TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-765-1

Job Description: PFC Analysis

For:
Dalton Utilities
1200 V.D. Parrott Jr. Parkway
Dalton, GA 30721

Attention: Ms. Dena Haverland

Approved for release.
Michelle Johnston
Project Manager I
4/2/2010 3:33 PM

Michelle Johnston
Project Manager I
michelle.johnston@testamericainc.com
04/02/2010
Revision: 1

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Table of Contents

Cover Title Page 1

Data Summaries 4

- Report Narrative 4
- Sample Summary 5
- Executive Summary 6
- Method Summary 9
- Method / Analyst Summary 10
- Data Qualifiers 11
- Sample Datasheets 12
- Surrogate Summary 24
- QC Data Summary 26
- QC Association Summary 31
- Manual Integration Summary 32
- Lab Chronicle 40

Organic Sample Data 42

- LCMS 42
  - Method PFC 42
    - Method PFC Sample Data 43
    - Standards Data 97
      - Method PFC ICAL Data 97
      - Method PFC CCAL Data 155
    - Raw QC Data 197
      - Method PFC Blank Data 197
      - Method PFC LCS/LCSD Data 216
      - Method PFC MS/MSD Data 223
    - Run Logs 239

Table of Contents

Method PFC Prep Data 242

Inorganic Sample Data 243

General Chemistry Data 243

Gen Chem Raw Data 244

Gen Chem Prep Data 245

Shipping and Receiving Documents 248

Client Chain of Custody 249

Sample Receipt Checklist 250

CASE NARRATIVE
Client: Dalton Utilities
Project: PFC Analysis
Report Number: 280-765-1

TestAmerica Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the methods summary page in accordance with the methods indicated. Dilution factors and footnotes are provided on each datasheet to assist in the interpretation of the results.

The results relate only to the samples in this report and meet all requirements of NELAC. All data have been reviewed for compliance with the laboratory QA/QC plan and have found to be compliant with laboratory protocols with any exceptions noted below.

Please note that Non-Detect (ND) results have been evaluated down to the Method Detection Limit (MDL) and should be considered ND at the MDL. Unless otherwise noted, results for solids have been dry weight corrected.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Receipt
The following report contains the analytical results for six samples received at TestAmerica Denver on February 20, 2010, according to documented sample acceptance procedures. The samples were received in good condition at a temperature of 3.6°C. No anomalies were encountered during sample receipt.

PERCENT SOLIDS
Samples AB5-12 month (280-765-1), AB13-6 month (280-765-2), AA2-18 month (280-765-3), AB5-12 month (280-765-4), AB13-6 month (280-765-5) and AA2-18 month (280-765-6) were analyzed for percent solids in accordance with ASTM D2974-87 Modified. The samples were analyzed on 02/23/2010.

No difficulties were encountered during the % solids analyses.

All quality control parameters were within the acceptance limits.

PFC
Samples AB5-12 month (280-765-1), AB13-6 month (280-765-2), AA2-18 month (280-765-3), AB5-12 month (280-765-4), AB13-6 month (280-765-5) and AA2-18 month (280-765-6) were analyzed for PFC in accordance with SOP DV-LC-0012. The samples were prepared on 02/24/2010 and analyzed on 02/27/2010 and 03/01/2010.

Perfluorobutane Sulfonate (PFBS), Perfluorooctanoic acid (PFOA) and Perfluoroundecanoic acid (PFUnA) failed the recovery criteria low for the MS of sample AB5-12 monthMS (280-765-1) in batch 280-5477. Perfluorodecanoic acid (PFDA) failed the recovery criteria high. The presence of the '4' qualifier in the report indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Perfluorodecanoic acid (PFDA), Perfluorooctanoic acid (PFOA) and Perfluoroundecanoic acid (PFUnA) failed the recovery criteria low for the MSD of sample AB5-12 monthMSD (280-765-1) in batch 280-5477. Perfluorobutane Sulfonate (PFBS) failed the recovery criteria high. The presence of the '4' qualifier in the report indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Due to high concentrations of target analytes, samples AB5-12 month (280-765-1), AB13-6 month (280-765-2), AA2-18 month (280-765-3), AB5-12 month (280-765-4), AB13-6 month (280-765-5) and AA2-18 month (280-765-6) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the PFC analyses.

All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Dalton Utilities

Job Number: 280-765-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-765-1	AB5-12 month	Solid	02/17/2010 1028	02/20/2010 0900
280-765-2	AB13-6 month	Solid	02/17/2010 1045	02/20/2010 0900
280-765-3	AA2-18 month	Solid	02/17/2010 1100	02/20/2010 0900
280-765-4	AB5-12 month	Solid	02/17/2010 1028	02/20/2010 0900
280-765-5	AB13-6 month	Solid	02/17/2010 1045	02/20/2010 0900
280-765-6	AA2-18 month	Solid	02/17/2010 1100	02/20/2010 0900

EXECUTIVE SUMMARY - Detections

Client: Dalton Utilities

Job Number: 280-765-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
280-765-1	**AB5-12 MONTH**					
Perfluorobutane Sulfonate		560		49	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		70		49	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		1800		49	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		300		120	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		240		49	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		170		49	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		360		49	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		260		120	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		1800		120	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		220		49	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		90		49	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		51	J	120	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		300		120	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		1100		120	ug/Kg	DV-LC-0012
Percent Moisture		59		0.10	%	D-2216
280-765-2	**AB13-6 MONTH**					
Perfluorobutane Sulfonate		1100		56	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		120		56	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		2500		56	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		440		140	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		340		56	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		260		56	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		570		56	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		280		140	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		2600		140	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		330		56	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		140		56	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		77	J	140	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		450		140	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		1400		140	ug/Kg	DV-LC-0012
Percent Moisture		64		0.10	%	D-2216

EXECUTIVE SUMMARY - Detections

Client: Dalton Utilities

Job Number: 280-765-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
280-765-3	**AA2-18 MONTH**					
Perfluorobutane Sulfonate		750		100	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		110		100	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		2500		100	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		620		250	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		310		100	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		230		100	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		580		100	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		710		250	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		2000		250	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		550		100	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		170		100	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		99	J	250	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		380		250	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		1100		250	ug/Kg	DV-LC-0012
Percent Moisture		61		0.10	%	D-2216
280-765-4	**AB5-12 MONTH**					
Perfluorobutane Sulfonate		440		47	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		67		47	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		1700		47	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		390		120	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		150		47	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		140		47	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		340		47	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		430		120	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		1200		120	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		290		47	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		85		47	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		69	J	120	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		240		120	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		940		120	ug/Kg	DV-LC-0012
Percent Moisture		58		0.10	%	D-2216

EXECUTIVE SUMMARY - Detections

Client: Dalton Utilities

Job Number: 280-765-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
280-765-5	**AB13-6 MONTH**					
Perfluorobutane Sulfonate		750		54	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		60		54	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		1900		54	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		440		130	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		190		54	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		170		54	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		410		54	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		190		130	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		1700		130	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		250		54	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		70		54	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		77	J	130	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		420		130	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		1200		130	ug/Kg	DV-LC-0012
Percent Moisture		63		0.10	%	D-2216
280-765-6	**AA2-18 MONTH**					
Perfluorobutane Sulfonate		580		91	ug/Kg	DV-LC-0012
Perfluorobutanioc acid (PFBA)		94		91	ug/Kg	DV-LC-0012
Perfluorodecanoic acid (PFDA)		2300		91	ug/Kg	DV-LC-0012
Perfluorododecanoic acid (PFDoA)		500		230	ug/Kg	DV-LC-0012
Perfluoroheptanoic acid (PFHpA)		330		91	ug/Kg	DV-LC-0012
Perfluorohexanoic acid (PFHxA)		180		91	ug/Kg	DV-LC-0012
Perfluorononanoic acid (PFNA)		580		91	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonamide (FOSA)		270		230	ug/Kg	DV-LC-0012
Perfluorooctanoic acid (PFOA)		2200		230	ug/Kg	DV-LC-0012
Perfluorooctane Sulfonate (PFOS)		280		91	ug/Kg	DV-LC-0012
Perfluoropentanoic acid (PFPA)		120		91	ug/Kg	DV-LC-0012
Perfluorotetradecanoic acid (PFTeA)		96	J	230	ug/Kg	DV-LC-0012
Perfluorotridecanoic Acid (PFTriA)		350		230	ug/Kg	DV-LC-0012
Perfluoroundecanoic acid (PFUnA)		1000		230	ug/Kg	DV-LC-0012
Percent Moisture		56		0.10	%	D-2216

METHOD SUMMARY

Client: Dalton Utilities

Job Number: 280-765-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Perfluoronated Hydrocarbons	TAL DEN	TAL-DEN DV-LC-0012	
Leaching procedure for PFCs	TAL DEN		TAL-DEN PFC leach
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

METHOD / ANALYST SUMMARY

Client: Dalton Utilities

Job Number: 280-765-1

Method	Analyst	Analyst ID
TAL-DEN DV-LC-0012	Williams, Teresa L	TLW
ASTM D-2216	Berry III, Paul B	PBB

DATA REPORTING QUALIFIERS

Client: Dalton Utilities

Job Number: 280-765-1

Lab Section	Qualifier	Description
LCMS		
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AB5-12 month**

Lab Sample ID: 280-765-1

Client Matrix: Solid

% Moisture: 59.4

Date Sampled: 02/17/2010 1028

Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5477		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30B27B34.d
Dilution:	10			Initial Weight/Volume:	10.08 g
Date Analyzed:	02/27/2010 2102			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate		560		20	49
Perfluorobutanioc acid (PFBA)		70		8.3	49
Perfluorodecanoic acid (PFDA)		1800		18	49
Perfluorododecanoic acid (PFDoA)		300		20	120
Perfluoroheptanoic acid (PFHpA)		240		18	49
Perfluorohexane Sulfonate (PFHxS)		ND		19	49
Perfluorohexanoic acid (PFHxA)		170		4.9	49
Perfluorononanoic acid (PFNA)		360		12	49
Perfluorooctane Sulfonamide (FOSA)		260		30	120
Perfluorooctanoic acid (PFOA)		1800		25	120
Perfluorooctane Sulfonate (PFOS)		220		9.2	49
Perfluoropentanoic acid (PFPA)		90		22	49
Perfluorotetradecanoic acid (PFTeA)		51	J	35	120
Perfluorotridecanoic Acid (PFTriA)		300		28	120
Perfluoroundecanoic acid (PFUnA)		1100		44	120

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	76		50 - 200
13C4 PFOS	75		50 - 200
13C4 PFBA	61		50 - 200
13C2 PFHxA	74		50 - 200
13C5 PFNA	74		50 - 200
13C2 PFDA	73		50 - 200
13C2 PFUnA	69		50 - 200
13C2 PFDoA	78		50 - 200
18O2 PFHxS	70		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AB13-6 month**

Lab Sample ID: 280-765-2
Client Matrix: Solid

% Moisture: 64.5

Date Sampled: 02/17/2010 1045
Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5477		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30B27B37.d
Dilution:	10			Initial Weight/Volume:	10.08 g
Date Analyzed:	02/27/2010 2147			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate		1100		23	56
Perfluorobutanioc acid (PFBA)		120		9.5	56
Perfluorodecanoic acid (PFDA)		2500		21	56
Perfluorododecanoic acid (PFDoA)		440		23	140
Perfluoroheptanoic acid (PFHpA)		340		20	56
Perfluorohexane Sulfonate (PFHxS)		ND		22	56
Perfluorohexanoic acid (PFHxA)		260		5.6	56
Perfluorononanoic acid (PFNA)		570		14	56
Perfluorooctane Sulfonamide (FOSA)		280		35	140
Perfluorooctanoic acid (PFOA)		2600		28	140
Perfluorooctane Sulfonate (PFOS)		330		11	56
Perfluoropentanoic acid (PFPA)		140		25	56
Perfluorotetradecanoic acid (PFTeA)		77	J	40	140
Perfluorotridecanoic Acid (PFTriA)		450		32	140
Perfluoroundecanoic acid (PFUnA)		1400		51	140

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	76		50 - 200
13C4 PFOS	76		50 - 200
13C4 PFBA	60		50 - 200
13C2 PFHxA	73		50 - 200
13C5 PFNA	76		50 - 200
13C2 PFDA	72		50 - 200
13C2 PFUnA	73		50 - 200
13C2 PFDoA	77		50 - 200
18O2 PFHxS	76		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AA2-18 month**

Lab Sample ID: 280-765-3

Client Matrix: Solid

% Moisture: 61.4

Date Sampled: 02/17/2010 1100

Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5743		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30C0112.d
Dilution:	20			Initial Weight/Volume:	10.19 g
Date Analyzed:	03/01/2010 2139			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate		750		43	100
Perfluorobutanioc acid (PFBA)		110		17	100
Perfluorodecanoic acid (PFDA)		2500		38	100
Perfluorododecanoic acid (PFDoA)		620		42	250
Perfluoroheptanoic acid (PFHpA)		310		37	100
Perfluorohexane Sulfonate (PFHxS)		ND		39	100
Perfluorohexanoic acid (PFHxA)		230		10	100
Perfluorononanoic acid (PFNA)		580		25	100
Perfluorooctane Sulfonamide (FOSA)		710		63	250
Perfluorooctanoic acid (PFOA)		2000		52	250
Perfluorooctane Sulfonate (PFOS)		550		19	100
Perfluoropentanoic acid (PFPA)		170		45	100
Perfluorotetradecanoic acid (PFTeA)		99	J	74	250
Perfluorotridecanoic Acid (PFTriA)		380		59	250
Perfluoroundecanoic acid (PFUnA)		1100		92	250

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	92		50 - 200
13C4 PFOS	79		50 - 200
13C4 PFBA	91		50 - 200
13C2 PFHxA	93		50 - 200
13C5 PFNA	88		50 - 200
13C2 PFDA	89		50 - 200
13C2 PFUnA	93		50 - 200
13C2 PFDoA	87		50 - 200
18O2 PFHxS	81		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AB5-12 month**

Lab Sample ID: 280-765-4

Client Matrix: Solid

% Moisture: 58.5

Date Sampled: 02/17/2010 1028

Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5477		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30B27B39.d
Dilution:	10			Initial Weight/Volume:	10.17 g
Date Analyzed:	02/27/2010 2217			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate		440		20	47
Perfluorobutanioc acid (PFBA)		67		8.1	47
Perfluorodecanoic acid (PFDA)		1700		18	47
Perfluorododecanoic acid (PFDoA)		390		19	120
Perfluoroheptanoic acid (PFHpA)		150		17	47
Perfluorohexane Sulfonate (PFHxS)		ND		18	47
Perfluorohexanoic acid (PFHxA)		140		4.8	47
Perfluorononanoic acid (PFNA)		340		12	47
Perfluorooctane Sulfonamide (FOSA)		430		29	120
Perfluorooctanoic acid (PFOA)		1200		24	120
Perfluorooctane Sulfonate (PFOS)		290		8.9	47
Perfluoropentanoic acid (PFPA)		85		21	47
Perfluorotetradecanoic acid (PFTeA)		69	J	34	120
Perfluorotridecanoic Acid (PFTriA)		240		27	120
Perfluoroundecanoic acid (PFUnA)		940		43	120

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	81		50 - 200
13C4 PFOS	76		50 - 200
13C4 PFBA	68		50 - 200
13C2 PFHxA	74		50 - 200
13C5 PFNA	77		50 - 200
13C2 PFDA	75		50 - 200
13C2 PFUnA	72		50 - 200
13C2 PFDoA	72		50 - 200
18O2 PFHxS	77		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AB13-6 month**

Lab Sample ID: 280-765-5

Client Matrix: Solid

% Moisture: 62.9

Date Sampled: 02/17/2010 1045

Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5477		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30B27B40.d
Dilution:	10			Initial Weight/Volume:	10.03 g
Date Analyzed:	02/27/2010 2232			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate	750		22	54
Perfluorobutanioc acid (PFBA)	60		9.1	54
Perfluorodecanoic acid (PFDA)	1900		20	54
Perfluorododecanoic acid (PFDoA)	440		22	130
Perfluoroheptanoic acid (PFHpA)	190		19	54
Perfluorohexane Sulfonate (PFHxS)	ND		21	54
Perfluorohexanoic acid (PFHxA)	170		5.4	54
Perfluorononanoic acid (PFNA)	410		13	54
Perfluorooctane Sulfonamide (FOSA)	190		33	130
Perfluorooctanoic acid (PFOA)	1700		27	130
Perfluorooctane Sulfonate (PFOS)	250		10	54
Perfluoropentanoic acid (PFPA)	70		24	54
Perfluorotetradecanoic acid (PFTeA)	77	J	39	130
Perfluorotridecanoic Acid (PFTriA)	420		31	130
Perfluoroundecanoic acid (PFUnA)	1200		49	130

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	96		50 - 200
13C4 PFOS	93		50 - 200
13C4 PFBA	73		50 - 200
13C2 PFHxA	85		50 - 200
13C5 PFNA	92		50 - 200
13C2 PFDA	91		50 - 200
13C2 PFUnA	89		50 - 200
13C2 PFDoA	90		50 - 200
18O2 PFHxS	87		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

Client Sample ID: **AA2-18 month**

Lab Sample ID: 280-765-6
Client Matrix: Solid

% Moisture: 56.5

Date Sampled: 02/17/2010 1100
Date Received: 02/20/2010 0900

DV-LC-0012 Perfluoronated Hydrocarbons

Method:	DV-LC-0012	Analysis Batch: 280-5743		Instrument ID:	LC_LCMS3
Preparation:	PFC leach	Prep Batch: 280-5182		Lab File ID:	PC30C0113.d
Dilution:	20			Initial Weight/Volume:	10.15 g
Date Analyzed:	03/01/2010 2154			Final Weight/Volume:	50 mL
Date Prepared:	02/24/2010 0912			Injection Volume:	20 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Perfluorobutane Sulfonate		580		38	91
Perfluorobutanioc acid (PFBA)		94		15	91
Perfluorodecanoic acid (PFDA)		2300		34	91
Perfluorododecanoic acid (PFDoA)		500		37	230
Perfluoroheptanoic acid (PFHpA)		330		33	91
Perfluorohexane Sulfonate (PFHxS)		ND		35	91
Perfluorohexanoic acid (PFHxA)		180		9.1	91
Perfluorononanoic acid (PFNA)		580		23	91
Perfluorooctane Sulfonamide (FOSA)		270		56	230
Perfluorooctanoic acid (PFOA)		2200		46	230
Perfluorooctane Sulfonate (PFOS)		280		17	91
Perfluoropentanoic acid (PFPA)		120		40	91
Perfluorotetradecanoic acid (PFTeA)		96	J	66	230
Perfluorotridecanoic Acid (PFTriA)		350		52	230
Perfluoroundecanoic acid (PFUnA)		1000		82	230

Surrogate	%Rec	Qualifier	Acceptance Limits
13C4 PFOA	82		50 - 200
13C4 PFOS	81		50 - 200
13C4 PFBA	91		50 - 200
13C2 PFHxA	93		50 - 200
13C5 PFNA	90		50 - 200
13C2 PFDA	84		50 - 200
13C2 PFUnA	89		50 - 200
13C2 PFDoA	87		50 - 200
18O2 PFHxS	81		50 - 200

Client: Dalton Utilities

Job Number: 280-765-1

General Chemistry

Client Sample ID: **AB5-12 month**

Lab Sample ID: 280-765-1

Client Matrix: Solid

Date Sampled: 02/17/2010 1028

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	59		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N

Client: Dalton Utilities

Job Number: 280-765-1

General Chemistry

Client Sample ID: **AB13-6 month**

Lab Sample ID: 280-765-2

Client Matrix: Solid

Date Sampled: 02/17/2010 1045

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	64		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N

Client: Dalton Utilities

Job Number: 280-765-1

General Chemistry

Client Sample ID: **AA2-18 month**

Lab Sample ID: 280-765-3

Client Matrix: Solid

Date Sampled: 02/17/2010 1100

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	61		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N

Client: Dalton Utilities

Job Number: 280-765-1

General Chemistry

Client Sample ID: **AB5-12 month**

Lab Sample ID: 280-765-4

Client Matrix: Solid

Date Sampled: 02/17/2010 1028

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	58		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N

General Chemistry

Client Sample ID: **AB13-6 month**

Lab Sample ID: 280-765-5

Client Matrix: Solid

Date Sampled: 02/17/2010 1045

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	63		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N

Client: Dalton Utilities

Job Number: 280-765-1

General Chemistry

Client Sample ID: **AA2-18 month**

Lab Sample ID: 280-765-6

Client Matrix: Solid

Date Sampled: 02/17/2010 1100

Date Received: 02/20/2010 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	56		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-5054 Date Analyzed: 02/23/2010 1110 DryWt Corrected: N