		25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C2 PFDA	64		25 - 150				04/11/17 16:06	04/17/17 23:19	1
13C2 PFUnA	54		25 - 150				04/11/17 16:06	04/17/17 23:19	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-YW

Lab Sample ID: 320-27269-7

Date Collected: 04/05/17 10:50

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 40.4

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	47		25 - 150	04/11/17 16:06	04/17/17 23:19	1
18O2 PFHxS	73		25 - 150	04/11/17 16:06	04/17/17 23:19	1
13C4 PFOS	70		25 - 150	04/11/17 16:06	04/17/17 23:19	1
13C4-PFHpA	68		25 - 150	04/11/17 16:06	04/17/17 23:19	1
13C5 PFPeA	50		25 - 150	04/11/17 16:06	04/17/17 23:19	1

Client Sample ID: AC-040517-WR1

Lab Sample ID: 320-27269-8

Date Collected: 04/05/17 11:05

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 33.9

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.59	0.19	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluoropentanoic acid (PFPeA)	ND		0.59	0.39	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorohexanoic acid (PFHxA)	2.1		0.59	0.21	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluoroheptanoic acid (PFHpA)	ND		0.59	0.26	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorooctanoic acid (PFOA)	1.3		0.59	0.30	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorononanoic acid (PFNA)	0.75		0.59	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorodecanoic acid (PFDA)	1.3		0.59	0.17	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluoroundecanoic acid (PFUnA)	1.4		0.59	0.31	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorododecanoic acid (PFDoA)	1.4		0.59	0.36	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorotridecanoic Acid (PFTriA)	0.76		0.59	0.27	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorotetradecanoic acid (PFTeA)	1.4		0.59	0.17	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.59	0.31	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.59	0.35	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.59	0.35	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorooctanesulfonic acid (PFOS)	5.2		0.59	0.37	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.59	0.21	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1
Perfluorooctane Sulfonamide (FOSA)	ND		0.59	0.24	ug/Kg	☼	04/11/17 16:06	04/17/17 23:26	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	29		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C4 PFBA	40		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C2 PFHxA	68		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C4 PFOA	83		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C5 PFNA	80		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C2 PFDA	79		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C2 PFUnA	82		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C2 PFDoA	66		25 - 150	04/11/17 16:06	04/17/17 23:26	1
18O2 PFHxS	78		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C4 PFOS	69		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C4-PFHpA	83		25 - 150	04/11/17 16:06	04/17/17 23:26	1
13C5 PFPeA	60		25 - 150	04/11/17 16:06	04/17/17 23:26	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-WR2

Lab Sample ID: 320-27269-9

Date Collected: 04/05/17 11:15

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 25.2

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.80	0.26	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluoropentanoic acid (PFPeA)	ND		0.80	0.52	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorohexanoic acid (PFHxA)	3.3		0.80	0.28	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluoroheptanoic acid (PFHpA)	1.2		0.80	0.35	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorooctanoic acid (PFOA)	3.5		0.80	0.41	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorononanoic acid (PFNA)	3.0		0.80	0.33	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorodecanoic acid (PFDA)	4.8		0.80	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluoroundecanoic acid (PFUnA)	4.5		0.80	0.42	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorododecanoic acid (PFDoA)	4.8		0.80	0.48	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorotridecanoic Acid (PFTriA)	3.0		0.80	0.37	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorotetradecanoic acid (PFTeA)	2.4		0.80	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.80	0.41	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.80	0.47	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.80	0.47	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.80	0.50	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.80	0.29	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Perfluorooctane Sulfonamide (FOSA)	ND		0.80	0.32	ug/Kg	☼	04/11/17 16:06	04/17/17 23:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	23	*	25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C4 PFBA	29		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C2 PFHxA	77		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C4 PFOA	87		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C5 PFNA	86		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C2 PFDA	77		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C2 PFUnA	77		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C2 PFDoA	54		25 - 150				04/11/17 16:06	04/17/17 23:34	1
18O2 PFHxS	85		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C4 PFOS	79		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C4-PFHxA	86		25 - 150				04/11/17 16:06	04/17/17 23:34	1
13C5 PFPeA	59		25 - 150				04/11/17 16:06	04/17/17 23:34	1

Client Sample ID: AC-040517-SDUP

Lab Sample ID: 320-27269-10

Date Collected: 04/05/17 00:00

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 46.9

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.43	0.14	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluoropentanoic acid (PFPeA)	0.56		0.43	0.28	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorohexanoic acid (PFHxA)	1.6		0.43	0.15	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluoroheptanoic acid (PFHpA)	3.7		0.43	0.19	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorooctanoic acid (PFOA)	31		0.43	0.22	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorononanoic acid (PFNA)	15		0.43	0.18	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorodecanoic acid (PFDA)	19		0.43	0.12	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluoroundecanoic acid (PFUnA)	6.5		0.43	0.23	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SDUP

Lab Sample ID: 320-27269-10

Date Collected: 04/05/17 00:00

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 46.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	6.2		0.43	0.26	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorotridecanoic Acid (PFTriA)	3.3		0.43	0.20	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorotetradecanoic acid (PFTeA)	3.0		0.43	0.12	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.43	0.22	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorohexanesulfonic acid (PFHxS)	0.81		0.43	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.58		0.43	0.25	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorooctanesulfonic acid (PFOS)	59		0.43	0.27	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.43	0.15	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1
Perfluorooctane Sulfonamide (FOSA)	1.4		0.43	0.17	ug/Kg	☼	04/11/17 16:06	04/17/17 23:41	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	34		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C4 PFBA	58		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C2 PFHxA	90		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C4 PFOA	93		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C5 PFNA	81		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C2 PFDA	81		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C2 PFUnA	86		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C2 PFDoA	64		25 - 150	04/11/17 16:06	04/17/17 23:41	1
18O2 PFHxS	94		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C4 PFOS	78		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C4-PFHpA	90		25 - 150	04/11/17 16:06	04/17/17 23:41	1
13C5 PFPeA	80		25 - 150	04/11/17 16:06	04/17/17 23:41	1

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Method: 537 (modified) - Perfluorinated Hydrocarbons

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		3C8 FOS/ (25-150)	3C4 PFB/ (25-150)	3C2 PFHx (25-150)	3C4 PFO/ (25-150)	3C5 PFN/ (25-150)	3C2 PFD/ (25-150)	3C2 PFUn (25-150)	3C2 PFDo (25-150)
320-27269-6	AC-040517-FC	26	44	69	66	57	60	61	39
320-27269-6 MS	AC-040517-FC	32	58	96	90	80	81	87	64
320-27269-6 MSD	AC-040517-FC	33	50	79	73	66	68	68	47
320-27269-7	AC-040517-YW	16 *	22 *	65	73	76	64	54	47
320-27269-8	AC-040517-WR1	29	40	68	83	80	79	82	66
320-27269-9	AC-040517-WR2	23 *	29	77	87	86	77	77	54
320-27269-10	AC-040517-SDUP	34	58	90	93	81	81	86	64
LCS 320-159159/2-A	Lab Control Sample	86	132	137	135	123	126	124	103
MB 320-159159/1-A	Method Blank	68	122	116	130	115	114	114	87

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)			
		3O2 PFHx (25-150)	3C4 PFO/ (25-150)	3C4-PFHp (25-150)	3C5 PFPe (25-150)
320-27269-6	AC-040517-FC	65	54	62	56
320-27269-6 MS	AC-040517-FC	88	77	86	79
320-27269-6 MSD	AC-040517-FC	76	64	71	66
320-27269-7	AC-040517-YW	73	70	68	50
320-27269-8	AC-040517-WR1	78	69	83	60
320-27269-9	AC-040517-WR2	85	79	86	59
320-27269-10	AC-040517-SDUP	94	78	90	80
LCS 320-159159/2-A	Lab Control Sample	125	112	147	123
MB 320-159159/1-A	Method Blank	115	105	136	114

Surrogate Legend

- 13C8 FOSA = 13C8 FOSA
- 13C4 PFBA = 13C4 PFBA
- 13C2 PFHxA = 13C2 PFHxA
- 13C4 PFOA = 13C4 PFOA
- 13C5 PFNA = 13C5 PFNA
- 13C2 PFDA = 13C2 PFDA
- 13C2 PFUnA = 13C2 PFUnA
- 13C2 PFDoA = 13C2 PFDoA
- 18O2 PFHxS = 18O2 PFHxS
- 13C4 PFOS = 13C4 PFOS
- 13C4-PFHpA = 13C4-PFHpA
- 13C5 PFPeA = 13C5 PFPeA

Method: 537 (modified) - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		3C8 FOS/ (25-150)	3C4 PFB/ (25-150)	3C2 PFHx (25-150)	3C4 PFO/ (25-150)	3C5 PFN/ (25-150)	3C2 PFD/ (25-150)	3C2 PFUn (25-150)	3C2 PFDo (25-150)
320-27269-1	AC-040517-SW	4 *	9 *	56	79	84	97	91	75
320-27269-1 MS	AC-040517-SW	3 *	8 *	47	63	70	75	73	60
320-27269-1 MSD	AC-040517-SW	4 *	9 *	56	76	82	99	97	76
320-27269-2 - DL	AC-040517-LW		5 *	54					
320-27269-2	AC-040517-LW	14 *	1 *	12 *	24 *	42	55	56	44
320-27269-3	AC-040517-SCH1	2 *	18 *	65	82	76	72	67	58
320-27269-4	AC-040517-SCH2	1 *	19 *	69	79	56	40	34	31

TestAmerica Sacramento

Isotope Dilution Summary

Client: New York State D.E.C.
 Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		3C8 FOS/ (25-150)	3C4 PFB/ (25-150)	3C2 PFHx (25-150)	3C4 PFO/ (25-150)	3C5 PFN/ (25-150)	3C2 PFD/ (25-150)	3C2 PFUn (25-150)	3C2 PFDo (25-150)
320-27269-5	AC-040517-WDUP	2 *	8 *	45	62	66	72	66	54
LCS 320-159520/2-A	Lab Control Sample	11 *	88	91	89	84	89	84	83
MB 320-159520/1-A	Method Blank	17 *	89	102	120	123	136	137	129

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)			
		3O2 PFHx (25-150)	3C4 PFO/ (25-150)	3C4-PFHp (25-150)	3C5 PFPe (25-150)
320-27269-1	AC-040517-SW	81	86	66	31
320-27269-1 MS	AC-040517-SW	72	71	58	30
320-27269-1 MSD	AC-040517-SW	85	87	70	32
320-27269-2 - DL	AC-040517-LW			88	26
320-27269-2	AC-040517-LW	51	62	25	6 *
320-27269-3	AC-040517-SCH1	97	113	83	46
320-27269-4	AC-040517-SCH2	98	102	85	52
320-27269-5	AC-040517-WDUP	68	68	53	25
LCS 320-159520/2-A	Lab Control Sample	86	80	94	92
MB 320-159520/1-A	Method Blank	99	104	124	88

Surrogate Legend

- 13C8 FOSA = 13C8 FOSA
- 13C4 PFBA = 13C4 PFBA
- 13C2 PFHxA = 13C2 PFHxA
- 13C4 PFOA = 13C4 PFOA
- 13C5 PFNA = 13C5 PFNA
- 13C2 PFDA = 13C2 PFDA
- 13C2 PFUnA = 13C2 PFUnA
- 13C2 PFDoA = 13C2 PFDoA
- 18O2 PFHxS = 18O2 PFHxS
- 13C4 PFOS = 13C4 PFOS
- 13C4-PFHpA = 13C4-PFHpA
- 13C5 PFPeA = 13C5 PFPeA

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Method: 537 (modified) - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-159159/1-A
Matrix: Solid
Analysis Batch: 160096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159159

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		0.20	0.065	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.13	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.071	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.088	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.10	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.083	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.057	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.11	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.12	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorotridecanoic Acid (PFTriA)	ND		0.20	0.092	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.058	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.10	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.12	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.20	0.12	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.13	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.072	ug/Kg		04/11/17 16:06	04/17/17 22:41	1
Perfluorooctane Sulfonamide (FOSA)	ND		0.20	0.080	ug/Kg		04/11/17 16:06	04/17/17 22:41	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 FOSA	68		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C4 PFBA	122		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C2 PFHxA	116		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C4 PFOA	130		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C5 PFNA	115		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C2 PFDA	114		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C2 PFUnA	114		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C2 PFDoA	87		25 - 150	04/11/17 16:06	04/17/17 22:41	1
18O2 PFHxS	115		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C4 PFOS	105		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C4-PFHpA	136		25 - 150	04/11/17 16:06	04/17/17 22:41	1
13C5 PFPeA	114		25 - 150	04/11/17 16:06	04/17/17 22:41	1

Lab Sample ID: LCS 320-159159/2-A
Matrix: Solid
Analysis Batch: 160096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159159

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Perfluorobutanoic acid (PFBA)	4.00	3.69		ug/Kg		92	23 - 191
Perfluoropentanoic acid (PFPeA)	4.00	3.81		ug/Kg		95	57 - 154
Perfluorohexanoic acid (PFHxA)	4.00	3.51		ug/Kg		88	62 - 152
Perfluoroheptanoic acid (PFHpA)	4.00	3.46		ug/Kg		86	69 - 148
Perfluorooctanoic acid (PFOA)	4.00	3.58		ug/Kg		90	54 - 144
Perfluorononanoic acid (PFNA)	4.00	3.31		ug/Kg		83	75 - 134
Perfluorodecanoic acid (PFDA)	4.00	3.50		ug/Kg		88	69 - 145
Perfluoroundecanoic acid (PFUnA)	4.00	3.44		ug/Kg		86	66 - 156
Perfluorododecanoic acid (PFDoA)	4.00	3.48		ug/Kg		87	62 - 152

TestAmerica Sacramento

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: LCS 320-159159/2-A
Matrix: Solid
Analysis Batch: 160096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159159
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorotridecanoic Acid (PFTriA)	4.00	2.99		ug/Kg		75	56 - 138
Perfluorotetradecanoic acid (PFTeA)	4.00	2.51		ug/Kg		63	38 - 143
Perfluorobutanesulfonic acid (PFBS)	3.54	3.12		ug/Kg		88	69 - 139
Perfluorohexanesulfonic acid (PFHxS)	3.64	3.06		ug/Kg		84	53 - 157
Perfluoroheptanesulfonic Acid (PFHpS)	3.81	4.03		ug/Kg		106	61 - 156
Perfluorooctanesulfonic acid (PFOS)	3.71	3.43		ug/Kg		92	47 - 154
Perfluorodecanesulfonic acid (PFDS)	3.86	3.03		ug/Kg		79	41 - 122
Perfluorooctane Sulfonamide (FOSA)	4.00	3.44		ug/Kg		86	65 - 144
		LCS %Recovery	LCS Qualifier				
Isotope Dilution				Limits			
13C8 FOSA	86			25 - 150			
13C4 PFBA	132			25 - 150			
13C2 PFHxA	137			25 - 150			
13C4 PFOA	135			25 - 150			
13C5 PFNA	123			25 - 150			
13C2 PFDA	126			25 - 150			
13C2 PFUnA	124			25 - 150			
13C2 PFDoA	103			25 - 150			
18O2 PFHxS	125			25 - 150			
13C4 PFOS	112			25 - 150			
13C4-PFHpA	147			25 - 150			
13C5 PFPeA	123			25 - 150			

Lab Sample ID: 320-27269-6 MS
Matrix: Solid
Analysis Batch: 160096

Client Sample ID: AC-040517-FC
Prep Type: Total/NA
Prep Batch: 159159
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	ND		7.79	8.22		ug/Kg	☼	106	23 - 191
Perfluoropentanoic acid (PFPeA)	0.45		7.79	7.64		ug/Kg	☼	92	57 - 154
Perfluorohexanoic acid (PFHxA)	1.2		7.79	8.47		ug/Kg	☼	93	62 - 152
Perfluoroheptanoic acid (PFHpA)	2.5		7.79	10.4		ug/Kg	☼	102	69 - 148
Perfluorooctanoic acid (PFOA)	27		7.79	33.2		ug/Kg	☼	86	54 - 144
Perfluorononanoic acid (PFNA)	13	F1	7.79	18.9	F1	ug/Kg	☼	73	75 - 134
Perfluorodecanoic acid (PFDA)	17		7.79	25.4		ug/Kg	☼	109	69 - 145
Perfluoroundecanoic acid (PFUnA)	5.7		7.79	12.1		ug/Kg	☼	81	66 - 156
Perfluorododecanoic acid (PFDoA)	4.9		7.79	11.9		ug/Kg	☼	90	62 - 152
Perfluorotridecanoic Acid (PFTriA)	3.5		7.79	9.89		ug/Kg	☼	82	56 - 138
Perfluorotetradecanoic acid (PFTeA)	2.7		7.79	9.98		ug/Kg	☼	93	38 - 143

TestAmerica Sacramento

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: 320-27269-6 MS

Matrix: Solid

Analysis Batch: 160096

Client Sample ID: AC-040517-FC

Prep Type: Total/NA

Prep Batch: 159159

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanesulfonic acid (PFBS)	ND		6.88	6.44		ug/Kg	☼	94	69 - 139
Perfluorohexanesulfonic acid (PFHxS)	0.59		7.09	6.41		ug/Kg	☼	82	53 - 157
Perfluoroheptanesulfonic Acid (PFHpS)	0.52		7.41	8.09		ug/Kg	☼	102	61 - 156
Perfluorooctanesulfonic acid (PFOS)	57		7.23	62.3	4	ug/Kg	☼	67	47 - 154
Perfluorodecanesulfonic acid (PFDS)	0.14	J	7.51	6.53		ug/Kg	☼	87	41 - 122
Perfluorooctane Sulfonamide (FOSA)	1.3		7.79	8.04		ug/Kg	☼	87	65 - 144

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C8 FOSA	32		25 - 150
13C4 PFBA	58		25 - 150
13C2 PFHxA	96		25 - 150
13C4 PFOA	90		25 - 150
13C5 PFNA	80		25 - 150
13C2 PFDA	81		25 - 150
13C2 PFUnA	87		25 - 150
13C2 PFDoA	64		25 - 150
18O2 PFHxS	88		25 - 150
13C4 PFOS	77		25 - 150
13C4-PFHpA	86		25 - 150
13C5 PFPeA	79		25 - 150

Lab Sample ID: 320-27269-6 MSD

Matrix: Solid

Analysis Batch: 160096

Client Sample ID: AC-040517-FC

Prep Type: Total/NA

Prep Batch: 159159

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	ND		7.70	7.99		ug/Kg	☼	104	23 - 191	3	30
Perfluoropentanoic acid (PFPeA)	0.45		7.70	7.66		ug/Kg	☼	94	57 - 154	0	30
Perfluorohexanoic acid (PFHxA)	1.2		7.70	8.40		ug/Kg	☼	93	62 - 152	1	30
Perfluoroheptanoic acid (PFHpA)	2.5		7.70	12.1		ug/Kg	☼	125	69 - 148	15	30
Perfluorooctanoic acid (PFOA)	27		7.70	34.4		ug/Kg	☼	102	54 - 144	3	30
Perfluorononanoic acid (PFNA)	13	F1	7.70	21.3		ug/Kg	☼	104	75 - 134	12	30
Perfluorodecanoic acid (PFDA)	17		7.70	26.3		ug/Kg	☼	122	69 - 145	4	30
Perfluoroundecanoic acid (PFUnA)	5.7		7.70	13.4		ug/Kg	☼	100	66 - 156	11	30
Perfluorododecanoic acid (PFDoA)	4.9		7.70	12.6		ug/Kg	☼	101	62 - 152	6	30
Perfluorotridecanoic Acid (PFTriA)	3.5		7.70	10.9		ug/Kg	☼	96	56 - 138	10	30
Perfluorotetradecanoic acid (PFTeA)	2.7		7.70	10.7		ug/Kg	☼	104	38 - 143	7	30
Perfluorobutanesulfonic acid (PFBS)	ND		6.80	6.51		ug/Kg	☼	96	69 - 139	1	30
Perfluorohexanesulfonic acid (PFHxS)	0.59		7.00	6.27		ug/Kg	☼	81	53 - 157	2	30

TestAmerica Sacramento

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: 320-27269-6 MSD

Matrix: Solid

Analysis Batch: 160096

Client Sample ID: AC-040517-FC

Prep Type: Total/NA

Prep Batch: 159159

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier							
Perfluoroheptanesulfonic Acid (PFHpS)	0.52		7.33	8.56		ug/Kg	☼	110		61 - 156	6	30
Perfluorooctanesulfonic acid (PFOS)	57		7.14	57.1	4	ug/Kg	☼	-4		47 - 154	9	30
Perfluorodecanesulfonic acid (PFDS)	0.14	J	7.42	6.57		ug/Kg	☼	89		41 - 122	1	30
Perfluorooctane Sulfonamide (FOSA)	1.3		7.70	8.23		ug/Kg	☼	90		65 - 144	2	30
Isotope Dilution		MSD	MSD									
		%Recovery	Qualifier	Limits								
13C8 FOSA		33		25 - 150								
13C4 PFBA		50		25 - 150								
13C2 PFHxA		79		25 - 150								
13C4 PFOA		73		25 - 150								
13C5 PFNA		66		25 - 150								
13C2 PFDA		68		25 - 150								
13C2 PFUnA		68		25 - 150								
13C2 PFDoA		47		25 - 150								
18O2 PFHxS		76		25 - 150								
13C4 PFOS		64		25 - 150								
13C4-PFHpA		71		25 - 150								
13C5 PFPeA		66		25 - 150								

Lab Sample ID: MB 320-159520/1-A

Matrix: Water

Analysis Batch: 159829

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 159520

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		2.0	0.46	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.99	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.79	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.80	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.75	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.65	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.44	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorotetradecanoic acid (PFTeA)	0.314	J	2.0	0.20	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.87	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.71	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	1.3	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		04/13/17 15:13	04/16/17 21:11	1
Perfluorooctane Sulfonamide (FOSA)	ND		2.0	0.64	ng/L		04/13/17 15:13	04/16/17 21:11	1
Isotope Dilution		MB					Prepared	Analyzed	Dil Fac
		%Recovery	Qualifier	Limits					
13C8 FOSA		17	*	25 - 150			04/13/17 15:13	04/16/17 21:11	1
13C4 PFBA		89		25 - 150			04/13/17 15:13	04/16/17 21:11	1

TestAmerica Sacramento

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: MB 320-159520/1-A
Matrix: Water
Analysis Batch: 159829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 159520

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFHxA	102		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C4 PFOA	120		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C5 PFNA	123		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C2 PFDA	136		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C2 PFUnA	137		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C2 PFDoA	129		25 - 150	04/13/17 15:13	04/16/17 21:11	1
18O2 PFHxS	99		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C4 PFOS	104		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C4-PFHpA	124		25 - 150	04/13/17 15:13	04/16/17 21:11	1
13C5 PFPeA	88		25 - 150	04/13/17 15:13	04/16/17 21:11	1

Lab Sample ID: LCS 320-159520/2-A
Matrix: Water
Analysis Batch: 160509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	46.1		ng/L		115	74 - 138
Perfluoropentanoic acid (PFPeA)	40.0	41.4		ng/L		104	69 - 134
Perfluorohexanoic acid (PFHxA)	40.0	42.9		ng/L		107	70 - 136
Perfluoroheptanoic acid (PFHpA)	40.0	44.2		ng/L		110	63 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.6		ng/L		99	63 - 141
Perfluorononanoic acid (PFNA)	40.0	35.9		ng/L		90	71 - 140
Perfluorodecanoic acid (PFDA)	40.0	41.1		ng/L		103	66 - 141
Perfluoroundecanoic acid (PFUnA)	40.0	39.4		ng/L		98	68 - 139
Perfluorododecanoic acid (PFDoA)	40.0	41.9		ng/L		105	71 - 139
Perfluorotridecanoic Acid (PFTriA)	40.0	46.4		ng/L		116	51 - 139
Perfluorotetradecanoic acid (PFTeA)	40.0	50.7		ng/L		127	47 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	39.4		ng/L		111	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.7		ng/L		98	58 - 138
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	43.9		ng/L		115	32 - 170
Perfluorooctanesulfonic acid (PFOS)	37.1	40.4		ng/L		109	47 - 162
Perfluorodecanesulfonic acid (PFDS)	38.6	43.0		ng/L		112	35 - 157
Perfluorooctane Sulfonamide (FOSA)	40.0	40.8		ng/L		102	59 - 163

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C8 FOSA	11	*	25 - 150
13C4 PFBA	88		25 - 150
13C2 PFHxA	91		25 - 150
13C4 PFOA	89		25 - 150
13C5 PFNA	84		25 - 150
13C2 PFDA	89		25 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: LCS 320-159520/2-A
Matrix: Water
Analysis Batch: 160509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 159520

<i>Isotope Dilution</i>	<i>LCS LCS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C2 PFUnA	84		25 - 150
13C2 PFDoA	83		25 - 150
18O2 PFHxS	86		25 - 150
13C4 PFOS	80		25 - 150
13C4-PFHpA	94		25 - 150
13C5 PFPeA	92		25 - 150

Lab Sample ID: 320-27269-1 MS
Matrix: Water
Analysis Batch: 160509

Client Sample ID: AC-040517-SW
Prep Type: Total/NA
Prep Batch: 159520

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS MS</i>		<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
				<i>Result</i>	<i>Qualifier</i>				
Perfluorobutanoic acid (PFBA)	90		39.1	128		ng/L		100	74 - 138
Perfluoropentanoic acid (PFPeA)	87	F1	39.1	103	F1	ng/L		42	69 - 134
Perfluorohexanoic acid (PFHxA)	130		39.1	162		ng/L		75	70 - 136
Perfluoroheptanoic acid (PFHpA)	47		39.1	79.2		ng/L		82	63 - 135
Perfluorooctanoic acid (PFOA)	87		39.1	125		ng/L		97	63 - 141
Perfluorononanoic acid (PFNA)	17		39.1	46.0		ng/L		74	71 - 140
Perfluorodecanoic acid (PFDA)	11		39.1	46.1		ng/L		89	66 - 141
Perfluoroundecanoic acid (PFUnA)	11		39.1	37.3		ng/L		68	68 - 139
Perfluorododecanoic acid (PFDoA)	1.6	J	39.1	34.7		ng/L		84	71 - 139
Perfluorotridecanoic Acid (PFTriA)	4.0	F1	39.1	23.2	F1	ng/L		49	51 - 139
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	39.1	24.8		ng/L		61	47 - 130
Perfluorobutanesulfonic acid (PFBS)	15		34.6	42.7		ng/L		81	55 - 147
Perfluorohexanesulfonic acid (PFHxS)	4.5		35.6	32.9		ng/L		80	58 - 138
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	J	37.2	35.2		ng/L		90	32 - 170
Perfluorooctanesulfonic acid (PFOS)	140		36.3	174		ng/L		80	47 - 162
Perfluorodecanesulfonic acid (PFDS)	ND		37.7	28.1		ng/L		75	35 - 157
Perfluorooctane Sulfonamide (FOSA)	1.6	J	39.1	33.0		ng/L		80	59 - 163

<i>Isotope Dilution</i>	<i>MS MS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C8 FOSA	3	*	25 - 150
13C4 PFBA	8	*	25 - 150
13C2 PFHxA	47		25 - 150
13C4 PFOA	63		25 - 150
13C5 PFNA	70		25 - 150
13C2 PFDA	75		25 - 150
13C2 PFUnA	73		25 - 150
13C2 PFDoA	60		25 - 150
18O2 PFHxS	72		25 - 150
13C4 PFOS	71		25 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

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

Lab Sample ID: 320-27269-1 MS

Matrix: Water

Analysis Batch: 160509

Client Sample ID: AC-040517-SW

Prep Type: Total/NA

Prep Batch: 159520

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
<i>13C4-PFHpA</i>	58		25 - 150
<i>13C5 PFPeA</i>	30		25 - 150

Lab Sample ID: 320-27269-1 MSD

Matrix: Water

Analysis Batch: 160509

Client Sample ID: AC-040517-SW

Prep Type: Total/NA

Prep Batch: 159520

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Perfluorobutanoic acid (PFBA)	90		39.4	124		ng/L		89	74 - 138	3	30
Perfluoropentanoic acid (PFPeA)	87	F1	39.4	115		ng/L		71	69 - 134	11	30
Perfluorohexanoic acid (PFHxA)	130		39.4	171		ng/L		96	70 - 136	5	30
Perfluoroheptanoic acid (PFHpA)	47		39.4	80.9		ng/L		86	63 - 135	2	30
Perfluorooctanoic acid (PFOA)	87		39.4	129		ng/L		106	63 - 141	3	30
Perfluorononanoic acid (PFNA)	17		39.4	52.5		ng/L		90	71 - 140	13	30
Perfluorodecanoic acid (PFDA)	11		39.4	46.2		ng/L		88	66 - 141	0	30
Perfluoroundecanoic acid (PFUnA)	11		39.4	38.0		ng/L		69	68 - 139	2	30
Perfluorododecanoic acid (PFDoA)	1.6	J	39.4	37.6		ng/L		91	71 - 139	8	30
Perfluorotridecanoic Acid (PFTriA)	4.0	F1	39.4	26.8		ng/L		58	51 - 139	14	30
Perfluorotetradecanoic acid (PFTeA)	0.94	J B	39.4	29.7		ng/L		73	47 - 130	18	30
Perfluorobutanesulfonic acid (PFBS)	15		34.8	50.6		ng/L		103	55 - 147	17	30
Perfluorohexanesulfonic acid (PFHxS)	4.5		35.9	37.7		ng/L		93	58 - 138	14	30
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	J	37.5	39.7		ng/L		101	32 - 170	12	30
Perfluorooctanesulfonic acid (PFOS)	140		36.6	171		ng/L		72	47 - 162	2	30
Perfluorodecanesulfonic acid (PFDS)	ND		38.0	34.5		ng/L		91	35 - 157	21	30
Perfluorooctane Sulfonamide (FOSA)	1.6	J	39.4	36.7		ng/L		89	59 - 163	11	30

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
<i>13C8 FOSA</i>	4	*	25 - 150
<i>13C4 PFBA</i>	9	*	25 - 150
<i>13C2 PFHxA</i>	56		25 - 150
<i>13C4 PFOA</i>	76		25 - 150
<i>13C5 PFNA</i>	82		25 - 150
<i>13C2 PFDA</i>	99		25 - 150
<i>13C2 PFUnA</i>	97		25 - 150
<i>13C2 PFDoA</i>	76		25 - 150
<i>18O2 PFHxS</i>	85		25 - 150
<i>13C4 PFOS</i>	87		25 - 150
<i>13C4-PFHpA</i>	70		25 - 150
<i>13C5 PFPeA</i>	32		25 - 150

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Qualifiers

LCMS

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

QC Association Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

LCMS

Prep Batch: 159159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-6	AC-040517-FC	Total/NA	Solid	SHAKE	
320-27269-7	AC-040517-YW	Total/NA	Solid	SHAKE	
320-27269-8	AC-040517-WR1	Total/NA	Solid	SHAKE	
320-27269-9	AC-040517-WR2	Total/NA	Solid	SHAKE	
320-27269-10	AC-040517-SDUP	Total/NA	Solid	SHAKE	
MB 320-159159/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-159159/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
320-27269-6 MS	AC-040517-FC	Total/NA	Solid	SHAKE	
320-27269-6 MSD	AC-040517-FC	Total/NA	Solid	SHAKE	

Prep Batch: 159520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-1	AC-040517-SW	Total/NA	Water	3535	
320-27269-2 - DL	AC-040517-LW	Total/NA	Water	3535	
320-27269-2	AC-040517-LW	Total/NA	Water	3535	
320-27269-3	AC-040517-SCH1	Total/NA	Water	3535	
320-27269-4	AC-040517-SCH2	Total/NA	Water	3535	
320-27269-5	AC-040517-WDUP	Total/NA	Water	3535	
MB 320-159520/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-159520/2-A	Lab Control Sample	Total/NA	Water	3535	
320-27269-1 MS	AC-040517-SW	Total/NA	Water	3535	
320-27269-1 MSD	AC-040517-SW	Total/NA	Water	3535	

Analysis Batch: 159829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-2 - DL	AC-040517-LW	Total/NA	Water	537 (modified)	159520
320-27269-3	AC-040517-SCH1	Total/NA	Water	537 (modified)	159520
MB 320-159520/1-A	Method Blank	Total/NA	Water	537 (modified)	159520

Analysis Batch: 160096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-6	AC-040517-FC	Total/NA	Solid	537 (modified)	159159
320-27269-7	AC-040517-YW	Total/NA	Solid	537 (modified)	159159
320-27269-8	AC-040517-WR1	Total/NA	Solid	537 (modified)	159159
320-27269-9	AC-040517-WR2	Total/NA	Solid	537 (modified)	159159
320-27269-10	AC-040517-SDUP	Total/NA	Solid	537 (modified)	159159
MB 320-159159/1-A	Method Blank	Total/NA	Solid	537 (modified)	159159
LCS 320-159159/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	159159
320-27269-6 MS	AC-040517-FC	Total/NA	Solid	537 (modified)	159159
320-27269-6 MSD	AC-040517-FC	Total/NA	Solid	537 (modified)	159159

Analysis Batch: 160509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-1	AC-040517-SW	Total/NA	Water	537 (modified)	159520
320-27269-2	AC-040517-LW	Total/NA	Water	537 (modified)	159520
320-27269-4	AC-040517-SCH2	Total/NA	Water	537 (modified)	159520
320-27269-5	AC-040517-WDUP	Total/NA	Water	537 (modified)	159520
LCS 320-159520/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	159520
320-27269-1 MS	AC-040517-SW	Total/NA	Water	537 (modified)	159520
320-27269-1 MSD	AC-040517-SW	Total/NA	Water	537 (modified)	159520

TestAmerica Sacramento

QC Association Summary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

General Chemistry

Analysis Batch: 159076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-27269-6	AC-040517-FC	Total/NA	Solid	D 2216	
320-27269-7	AC-040517-YW	Total/NA	Solid	D 2216	
320-27269-8	AC-040517-WR1	Total/NA	Solid	D 2216	
320-27269-9	AC-040517-WR2	Total/NA	Solid	D 2216	
320-27269-10	AC-040517-SDUP	Total/NA	Solid	D 2216	
320-27269-6 DU	AC-040517-FC	Total/NA	Solid	D 2216	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-SW

Date Collected: 04/05/17 11:40

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	160509	04/19/17 18:27	SBC	TAL SAC

Client Sample ID: AC-040517-LW

Date Collected: 04/05/17 11:50

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	DL		159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	159829	04/16/17 21:56	JRB	TAL SAC
Total/NA	Prep	3535			159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	160509	04/19/17 18:57	SBC	TAL SAC

Client Sample ID: AC-040517-SCH1

Date Collected: 04/05/17 12:50

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	159829	04/16/17 22:18	JRB	TAL SAC

Client Sample ID: AC-040517-SCH2

Date Collected: 04/05/17 13:25

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	160509	04/19/17 19:04	SBC	TAL SAC

Client Sample ID: AC-040517-WDUP

Date Collected: 04/05/17 00:00

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			159520	04/13/17 15:13	KMK	TAL SAC
Total/NA	Analysis	537 (modified)		1	160509	04/19/17 19:12	SBC	TAL SAC

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-FC

Date Collected: 04/05/17 10:30

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	159076	04/11/17 11:10	GSH	TAL SAC

Client Sample ID: AC-040517-FC

Date Collected: 04/05/17 10:30

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-6

Matrix: Solid

Percent Solids: 51.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			159159	04/11/17 16:06	NS1	TAL SAC
Total/NA	Analysis	537 (modified)		1	160096	04/17/17 22:56	SBC	TAL SAC

Client Sample ID: AC-040517-YW

Date Collected: 04/05/17 10:50

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	159076	04/11/17 11:10	GSH	TAL SAC

Client Sample ID: AC-040517-YW

Date Collected: 04/05/17 10:50

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-7

Matrix: Solid

Percent Solids: 40.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			159159	04/11/17 16:06	NS1	TAL SAC
Total/NA	Analysis	537 (modified)		1	160096	04/17/17 23:19	SBC	TAL SAC

Client Sample ID: AC-040517-WR1

Date Collected: 04/05/17 11:05

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	159076	04/11/17 11:10	GSH	TAL SAC

Client Sample ID: AC-040517-WR1

Date Collected: 04/05/17 11:05

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-8

Matrix: Solid

Percent Solids: 33.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			159159	04/11/17 16:06	NS1	TAL SAC
Total/NA	Analysis	537 (modified)		1	160096	04/17/17 23:26	SBC	TAL SAC

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Client Sample ID: AC-040517-WR2

Date Collected: 04/05/17 11:15

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	159076	04/11/17 11:10	GSH	TAL SAC

Client Sample ID: AC-040517-WR2

Date Collected: 04/05/17 11:15

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-9

Matrix: Solid

Percent Solids: 25.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			159159	04/11/17 16:06	NS1	TAL SAC
Total/NA	Analysis	537 (modified)		1	160096	04/17/17 23:34	SBC	TAL SAC

Client Sample ID: AC-040517-SDUP

Date Collected: 04/05/17 00:00

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1	159076	04/11/17 11:10	GSH	TAL SAC

Client Sample ID: AC-040517-SDUP

Date Collected: 04/05/17 00:00

Date Received: 04/06/17 09:50

Lab Sample ID: 320-27269-10

Matrix: Solid

Percent Solids: 46.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			159159	04/11/17 16:06	NS1	TAL SAC
Total/NA	Analysis	537 (modified)		1	160096	04/17/17 23:41	SBC	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

Client: New York State D.E.C.
 Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11666	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)
537 (modified)	SHAKE	Solid	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	SHAKE	Solid	Perfluorobutanoic acid (PFBA)
537 (modified)	SHAKE	Solid	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	SHAKE	Solid	Perfluorodecanoic acid (PFDA)
537 (modified)	SHAKE	Solid	Perfluorododecanoic acid (PFDoA)
537 (modified)	SHAKE	Solid	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	SHAKE	Solid	Perfluoroheptanoic acid (PFHpA)
537 (modified)	SHAKE	Solid	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	SHAKE	Solid	Perfluorohexanoic acid (PFHxA)
537 (modified)	SHAKE	Solid	Perfluorononanoic acid (PFNA)
537 (modified)	SHAKE	Solid	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	SHAKE	Solid	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	SHAKE	Solid	Perfluorooctanoic acid (PFOA)
537 (modified)	SHAKE	Solid	Perfluoropentanoic acid (PFPeA)
537 (modified)	SHAKE	Solid	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	SHAKE	Solid	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	SHAKE	Solid	Perfluoroundecanoic acid (PFUnA)
D 2216		Solid	Percent Moisture
D 2216		Solid	Percent Solids

USEPA UCMR	Federal	1	CA00044	11-06-18
------------	---------	---	---------	----------

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)

Accreditation/Certification Summary

Client: New York State D.E.C.
 Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27269-1

Laboratory: TestAmerica Sacramento (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
USEPA UCMR	Federal	1	CA00044	11-06-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)
537 (modified)	SHAKE	Solid	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	SHAKE	Solid	Perfluorobutanoic acid (PFBA)
537 (modified)	SHAKE	Solid	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	SHAKE	Solid	Perfluorodecanoic acid (PFDA)
537 (modified)	SHAKE	Solid	Perfluorododecanoic acid (PFDoA)
537 (modified)	SHAKE	Solid	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	SHAKE	Solid	Perfluoroheptanoic acid (PFHpA)
537 (modified)	SHAKE	Solid	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	SHAKE	Solid	Perfluorohexanoic acid (PFHxA)
537 (modified)	SHAKE	Solid	Perfluorononanoic acid (PFNA)
537 (modified)	SHAKE	Solid	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	SHAKE	Solid	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	SHAKE	Solid	Perfluorooctanoic acid (PFOA)
537 (modified)	SHAKE	Solid	Perfluoropentanoic acid (PFPeA)
537 (modified)	SHAKE	Solid	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	SHAKE	Solid	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	SHAKE	Solid	Perfluoroundecanoic acid (PFUnA)
D 2216		Solid	Percent Moisture
D 2216		Solid	Percent Solids

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

ANALYTICAL REPORT

Job Number: 320-27617-1

Job Description: Agri-Cycle #1611195 PIN H7001

Contract Number: C008010

For:

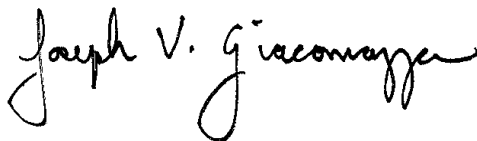
New York State D.E.C.

1115 Route 86

PO BOX 296

Ray Brook, NY 12977

Attention: Dale Becker



Approved for release.
Joe V Giacomazza
Project Management Assistant II
5/10/2017 1:48 PM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
05/10/2017

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Sacramento 880 Riverside Parkway, West Sacramento, CA 95605

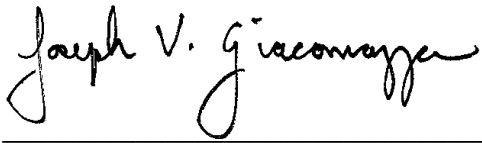
Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



Job Number: 320-27617-1

Job Description: Agri-Cycle #1611195 PIN H7001

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Joe V Giacomazza
Project Management Assistant II
5/10/2017 1:48 PM

Designee for
Judy L Stone

Table of Contents

Cover Title Page	1
Data Summaries	5
Definitions	5
Report Narrative	6
Sample Summary	8
Detection Summary	9
Method Summary	18
Client Sample Results	19
Isotope Dilution Summary	44
QC Sample Results	47
QC Association	54
Chronicle	58
Certification Summary	65
Organic Sample Data	67
LCMS	67
Method PFC IDA	67
Method PFC IDA QC Summary	68
Method PFC IDA Sample Data	84
Standards Data	574
Method PFC IDA ICAL Data	574
Method PFC IDA CCAL Data	642
Raw QC Data	783
Method PFC IDA Blank Data	783
Method PFC IDA LCS/LCSD Data	811
Method PFC IDA MS/MSD Data	832
Method PFC IDA Run Logs	863

Table of Contents

Method PFC IDA Prep Data	870
Inorganic Sample Data	896
General Chemistry Data	896
Gen Chem Cover Page	897
Gen Chem MDL	898
Gen Chem Analysis Run Log	900
Gen Chem Prep Data	902
Shipping and Receiving Documents	904
Client Chain of Custody	905
Sample Receipt Checklist	907

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

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.
B	Compound was found in the blank and sample.
*	Isotope Dilution analyte is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

**Job Narrative
320-27617-1**

Receipt

The samples were received on 4/21/2017 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 1.2° C.

Metals

Method(s) 1312: Insufficient samples were provided to perform the leaching procedure with the required 100g for the following samples: AC-041917-4N (320-27617-1), AC-041917-11A (320-27617-5), AC-041917-12 (320-27617-6) and AC-041917-DUP (320-27617-11). The volume of leaching fluid was adjusted proportionally to maintain a 20:1 ratio of leaching fluid to weight of sample. Reporting limits (RLs) are not affected.

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

LCMS

Method(s) 537 (modified): The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Perfluorononanoic acid (PFNA) inpreparation batch 320-161158 and analytical batch 320-162272 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 537 (modified): The matrix spike (MS) recovery for Perfluoroundecanoic acid (PFUnA) inpreparation batch 320-161158 and analytical batch 320-162272 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 537 (modified): The matrix spike duplicate (MSD) recovery for Perfluorodecanoic acid (PFDA)preparation batch 320-161158 and analytical batch 320-162272 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 537 (modified): The following samples were diluted to bring the concentration of target analytes within the calibration range: AC-041917-8 (320-27617-4), AC-041917-P1 (320-27617-12), AC-041917-P2 (320-27617-13) and AC-041917-P3 (320-27617-14). Elevated reporting limits (RLs) are provided.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit for 13C8 FOSA: AC-041917-4N (320-27617-1), AC-041917-7s (320-27617-2), AC-041917-7d (320-27617-3), AC-041917-8 (320-27617-4), AC-041917-11A (320-27617-5), AC-041917-12 (320-27617-6), AC-041917-12 (320-27617-6[MS]), AC-041917-12 (320-27617-6[MSD]), AC-041917-14s (320-27617-7), AC-041917-14d (320-27617-8), AC-041917-17 (320-27617-9), AC-041917-18 (320-27617-10), AC-041917-P1 (320-27617-12), AC-041917-P3 (320-27617-14) and AC-041917-P4 (320-27617-15). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit for 13C2 PFDoA: AC-041917-12 (320-27617-6[MSD]). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method(s) 537 (modified): The following samples have chromatographic interferences that could adversely impact the identification and quantitation of Perfluorooctanesulfonic acid (PFOS): AC-041917-7d (320-27617-3) and AC-041917-14d (320-27617-8). These interferences could cause false positive and/or false negative results.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit for 13C4 PFBA: AC-041917-7d (320-27617-3) and AC-041917-14d (320-27617-8). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. All detection limits are below the lower calibration.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following leachate blank (LB) is below the method recommended limit for 13C2 PFDA and 13C2 PFUnA: (LB 320-162326/1-B). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the LB. All detection limits are below the lower calibration.

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

General Chemistry

Method(s) Moisture: The RPD was not within acceptable limits; however, the sample has less than 10% moisture content. Per standard operating procedures, the RPD for the % solid was used for calculation as it meets the RPD criteria. Data is being reported.

AC-041917-17 (320-27617-9), AC-041917-18 (320-27617-10), AC-041917-DUP (320-27617-11), AC-041917-P1 (320-27617-12), AC-041917-P2 (320-27617-13), AC-041917-P3 (320-27617-14), AC-041917-P4 (320-27617-15), (320-27621-A-1) and (320-27621-A-1 DU)

No additional analytical or quality issues were noted, other than those described above or 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 320-162134, 320-162326 and 320-162700.

Method(s) 3535: The following samples are leachates, which came in a 500 mL poly bottle, therefore 250 mL was aliquotted out into another poly bottle for the extraction.

AC-041917-4N (320-27617-1), AC-041917-7s (320-27617-2), AC-041917-7d (320-27617-3), AC-041917-8 (320-27617-4), AC-041917-11A (320-27617-5), AC-041917-12 (320-27617-6), AC-041917-14s (320-27617-7), AC-041917-14d (320-27617-8), AC-041917-17 (320-27617-9), AC-041917-18 (320-27617-10), AC-041917-DUP (320-27617-11), AC-041917-P1 (320-27617-12), AC-041917-P2 (320-27617-13), AC-041917-P3 (320-27617-14) and AC-041917-P4 (320-27617-15)

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-4N

Lab Sample ID: 320-27617-1

Date Collected: 04/19/17 10:00

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 55.5

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.36	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluoropentanoic acid (PFPeA)	0.84		0.36	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorohexanoic acid (PFHxA)	1.4		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluoroheptanoic acid (PFHpA)	0.59		0.36	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorooctanoic acid (PFOA)	4.4		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorononanoic acid (PFNA)	2.1		0.36	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorodecanoic acid (PFDA)	3.1		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluoroundecanoic acid (PFUnA)	2.0		0.36	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorododecanoic acid (PFDoA)	2.3		0.36	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorotridecanoic Acid (PFTriA)	3.5		0.36	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorotetradecanoic acid (PFTeA)	2.9		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.59		0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.27	J	0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorooctanesulfonic acid (PFOS)	21		0.36	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 05:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	38		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C2 PFHxA	56		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C4 PFOA	84		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C5 PFNA	82		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C2 PFDA	80		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C2 PFUnA	86		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C2 PFDoA	52		25 - 150				04/25/17 07:47	05/02/17 05:37	1
18O2 PFHxS	79		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C4 PFOS	81		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C4-PFHpA	77		25 - 150				04/25/17 07:47	05/02/17 05:37	1
13C5 PFPeA	60		25 - 150				04/25/17 07:47	05/02/17 05:37	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.7		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluoropentanoic acid (PFPeA)	12		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorohexanoic acid (PFHxA)	8.7		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluoroheptanoic acid (PFHpA)	7.1		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorooctanoic acid (PFOA)	85		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorononanoic acid (PFNA)	23		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorodecanoic acid (PFDA)	4.0		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorotetradecanoic acid (PFTeA)	0.81	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:07	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-4N

Lab Sample ID: 320-27617-1

Date Collected: 04/19/17 10:00

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	4.3		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.6		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorooctanesulfonic acid (PFOS)	120		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	40		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C2 PFHxA	73		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C4 PFOA	90		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C5 PFNA	90		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C2 PFDA	100		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C2 PFUnA	104		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C2 PFDoA	91		25 - 150				05/04/17 10:08	05/06/17 18:07	1
18O2 PFHxS	91		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C4 PFOS	90		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C4-PFHpA	83		25 - 150				05/04/17 10:08	05/06/17 18:07	1
13C5 PFPeA	68		25 - 150				05/04/17 10:08	05/06/17 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	44.5		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	55.5		0.1	0.1	%			04/24/17 09:52	1

Client Sample ID: AC-041917-7s

Lab Sample ID: 320-27617-2

Date Collected: 04/19/17 13:55

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 46.4

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.42	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluoropentanoic acid (PFPeA)	0.46		0.42	0.28	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorohexanoic acid (PFHxA)	1.1		0.42	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluoroheptanoic acid (PFHpA)	0.83		0.42	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorooctanoic acid (PFOA)	6.5		0.42	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorononanoic acid (PFNA)	2.9		0.42	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorodecanoic acid (PFDA)	4.6		0.42	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluoroundecanoic acid (PFUnA)	2.6		0.42	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorododecanoic acid (PFDoA)	2.5		0.42	0.26	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorotridecanoic Acid (PFTriA)	2.9		0.42	0.20	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorotetradecanoic acid (PFTeA)	2.8		0.42	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.42	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.48		0.42	0.25	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.42	0.25	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-7s

Lab Sample ID: 320-27617-2

Date Collected: 04/19/17 13:55

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 46.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	21		0.42	0.27	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.42	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 05:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	46		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C2 PFHxA	52		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C4 PFOA	88		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C5 PFNA	83		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C2 PFDA	80		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C2 PFUnA	84		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C2 PFDoA	55		25 - 150				04/25/17 07:47	05/02/17 05:45	1
18O2 PFHxS	73		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C4 PFOS	78		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C4-PFHpA	84		25 - 150				04/25/17 07:47	05/02/17 05:45	1
13C5 PFPeA	72		25 - 150				04/25/17 07:47	05/02/17 05:45	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.9	J	2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluoropentanoic acid (PFPeA)	3.7		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorohexanoic acid (PFHxA)	7.3		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluoroheptanoic acid (PFHpA)	13		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorooctanoic acid (PFOA)	110		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorononanoic acid (PFNA)	30		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorodecanoic acid (PFDA)	12		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluoroundecanoic acid (PFUnA)	0.76	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorotetradecanoic acid (PFTeA)	0.69	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorohexanesulfonic acid (PFHxS)	5.1		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.3		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorooctanesulfonic acid (PFOS)	140		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	38		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C2 PFHxA	69		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C4 PFOA	84		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C5 PFNA	84		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C2 PFDA	94		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C2 PFUnA	108		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C2 PFDoA	92		25 - 150				05/04/17 10:08	05/06/17 18:14	1
18O2 PFHxS	88		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C4 PFOS	89		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C4-PFHpA	82		25 - 150				05/04/17 10:08	05/06/17 18:14	1
13C5 PFPeA	63		25 - 150				05/04/17 10:08	05/06/17 18:14	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

General Chemistry

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	53.6		0.1	0.1 %			04/24/17 09:52	1
Percent Solids	46.4		0.1	0.1 %			04/24/17 09:52	1

Client Sample ID: AC-041917-7d

Lab Sample ID: 320-27617-3

Date Collected: 04/19/17 14:10

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 43.5

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.46	0.15 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluoropentanoic acid (PFPeA)	5.1		0.46	0.30 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorohexanoic acid (PFHxA)	3.5		0.46	0.16 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluoroheptanoic acid (PFHpA)	1.5		0.46	0.20 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorooctanoic acid (PFOA)	6.8		0.46	0.23 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorononanoic acid (PFNA)	2.3		0.46	0.19 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorodecanoic acid (PFDA)	3.4		0.46	0.13 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluoroundecanoic acid (PFUnA)	2.4		0.46	0.24 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorododecanoic acid (PFDoA)	2.7		0.46	0.28 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorotridecanoic Acid (PFTriA)	2.3		0.46	0.21 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorotetradecanoic acid (PFTeA)	2.6		0.46	0.13 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.46	0.24 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorohexanesulfonic acid (PFHxS)	0.51		0.46	0.27 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.46	0.27 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorooctanesulfonic acid (PFOS)	19		0.46	0.29 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.46	0.17 ug/Kg	☼	04/25/17 07:47	05/02/17 05:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	35		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C2 PFHxA	51		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C4 PFOA	73		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C5 PFNA	74		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C2 PFDA	74		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C2 PFUnA	76		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C2 PFDoA	51		25 - 150	04/25/17 07:47	05/02/17 05:52	1
18O2 PFHxS	76		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C4 PFOS	75		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C4-PFHpA	76		25 - 150	04/25/17 07:47	05/02/17 05:52	1
13C5 PFPeA	57		25 - 150	04/25/17 07:47	05/02/17 05:52	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	16		2.0	0.46 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluoropentanoic acid (PFPeA)	42		2.0	0.99 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorohexanoic acid (PFHxA)	53		2.0	0.79 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluoroheptanoic acid (PFHpA)	25		2.0	0.80 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorooctanoic acid (PFOA)	84		2.0	0.75 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorononanoic acid (PFNA)	27		2.0	0.65 ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorodecanoic acid (PFDA)	8.1		2.0	0.44 ng/L		05/04/17 10:08	05/06/17 18:22	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-7d

Lab Sample ID: 320-27617-3

Date Collected: 04/19/17 14:10

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	0.95	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorododecanoic acid (PFDoA)	0.61	J	2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorotridecanoic Acid (PFTriA)	0.92	J	2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorotetradecanoic acid (PFTeA)	0.75	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorobutanesulfonic acid (PFBS)	2.7		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorohexanesulfonic acid (PFHxS)	4.7		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.7	J	2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorooctanesulfonic acid (PFOS)	350		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	15	*	25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C2 PFHxA	51		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C4 PFOA	50		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C5 PFNA	36		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C2 PFDA	69		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C2 PFUnA	74		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C2 PFDoA	73		25 - 150				05/04/17 10:08	05/06/17 18:22	1
18O2 PFHxS	72		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C4 PFOS	51		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C4-PFHpA	54		25 - 150				05/04/17 10:08	05/06/17 18:22	1
13C5 PFPeA	38		25 - 150				05/04/17 10:08	05/06/17 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	56.5		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	43.5		0.1	0.1	%			04/24/17 09:52	1

Client Sample ID: AC-041917-8

Lab Sample ID: 320-27617-4

Date Collected: 04/19/17 15:00

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 64.9

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.31	0.099	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluoropentanoic acid (PFPeA)	1.0		0.31	0.20	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorohexanoic acid (PFHxA)	1.6		0.31	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluoroheptanoic acid (PFHpA)	1.3		0.31	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorooctanoic acid (PFOA)	5.3		0.31	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorononanoic acid (PFNA)	6.5		0.31	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorodecanoic acid (PFDA)	13		0.31	0.087	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluoroundecanoic acid (PFUnA)	8.5		0.31	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorododecanoic acid (PFDoA)	6.6		0.31	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-8

Lab Sample ID: 320-27617-4

Date Collected: 04/19/17 15:00

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 64.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic Acid (PFTriA)	5.9		0.31	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorotetradecanoic acid (PFTeA)	3.6		0.31	0.089	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.31	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorohexanesulfonic acid (PFHxS)	0.52		0.31	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.78		0.31	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Perfluorodecanesulfonic acid (PFDS)	0.29	J	0.31	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 06:00	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	52		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C2 PFHxA	66		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C4 PFOA	88		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C5 PFNA	71		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C2 PFDA	80		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C2 PFUnA	81		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C2 PFDoA	46		25 - 150				04/25/17 07:47	05/02/17 06:00	1
18O2 PFHxS	85		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C4 PFOS	66		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C4-PFHpA	85		25 - 150				04/25/17 07:47	05/02/17 06:00	1
13C5 PFPeA	70		25 - 150				04/25/17 07:47	05/02/17 06:00	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	160		3.1	1.9	ug/Kg	☼	04/25/17 07:47	05/02/17 03:37	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFOS	91		25 - 150				04/25/17 07:47	05/02/17 03:37	10

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	11		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluoropentanoic acid (PFPeA)	17		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorohexanoic acid (PFHxA)	13		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluoroheptanoic acid (PFHpA)	20		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorooctanoic acid (PFOA)	82		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorononanoic acid (PFNA)	84		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorodecanoic acid (PFDA)	32		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluoroundecanoic acid (PFUnA)	1.3	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorotetradecanoic acid (PFTeA)	0.93	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	7.9		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:29	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-8

Lab Sample ID: 320-27617-4

Date Collected: 04/19/17 15:00

Matrix: Solid

Date Received: 04/21/17 09:50

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	45		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C2 PFHxA	73		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C4 PFOA	78		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C5 PFNA	55		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C2 PFDA	90		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C2 PFUnA	94		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C2 PFDoA	85		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹⁸ O2 PFHxS	88		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C4 PFOS	68		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C4-PFHpA	82		25 - 150	05/04/17 10:08	05/06/17 18:29	1
¹³ C5 PFPeA	69		25 - 150	05/04/17 10:08	05/06/17 18:29	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	1100		10	6.4	ng/L		05/04/17 10:08	05/08/17 12:19	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFOS	81		25 - 150	05/04/17 10:08	05/08/17 12:19	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	35.1		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	64.9		0.1	0.1	%			04/24/17 09:52	1

Client Sample ID: AC-041917-11A

Lab Sample ID: 320-27617-5

Date Collected: 04/19/17 14:30

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 54.2

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.37	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluoropentanoic acid (PFPeA)	2.6		0.37	0.24	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorohexanoic acid (PFHxA)	1.2		0.37	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluoroheptanoic acid (PFHpA)	3.0		0.37	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorooctanoic acid (PFOA)	24		0.37	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorononanoic acid (PFNA)	18		0.37	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorodecanoic acid (PFDA)	15		0.37	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluoroundecanoic acid (PFUnA)	5.2		0.37	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorododecanoic acid (PFDoA)	4.6		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorotridecanoic Acid (PFTriA)	2.7		0.37	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorotetradecanoic acid (PFTeA)	2.2		0.37	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.37	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.0		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorooctanesulfonic acid (PFOS)	62		0.37	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.37	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:07	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-11A

Lab Sample ID: 320-27617-5

Date Collected: 04/19/17 14:30

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 54.2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	44		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C2 PFHxA	70		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C4 PFOA	77		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C5 PFNA	73		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C2 PFDA	67		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C2 PFUnA	56		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C2 PFDoA	48		25 - 150	04/25/17 07:47	05/02/17 06:07	1
18O2 PFHxS	87		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C4 PFOS	71		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C4-PFHpA	75		25 - 150	04/25/17 07:47	05/02/17 06:07	1
13C5 PFPeA	67		25 - 150	04/25/17 07:47	05/02/17 06:07	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.6		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluoropentanoic acid (PFPeA)	15		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorohexanoic acid (PFHxA)	13		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluoroheptanoic acid (PFHpA)	39		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorooctanoic acid (PFOA)	310		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorononanoic acid (PFNA)	100		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorodecanoic acid (PFDA)	12		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorotetradecanoic acid (PFTeA)	0.75	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorohexanesulfonic acid (PFHxS)	17		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	5.7		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorooctanesulfonic acid (PFOS)	160		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:37	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	30		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C2 PFHxA	68		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C4 PFOA	82		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C5 PFNA	84		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C2 PFDA	96		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C2 PFUnA	100		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C2 PFDoA	84		25 - 150	05/04/17 10:08	05/06/17 18:37	1
18O2 PFHxS	84		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C4 PFOS	89		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C4-PFHpA	81		25 - 150	05/04/17 10:08	05/06/17 18:37	1
13C5 PFPeA	60		25 - 150	05/04/17 10:08	05/06/17 18:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	45.8		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	54.2		0.1	0.1	%			04/24/17 09:52	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-12

Lab Sample ID: 320-27617-6

Date Collected: 04/19/17 10:25

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 56.3

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.35	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluoropentanoic acid (PFPeA)	1.9		0.35	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorohexanoic acid (PFHxA)	2.3		0.35	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluoroheptanoic acid (PFHpA)	2.2		0.35	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorooctanoic acid (PFOA)	9.8		0.35	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorononanoic acid (PFNA)	17	F1	0.35	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorodecanoic acid (PFDA)	13	F1	0.35	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluoroundecanoic acid (PFUnA)	7.3	F1	0.35	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorododecanoic acid (PFDoA)	4.9		0.35	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorotridecanoic Acid (PFTriA)	3.9		0.35	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorotetradecanoic acid (PFTeA)	3.6		0.35	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorobutanesulfonic acid (PFBS)	1.2		0.35	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorohexanesulfonic acid (PFHxS)	1.3		0.35	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.7		0.35	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorooctanesulfonic acid (PFOS)	41		0.35	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Perfluorodecanesulfonic acid (PFDS)	0.81		0.35	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	38		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C2 PFHxA	69		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C4 PFOA	92		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C5 PFNA	83		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C2 PFDA	82		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C2 PFUnA	80		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C2 PFDoA	53		25 - 150				04/25/17 07:47	05/02/17 06:15	1
18O2 PFHxS	88		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C4 PFOS	80		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C4-PFHpA	90		25 - 150				04/25/17 07:47	05/02/17 06:15	1
13C5 PFPeA	70		25 - 150				04/25/17 07:47	05/02/17 06:15	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.9		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluoropentanoic acid (PFPeA)	13		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorohexanoic acid (PFHxA)	7.8		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluoroheptanoic acid (PFHpA)	15		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorooctanoic acid (PFOA)	130		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorononanoic acid (PFNA)	160		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorodecanoic acid (PFDA)	21		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluoroundecanoic acid (PFUnA)	1.5	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:44	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-12

Lab Sample ID: 320-27617-6

Date Collected: 04/19/17 10:25

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	1.0	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	5.4		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorooctanesulfonic acid (PFOS)	240		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	44		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C2 PFHxA	70		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C4 PFOA	79		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C5 PFNA	73		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C2 PFDA	90		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C2 PFUnA	91		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C2 PFDoA	76		25 - 150				05/04/17 10:08	05/06/17 18:44	1
18O2 PFHxS	84		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C4 PFOS	79		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C4-PFHpA	80		25 - 150				05/04/17 10:08	05/06/17 18:44	1
13C5 PFPeA	71		25 - 150				05/04/17 10:08	05/06/17 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	43.7		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	56.3		0.1	0.1	%			04/24/17 09:52	1

Client Sample ID: AC-041917-14s

Lab Sample ID: 320-27617-7

Date Collected: 04/19/17 10:50

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 55.8

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.36	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluoropentanoic acid (PFPeA)	1.2		0.36	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorohexanoic acid (PFHxA)	1.6		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluoroheptanoic acid (PFHpA)	1.0		0.36	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorooctanoic acid (PFOA)	5.8		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorononanoic acid (PFNA)	1.5		0.36	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorodecanoic acid (PFDA)	2.7		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluoroundecanoic acid (PFUnA)	1.4		0.36	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorododecanoic acid (PFDoA)	1.7		0.36	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorotridecanoic Acid (PFTriA)	2.0		0.36	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorotetradecanoic acid (PFTeA)	2.1		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.76		0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-14s

Lab Sample ID: 320-27617-7

Date Collected: 04/19/17 10:50

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 55.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	0.26	J	0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorooctanesulfonic acid (PFOS)	21		0.36	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 06:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	43		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C2 PFHxA	61		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C4 PFOA	84		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C5 PFNA	85		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C2 PFDA	80		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C2 PFUnA	82		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C2 PFDoA	52		25 - 150				04/25/17 07:47	05/02/17 06:37	1
18O2 PFHxS	77		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C4 PFOS	79		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C4-PFHpA	73		25 - 150				04/25/17 07:47	05/02/17 06:37	1
13C5 PFPeA	64		25 - 150				04/25/17 07:47	05/02/17 06:37	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.8		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluoropentanoic acid (PFPeA)	21		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorohexanoic acid (PFHxA)	18		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluoroheptanoic acid (PFHpA)	15		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorooctanoic acid (PFOA)	110		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorononanoic acid (PFNA)	16		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorodecanoic acid (PFDA)	4.3		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorotetradecanoic acid (PFTeA)	1.2	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorohexanesulfonic acid (PFHxS)	8.3		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	3.3		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorooctanesulfonic acid (PFOS)	110		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 18:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 18:59	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	36		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C2 PFHxA	64		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C4 PFOA	74		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C5 PFNA	73		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C2 PFDA	79		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C2 PFUnA	87		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C2 PFDoA	73		25 - 150				05/04/17 10:08	05/06/17 18:59	1
18O2 PFHxS	82		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C4 PFOS	80		25 - 150				05/04/17 10:08	05/06/17 18:59	1
13C4-PFHpA	75		25 - 150				05/04/17 10:08	05/06/17 18:59	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-14s

Lab Sample ID: 320-27617-7

Date Collected: 04/19/17 10:50

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C5 PFPeA	62		25 - 150	05/04/17 10:08	05/06/17 18:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	44.2		0.1	0.1 %			04/24/17 09:52	1
Percent Solids	55.8		0.1	0.1 %			04/24/17 09:52	1

Client Sample ID: AC-041917-14d

Lab Sample ID: 320-27617-8

Date Collected: 04/19/17 11:10

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 41.8

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.48	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluoropentanoic acid (PFPeA)	5.2		0.48	0.31	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorohexanoic acid (PFHxA)	2.4		0.48	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluoroheptanoic acid (PFHpA)	0.75		0.48	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorooctanoic acid (PFOA)	1.4		0.48	0.24	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorononanoic acid (PFNA)	0.80		0.48	0.20	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorodecanoic acid (PFDA)	1.4		0.48	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluoroundecanoic acid (PFUnA)	1.1		0.48	0.25	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorododecanoic acid (PFDoA)	1.4		0.48	0.29	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorotridecanoic Acid (PFTriA)	1.2		0.48	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorotetradecanoic acid (PFTeA)	1.2		0.48	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.48	0.25	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.42	J	0.48	0.28	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.48	0.28	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorooctanesulfonic acid (PFOS)	8.9		0.48	0.30	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.48	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 06:45	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	25		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C2 PFHxA	45		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C4 PFOA	67		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C5 PFNA	65		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C2 PFDA	60		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C2 PFUnA	65		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C2 PFDoA	38		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹⁸ O2 PFHxS	60		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C4 PFOS	63		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C4-PFHpA	60		25 - 150	04/25/17 07:47	05/02/17 06:45	1
¹³ C5 PFPeA	46		25 - 150	04/25/17 07:47	05/02/17 06:45	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	54		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 19:07	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-14d

Lab Sample ID: 320-27617-8

Date Collected: 04/19/17 11:10

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	21		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorohexanoic acid (PFHxA)	38		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluoroheptanoic acid (PFHpA)	9.7		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorooctanoic acid (PFOA)	29		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorononanoic acid (PFNA)	9.0		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorodecanoic acid (PFDA)	3.7		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorotetradecanoic acid (PFTeA)	0.41	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorobutanesulfonic acid (PFBS)	2.9		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorohexanesulfonic acid (PFHxS)	4.5		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	J	2.0	0.71	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorooctanesulfonic acid (PFOS)	160		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 19:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 19:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	10	*	25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C2 PFHxA	43		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C4 PFOA	48		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C5 PFNA	46		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C2 PFDA	74		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C2 PFUnA	77		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C2 PFDoA	68		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹⁸ O2 PFHxS	73		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C4 PFOS	72		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C4-PFHpA	58		25 - 150				05/04/17 10:08	05/06/17 19:07	1
¹³ C5 PFPeA	32		25 - 150				05/04/17 10:08	05/06/17 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	58.2		0.1	0.1	%			04/24/17 09:52	1
Percent Solids	41.8		0.1	0.1	%			04/24/17 09:52	1

Client Sample ID: AC-041917-17

Lab Sample ID: 320-27617-9

Date Collected: 04/19/17 11:40

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 53.7

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.37	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluoropentanoic acid (PFPeA)	2.2		0.37	0.24	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorohexanoic acid (PFHxA)	2.6		0.37	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluoroheptanoic acid (PFHpA)	2.6		0.37	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorooctanoic acid (PFOA)	15		0.37	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorononanoic acid (PFNA)	8.0		0.37	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorodecanoic acid (PFDA)	7.3		0.37	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-17

Lab Sample ID: 320-27617-9

Date Collected: 04/19/17 11:40

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 53.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	4.2		0.37	0.20	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorododecanoic acid (PFDoA)	3.4		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorotridecanoic Acid (PFTriA)	2.3		0.37	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorotetradecanoic acid (PFTeA)	3.6		0.37	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.37	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorohexanesulfonic acid (PFHxS)	0.84		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.41		0.37	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorooctanesulfonic acid (PFOS)	36		0.37	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.37	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 07:00	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	40		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C2 PFHxA	57		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C4 PFOA	78		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C5 PFNA	81		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C2 PFDA	80		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C2 PFUnA	82		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C2 PFDoA	55		25 - 150	04/25/17 07:47	05/02/17 07:00	1
18O2 PFHxS	75		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C4 PFOS	75		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C4-PFHpA	77		25 - 150	04/25/17 07:47	05/02/17 07:00	1
13C5 PFPeA	60		25 - 150	04/25/17 07:47	05/02/17 07:00	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.7		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluoropentanoic acid (PFPeA)	34		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorohexanoic acid (PFHxA)	33		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluoroheptanoic acid (PFHpA)	46		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorooctanoic acid (PFOA)	240		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorononanoic acid (PFNA)	110		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorodecanoic acid (PFDA)	31		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluoroundecanoic acid (PFUnA)	1.7	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorotetradecanoic acid (PFTeA)	0.50	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorobutanesulfonic acid (PFBS)	1.4	J	2.0	0.92	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorohexanesulfonic acid (PFHxS)	8.0		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	5.5		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorooctanesulfonic acid (PFOS)	250		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 19:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 19:14	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	34		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C2 PFHxA	64		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C4 PFOA	73		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C5 PFNA	70		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C2 PFDA	87		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C2 PFUnA	95		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C2 PFDoA	86		25 - 150	05/04/17 10:08	05/06/17 19:14	1
18O2 PFHxS	86		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C4 PFOS	82		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C4-PFHpA	77		25 - 150	05/04/17 10:08	05/06/17 19:14	1
13C5 PFPeA	60		25 - 150	05/04/17 10:08	05/06/17 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	46.3		0.1	0.1 %			04/24/17 13:58	1
Percent Solids	53.7		0.1	0.1 %			04/24/17 13:58	1

Client Sample ID: AC-041917-18

Date Collected: 04/19/17 13:30

Date Received: 04/21/17 09:50

Lab Sample ID: 320-27617-10

Matrix: Solid

Percent Solids: 74.6

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.26	0.085	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluoropentanoic acid (PFPeA)	ND		0.26	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorohexanoic acid (PFHxA)	0.44		0.26	0.093	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluoroheptanoic acid (PFHpA)	ND		0.26	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorooctanoic acid (PFOA)	0.24	J	0.26	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorononanoic acid (PFNA)	0.20	J	0.26	0.11	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorodecanoic acid (PFDA)	0.43		0.26	0.075	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluoroundecanoic acid (PFUnA)	0.44		0.26	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorododecanoic acid (PFDoA)	0.46		0.26	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorotridecanoic Acid (PFTriA)	0.59		0.26	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorotetradecanoic acid (PFTeA)	0.57		0.26	0.076	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.26	0.14	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.26	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.26	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorooctanesulfonic acid (PFOS)	0.86		0.26	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.26	0.095	ug/Kg	☼	04/25/17 07:47	05/02/17 07:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	67		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C2 PFHxA	73		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C4 PFOA	110		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C5 PFNA	94		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C2 PFDA	68		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C2 PFUnA	57		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C2 PFDoA	36		25 - 150	04/25/17 07:47	05/02/17 07:07	1
18O2 PFHxS	90		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C4 PFOS	62		25 - 150	04/25/17 07:47	05/02/17 07:07	1
13C4-PFHpA	101		25 - 150	04/25/17 07:47	05/02/17 07:07	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-18

Lab Sample ID: 320-27617-10

Date Collected: 04/19/17 13:30

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 74.6

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C5 PFPeA	91		25 - 150	04/25/17 07:47	05/02/17 07:07	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.4	J	2.0	0.46	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluoropentanoic acid (PFPeA)	1.7	J	2.0	0.99	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorohexanoic acid (PFHxA)	2.3		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorooctanoic acid (PFOA)	1.9	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorononanoic acid (PFNA)	1.6	J	2.0	0.65	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorodecanoic acid (PFDA)	0.95	J	2.0	0.44	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorotetradecanoic acid (PFTeA)	0.85	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorooctanesulfonic acid (PFOS)	13		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 19:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 19:22	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
¹³ C4 PFBA	50		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C2 PFHxA	82		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C4 PFOA	97		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C5 PFNA	99		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C2 PFDA	105		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C2 PFUnA	101		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C2 PFDoA	86		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹⁸ O2 PFHxS	89		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C4 PFOS	88		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C4-PFHpA	93		25 - 150	05/04/17 10:08	05/06/17 19:22	1
¹³ C5 PFPeA	84		25 - 150	05/04/17 10:08	05/06/17 19:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.4		0.1	0.1	%			04/24/17 13:58	1
Percent Solids	74.6		0.1	0.1	%			04/24/17 13:58	1

Client Sample ID: AC-041917-DUP

Lab Sample ID: 320-27617-11

Date Collected: 04/19/17 00:00

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 55.6

Method: 537 (modified) - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.36	0.12	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluoropentanoic acid (PFPeA)	0.81		0.36	0.24	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorohexanoic acid (PFHxA)	1.2		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluoroheptanoic acid (PFHpA)	1.3		0.36	0.16	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-DUP

Lab Sample ID: 320-27617-11

Date Collected: 04/19/17 00:00

Matrix: Solid

Date Received: 04/21/17 09:50

Percent Solids: 55.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	9.5		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorononanoic acid (PFNA)	14		0.36	0.15	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorodecanoic acid (PFDA)	11		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluoroundecanoic acid (PFUnA)	6.9		0.36	0.19	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorododecanoic acid (PFDoA)	4.1		0.36	0.22	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorotridecanoic Acid (PFTriA)	3.5		0.36	0.17	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorotetradecanoic acid (PFTeA)	2.7		0.36	0.10	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.36	0.18	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorohexanesulfonic acid (PFHxS)	0.47		0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.38		0.36	0.21	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorooctanesulfonic acid (PFOS)	37		0.36	0.23	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.36	0.13	ug/Kg	☼	04/25/17 07:47	05/02/17 07:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	42		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C2 PFHxA	62		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C4 PFOA	82		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C5 PFNA	79		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C2 PFDA	70		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C2 PFUnA	73		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C2 PFDoA	45		25 - 150	04/25/17 07:47	05/02/17 07:15	1
18O2 PFHxS	75		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C4 PFOS	70		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C4-PFHpA	77		25 - 150	04/25/17 07:47	05/02/17 07:15	1
13C5 PFPeA	65		25 - 150	04/25/17 07:47	05/02/17 07:15	1

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.5		2.0	0.46	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluoropentanoic acid (PFPeA)	12		2.0	0.99	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorohexanoic acid (PFHxA)	8.4		2.0	0.79	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluoroheptanoic acid (PFHpA)	18		2.0	0.80	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorooctanoic acid (PFOA)	160		2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorononanoic acid (PFNA)	150		2.0	0.65	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorodecanoic acid (PFDA)	16		2.0	0.44	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluoroundecanoic acid (PFUnA)	0.95	J	2.0	0.75	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.58	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorotridecanoic Acid (PFTriA)	ND		2.0	0.55	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorotetradecanoic acid (PFTeA)	0.57	J B	2.0	0.20	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.92	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorohexanesulfonic acid (PFHxS)	3.1		2.0	0.87	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	5.0		2.0	0.71	ng/L		05/04/17 10:08	05/06/17 19:29	1

TestAmerica Sacramento

Client Sample Results

Client: New York State D.E.C.
Project/Site: Agri-Cycle #1611195 PIN H7001

TestAmerica Job ID: 320-27617-1

Client Sample ID: AC-041917-DUP

Lab Sample ID: 320-27617-11

Date Collected: 04/19/17 00:00

Matrix: Solid

Date Received: 04/21/17 09:50

Method: 537 (modified) - Perfluorinated Hydrocarbons - SPLP East (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	190		2.0	1.3	ng/L		05/04/17 10:08	05/06/17 19:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	1.2	ng/L		05/04/17 10:08	05/06/17 19:29	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>13C4 PFBA</i>	<i>39</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C2 PFHxA</i>	<i>63</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C4 PFOA</i>	<i>68</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C5 PFNA</i>	<i>64</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C2 PFDA</i>	<i>83</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C2 PFDnA</i>	<i>85</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C2 PFDoA</i>	<i>75</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>18O2 PFHxS</i>	<i>76</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C4 PFOS</i>	<i>76</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C4-PFHpA</i>	<i>71</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>
<i>13C5 PFPeA</i>	<i>63</i>		<i>25 - 150</i>				<i>05/04/17 10:08</i>	<i>05/06/17 19:29</i>	<i>1</i>

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	44.4		0.1	0.1	%			04/24/17 13:58	1
Percent Solids	55.6		0.1	0.1	%			04/24/17 13:58	1



[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]